

CATALOG ADDENDUM  
2022-2024 Academic Catalog



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## WHAT IS AN ADDENDUM?

Miami Dade College publishes a full Catalog every two (2) years. The addendum contains important information that has been updated throughout the past year.

An addendum is used in the event that changes or additions are made to existing catalog content and is to be used alongside the 2022-2024 catalog, not in isolation. Any new policies, procedures, new courses and/or new program requirements supersedes what is in the catalog. The addendum can be found on the College's website in the Academic Programs portal.

**Clinical Laboratory Sciences**
*Bachelor of Applied Science | Code: P9211 | 130 credits*
**Effective Term: Fall 2022 (2227)**

The Bachelor of Applied Science (B.A.S.) in Clinical Laboratory Sciences is designed to accommodate the unique demands for entry and advancement within the health science industry. Clinical Laboratory Scientist work with pathologists and other laboratory professionals in performing and analyzing laboratory testing used for diagnosis, treatment, and prevention of disease. Clinical Laboratory Sciences program graduates are eligible for certification by the American Association of Bioanalysts (AAB), American Society for Clinical Pathology (ASCP), and American Medical Technologist (AMT). Upon completion of the program and the attainment of certification and license, clinical laboratory scientists are employed in a variety of health-care settings as laboratory technologists with the opportunity of upward mobility to supervisory and management positions.

Course	Course Title	Credits	Pre-/Co-Requisites
<b>GENERAL EDUCATION REQUIREMENTS – 36 Credits Required (MET WITH A GRADE of “C” OR HIGHER)</b>			
<b>Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req: ENC 1101
<b>Oral Communication – 3 Credits Required</b>			
<b>Select 3 Credits from the following</b>			
ENC 2300	Advanced Composition & Communication	3	Pre-Req: ENC 1101, 1102
LIT 2480	Issues in Literature & Culture	3	Pre-Req: ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
SPC 2608	Introduction to Public Speaking	3	
<b>Humanities – 6 Credits Required</b>			
<b>Group A – Select 3 Credits from the following (State Core):</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Humanities	3	
LIT 2000	Introduction to Literature	3	
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	
THE 2000	Theater Appreciation	3	
<b>*AND*</b>			
<b>Group B – Select 3 Credits from the following (MDC Core):</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	Pre-Req: ARH 2050
ARH 2051	Art History 2	3	
ARH 2740	Cinema Appreciation	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1	3	
HUM 1020	Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2	3	
LIT 2000	Introduction to Literature	3	
LIT 2120	A Survey of World Literature	3	Pre-Req: ENC 1101 or ENC 1102 or Equivalent
MUH 2111	Survey of Music History 1	3	

MUH 2112	Survey of Music History 2	3	Pre-Req: MUH 2112
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz and Popular Music in America	3	
PHI 2010	Introduction to Philosophy	3	
PHI 2604	Critical Thinking and Ethics	3	
THE 2000	Theater Appreciation	3	

#### **Behavioral and Social Science – 3 Credits Required (State Core)**

##### **Group A – Select 3 Credits from the following:**

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\***

##### **Group B – Select 3 Credits from the following:**

AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
POS 2041	American Federal Government	3

*NOTE: If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.*

#### **Behavioral and Social Science – 3 Credits Required (MDC Core)**

##### **Group A – Select 3 Credits from the following:**

ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\***

##### **Group B – Select 3 Credits from the following:**

AMH 2010	History of the United States to 1877	3
AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government	3
WOH 2012	History of World Civilization to 1715	3
WOH 2022	History of World Civilization from 1715	3

*NOTE: If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.*

#### **Natural Science – 3 Credits Required (State Core)**

##### **Group A – Select 3 Credits from the following (Life Sciences):**

BSC 2010	Principles of Biology	3
BSC 2085	Human Anatomy & Physiology	3

**\*OR\***

##### **Group B - Select 3 Credits from the following (Physical Sciences):**

CHM 1020	General Education Chemistry	3
CHM 1045	General Chemistry & Qualitative Analysis	3
PHY 1020	Fundamentals of Physics	3
PHY 2048	Physics with Calculus 1	3
PHY 2053	Physics without Calculus 1	3

*NOTE: If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.*

**Natural Science – 3 Credits Required (MDC Core)****Group A – Select 3 Credits from the following (Life Sciences):**

BSC 2085	Human Anatomy & Physiology 1	3	Co-Req: BSC 2085L
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**\*OR\*****Group B - Select 3 Credits from the following (Physical Sciences):**

CHM 1033	Chemistry for Health Sciences	3	Pre-Co-Req: CHM 1033L, MAT 1033
CHM 1045	General Chemistry and Qualitative Analysis	3	Pre-Req: CHM 1025 or a passing score on the CART exam, MAC 1105; Co-requisite: CHM 1045L

\* Any course with the following prefix excluding labs.

*NOTE: If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.*

**Mathematics – 6 Credits Required****Group A Must take 3 credits from the following group (State Core):**

MAC 1105	College Algebra	3	Pre-Req: MAT 1033
MAC 2311	Calculus & Analytical Geometry	5	Pre-Req: MAC1106 and MAC1114, or MAC1114 and MAC1140, or MAC1147
MGF 1106	Math for Liberal Arts 1	3	Pre-Req: MAT 0029 or MAT 1033 or MGF 1107
MGF 1107	Math for Liberal Arts 2	3	
STA 2023	Statistical Methods	3	Pre-Req: MAT1033 or MGF 1106

**\*AND\*****Group B Must take 3 credits from the following group (MDC Core):**

MAC*		
MAD 2104	Discrete Mathematics	3
MAP*		
MAS*		
MGF*		
MTG 2204	Geometry for Educators	3
QMB 2100	Basic Business Statistics	3
STA 2023	Statistical Methods	3

**General Education Elective – 3 Credits Required (MET WITH A "C" LETTER GRADE OR HIGHER)**

BSC 1005	General Education Biology	3
BSC 1005L	General Education Biology Laboratory	1
BSC 1030	Social Issues in Biology	3
BSC 1050	Biology and Environment	3
BSC 1084	Functional Human Anatomy	3
BSC 1949	Co-op Work Experience 1: BIO	3
BSC 2010	Principles of Biology	3
BSC 2010	Principles of Biology Laboratory	2
BSC 2011	Principles of Biology 2	3
BSC 2011L	Principles of Biology Laboratory 2	2
BSC 2020	Human Biology: Fundamentals of Anatomy/Physiology	3
BSC 2085	Human Anatomy and Physiology 1	3
BSC 2085L	Human Anatomy and Physiology 1 Laboratory	1
BSC 2086	Human Anatomy and Physiology 2	3
BSC 2086L	Human Anatomy and Physiology 2 Laboratory	1
BSC 2250	Natural History of South Florida	3
BSC 2423C	Methods and Applications of Cell Culture and Protein Biotechnology	3
BSC 2426	Biotechnology Methods and Applications 1	3
BSC 2426L	Biotechnology Methods and Applications 1 Lab	2

BSC 2427	Biotechnology Methods and Applications 2	3
BSC 2427L	Biotechnology Methods and Applications 2 Lab	2
BSC 2943L	Bioscience Internship	3-6
BSC 2949	Co-op Work Experience 2: BSC	3
CHM 1020	General Education Chemistry	3
CHM 1020L	General Education Chemistry Laboratory	1
CHM 1033	Chemistry for Health Sciences	3
CHM 1033L	Chemistry for Health Sciences Laboratory	1
CHM 1045	General Chemistry and Qualitative Analysis	3
CHM 1045L	General Chemistry and Qualitative Analysis Lab	2
CHM 1046	General Chemistry and Qualitative Analysis	3
CHM 1046L	General Chemistry and Qualitative Analysis Lab	2
CHM 1941	Principles & Techniques of Peer Tutoring in Chemistry	1
CHM 1949	Co-op Work Experience 1: CHM	3
CHM 2124C	Survey of Quantitative Analysis	4
CHM 2200	Survey of Organic Chemistry	3
CHM 2200L	Survey of Organic Chemistry Laboratory	1
CHM 2210	Organic Chemistry 1	3
CHM 2210L	Organic Chemistry 1 Laboratory	2
CHM 2211	Organic Chemistry 2	3
CHM 2211L	Organic Chemistry 2 Laboratory	2
CHM 2949	Co-op Work Experience 2: CHM	3
MCB 2010	Microbiology	3
MCB 2010L	Microbiology Laboratory	2
PHY 1004	Physics with Applications 1	3
PHY 1004	Physics with Applications 1 Lab	1
PHY 1005	Physics with Applications 2	3
PHY 1005	Physics with Applications 2 Lab	1
PHY 1020	General Education Physics	3
PHY 1025	Basic Physics	3
PHY 2048	Physics with Calculus 1	3
PHY 2048L	Physics with Calculus 1 Laboratory	1
PHY 2049	Physics with Calculus 2	3
PHY 2049L	Physics with Calculus 2 Laboratory	1
PHY 2053	Physics (without Calculus) 1	3
PHY 2053L	Physics (without Calculus) 1 Lab	1
PHY 2054	Physics (without Calculus) 2	3
PHY 2054L	Physics (without Calculus) 2 Lab	1

**LOWER DIVISION ELECTIVES – 24 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)**

***Group A – Must take 9 Credits from the following group***

BSC 1005	General Education Biology	3
BSC 1005L	General Education Biology Laboratory	1
BSC 1030	Social Issues in Biology	3
BSC 1050	Biology and Environment	3
BSC 1084	Functional Human Anatomy	3
BSC 1949	Co-op Work Experience 1: BIO	3
BSC 2010	Principles of Biology	3
BSC 2010	Principles of Biology Laboratory	2
BSC 2011	Principles of Biology 2	3
BSC 2011L	Principles of Biology Laboratory 2	2
BSC 2020	Human Biology: Fundamentals of Anatomy/Physiology	3
BSC 2085	Human Anatomy and Physiology 1	3
BSC 2085L	Human Anatomy and Physiology 1 Laboratory	1
BSC 2086	Human Anatomy and Physiology 2	3

BSC 2086L	Human Anatomy and Physiology 2 Laboratory	1
BSC 2250	Natural History of South Florida	3
BSC 2423C	Methods and Applications of Cell Culture and Protein Biotechnology	3
BSC 2426	Biotechnology Methods and Applications 1	3
BSC 2426L	Biotechnology Methods and Applications 1 Lab	2
BSC 2427	Biotechnology Methods and Applications 2	3
BSC 2427L	Biotechnology Methods and Applications 2 Lab	2
BSC 2943L	Bioscience Internship	3-6
BSC 2949	Co-op Work Experience 2: BSC	3

**\*AND\***

**Group B – Must take 9 credits from the following group**

CHM 1020	General Education Chemistry	3
CHM 1020L	General Education Chemistry Laboratory	1
CHM 1033	Chemistry for Health Sciences	3
CHM 1033L	Chemistry for Health Sciences Laboratory	1
CHM 1045	General Chemistry and Qualitative Analysis	3
CHM 1045L	General Chemistry and Qualitative Analysis Lab	2
CHM 1046	General Chemistry and Qualitative Analysis	3
CHM 1046L	General Chemistry and Qualitative Analysis Lab	2
CHM 1941	Principles & Techniques of Peer Tutoring in Chemistry	1
CHM 1949	Co-op Work Experience 1: CHM	3
CHM 2124C	Survey of Quantitative Analysis	4
CHM 2200	Survey of Organic Chemistry	3
CHM 2200L	Survey of Organic Chemistry Laboratory	1
CHM 2210	Organic Chemistry 1	3
CHM 2210L	Organic Chemistry 1 Laboratory	2
CHM 2211	Organic Chemistry 2	3
CHM 2211L	Organic Chemistry 2 Laboratory	2
CHM 2949	Co-op Work Experience 2: CHM	3

**\*AND\***

**Group C – Must take 6 credits from the following group**

ACG 2001	AST*	COP 2805	FIL 1030	GRA 2191C	HUS*
ACG 2001L	BOT*	CPO*	FIL 1055	HAI*	IDS 1044
ACG 2011	BSC*	CRW*	FIL 1100	HBR*	IDS 1153
ACG 2011L	BUL 2130	CTE 1401	FIL 1360	HFT 1000	IND 1020
ACG 2021	BUL 2241	DAA*	FIL 1420C	HFT 1210	IND 1100
ACG 2021L	BUL 2242	DAN*	FIL 1431C	HFT 1220	IND 1130
ACG 2031	CCJ*	DEP*	FIL 2130	HFT 1300	IND 1200
ACG 2071	CGS 1021	EAP5*	FIL 2515C	HFT 1454	IND 2210
ACG 2071L	CGS 1060C	EAP6*	FIL 2552C	HFT 2223	IND 2220
ACG 2100	CGS 1145	ECO*	FIL 2553C	HFT 2410	INP*
ACG 2110	CGS 2092	EDF*	FIL 2560C	HFT 2421	INR*
ACG 2170	CGS 2405	EDG*	FIL 2572C	HFT 2500	IPM 2112
ACG 2360	CGS 2423	EEC*	FIL 2611	HFT 2501	ISC*
ACG 2450	CHI*	EEL*	FIN 2100	HFT 2750	ISS 1120
ACG 2630	CHM*	EEX*	FRE*	HFT 2800	ISS 1161
AFH*	CJC 1000	EGN 2033	FRW*	HLP 1080	ISS 2270
AMH*	CJC 1162	EGS 1001C	GEA*	HLP 1081	ITA*
AML*	CJD*	EGS 1010	GEB 1011	HLP 1083	JOU*
ANT*	CJL 2062	EGS 1111C	GEB 2112	HLP 1087	JPN*
ARC*	CJT*	EGS 2311	GEB 2350	HOS 1010	JST*
ARH*	CLP*	EME*	GEO*	HSC 1400	LAH*
ART*	COP 1170	ENC*	GER*	HSC 1121	LIN*
ASL 1140C	COP 2004	ENG*	GLY*	HSC 2100	LIS*
ASL 1150C	COP 1220	ENL*	GRA 1111C	HSC 2400	LIT*
ASL 2160C	COP 2171	EUH*	GRA 2117C	HUM*	MAC*
ASL 2200C	COP 2800	EVR 1001	GRA 2190C	HUN*	MAD*

MAN 2021	MTG*	MVV*	PGY 2475	POS*	SOW*
MAN 2300	MUC*	MVW*	PGY 2800C	POT*	SPA*
MAN 2604	MUE*	OCB*	PHI*	PSB*	SPC*
MAP*	MUH*	OCE*	PHM*	PSC*	SPN*
MAR 1011	MUL*	OST 2335	PHY*	PSY*	SPW*
MAR 1720	MUM 2704	PAD*	PLA 2003	PUR*	SUR 1001C
MAR 2150	MUN*	PCB*	PLA 2104	QMB*	STA*
MAS*	MUO*	PCO*	PLA 2114	REL*	SYG*
MAT 1033	MUS*	PEP*	PLA 2203	RTV 1100	THE*
MCB*	MUT*	PET*	PLA 2223	RUS*	TPA*
MET*	MVB*	PGY 2110C	PLA 2273	SLS 1106	TPP*
MGF*	MVJ*	PGY 2111C	PLA 2303	SLS 1125	VIC*
MLT*	MVK*	PGY 2112C	PLA 2600	SLS 1401	WHO*
MMC*	MVO*	PGY 2401C	PLA 2763	SLS 1505	ZOO*
MNA 1345	MVP*	PGY 2410C	PLA 2800	SLS 1510	
MNA 2120	MVS*	PGY 2470C	POR*	SOP*	

### **MEDICAL LABORATORY TECHNOLOGY COURSES (0 credits)**

#### ***Group A – Clinical Laboratory Sciences***

MLT 1040L	Introduction to Medical Laboratory Technology	1
MLT 1210C	Clinical Urinalysis with Lab	2
MLT 1300	Clinical Hematology	2
MLT 1300L	Clinical Hematology Laboratory	2
MLT 1752	Quality Control Laboratory Mathematics	2
MLT 1500	Clinical Immunology/Serology	2
MLT 1500L	Clinical Immunology/Serology Laboratory	1
MLT 1610	Clinical Chemistry 1	2
MLT 1610L	Clinical Chemistry 1 Laboratory	2
MLT 2440	Clinical Microbiology 1	1
MLT 2440L	Clinical Microbiology Lab 1	1
MLT 1330	Clinical Coagulation	1
MLT 1330L	Clinical Coagulation Laboratory	1
MLT 2525	Immunohematology	2
MLT 2525L	Immunohematology Laboratory	2
MLT 2403	Clinical Microbiology 2	2
MLT 2403L	Clinical Microbiology Lab 2	2
MLT 2620	Clinical Chemistry 2	2
MLT 2620L	Clinical Chemistry 2 Laboratory	1
MLT 2624L	Special Techniques in Clinical Chemistry	2
MLT 2807L	Hospital Practicum: Immunohematology	3
MLT 2809L	Hospital Practicum: Hematology	3
MLT 2810L	Hospital Practicum: Chemistry	3
MLT 2811L	Hospital Practicum: Microbiology	3
MLT 2930	Medical Laboratory Technology Seminar	2

### **MEDICAL LABORATORY TECHNOLOGY VALIDATION - 27 Credits Required**

MLS 3997 - Validated Medical Laboratory Technology Course	27
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### **UPPER DIVISION REQUIREMENTS – 19 Credits Required**

HSC 3057	Research Methods and Issues in Health Science	3
HSC 3655	Theoretical Foundations of Health Care Ethics	3
HSC 3701	Leadership and Management in Healthcare	3
MLS 4193	Clinical Molecular Diagnostics	3
MLS 4621	Clinical Biochemistry	4
MLS 4705	Laboratory Operations and Management	3

### **DISCIPLINE CONTENT CORE - 21 Credits Required**

#### ***Group A – Clinical Laboratory Sciences***

MLS 4221	Clinical Urinalysis	3
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MLS 4306	Clinical Hematology	3
MLS 4335	Clinical Hemostasis	3
MLS 4461	Clinical Diagnostic Microbiology	3
MLS 4506	Clinical Immunology	3
MLS 4552	Clinical Immunohematology	3
MLS 4630	Clinical Chemistry	3

**MEDICAL LABORATORY SCIENCES SPECIAL TOPICS – 3 Credits Required**

MLS 3150	Special Topics in Medical Laboratory Sciences	3
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## Film, Television and Digital Production

*Bachelor in Applied Science | P9220 | 120 credits*

**CIP (1105006021)**

The Bachelor of Applied Science (B.A.S.) in Film, Television and Digital Production is a flexible baccalaureate program intended to accommodate the unique demands for entry and advancement within specific workforce sectors.

The B.A.S. program provides degree advancement opportunities for students with the Associate in Science in Film Production Technology. Students learn advanced, practical, and hands-on training necessary in today's film, television and digital media production workforce. Students further their knowledge in the latest technologies giving them the experience to successfully achieve their academic goals and professional aspirations.

Students who graduate with the Bachelor of Applied Science in Film, Television & Digital Production will be prepared to gain immediate employment with film and/or television production companies as producers, directors, technical directors, production managers, camera operators, cinematographers, writers, researchers, editors and sound engineers, as well as be prepared for graduate school in digital media production.

### **GENERAL EDUCATION REQUIREMENTS – 36 Credits Required**

Courses require a grade of "C" or higher to satisfy the general education requirement.

		<b>Credits</b>	<b>Requisites</b>
<b>1. Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1 (Gw)	3	Pre-Req Placement score or exemption
ENC 1102	English Composition 2 (Gw)	3	Pre-Req ENC 1101
<b>2. Oral Communications – 3 Credits Required</b>			
Select one course from the following offerings.			
ENC 2300	Advanced Composition & Communication (Gw)	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture (Gw)	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications (Gw)	3	
SPC 2608	Introduction to Public Speaking (Gw)	3	
<b>3. Humanities – 6 Credits Required</b>			
Select one course from STATE CORE <b><u>AND</u></b> one course from MDC CORE. At least one Gordon Rule Writing (Gw) course must be selected from State Core <b>or</b> MDC Core.			
<b>State Core (3 credits)</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
<b>---AND---</b>			
<b>MDC Core (3 credits)</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2 (Gw)	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	
ARH 2051	Art History 2 (Gw)	3	Pre-Req ARH 2050
ARH 2740	Cinema Appreciation (Gw)	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1 (Gw)	3	
HUM 1020	Introduction to Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2 (Gw)	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
LIT 2120	A Survey of World Literature 2 (Gw)	3	Pre-Req ENC 1101, 1102
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2 (Gw)	3	Pre-Req MUH 2111
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz & Popular Music in America (Gw)	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
PHI 2604	Critical Thinking/Ethics (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	

#### 4. Behavioral and Social Science – 6 Credits Required

Choose two courses from OPTION A **OR** OPTION B. Within selected option, one course must be State Core and one course must be MDC Core.

Selecting AMH2020 or POS2041 (♦) is recommended as these courses also fulfill the civic literacy graduation requirement.

##### **Option A (6 credits):**

###### **State Core: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

###### **AND**

###### **MDC Core: Social Sciences (3 credits)**

AMH 2010	History of the US to 1877	3
AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government (♦)	3
WOH 2012	History of World Civilization to 1789	3
WOH 2022	History of World Civilization from 1789	3

###### **--- OR ---**

##### **Option B (6 credits):**

###### **State Core: Social Sciences (3 credits)**

AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
POS 2041	American Federal Government (♦)	3

###### **AND**

###### **MDC Core: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

#### 5. Natural Science – 6 Credits Required

Choose two courses from OPTION A **OR** OPTION B. Within selected option, one course must be State Core and one course must be MDC Core.

Laboratory courses do not fulfill this area's requirements.

##### **Option A (6 credits):**

###### **State Core: Life Sciences (3 credits)**

BSC 1005	General Education Biology	3	
BSC 2010	Principles of Biology	3	Pre/Co-Req CHM 1045/BSC 2010L
BSC 2085	Human Anatomy and Physiology 1	3	Co-Req BSC 2085L
EVR 1001	Introduction to Environmental Science	3	

###### **AND**

###### **MDC Core: Physical Sciences (3 credits)**

AST 1002	Descriptive Astronomy	3	
ESC 1000	General Education Earth Science	3	
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	
Any course with prefix CHM*, GLY*, MET*, OCE*, PHY*		3	

###### **--- OR ---**

##### **Option B (6 credits):**

###### **State Core: Physical Sciences (3 credits)**

AST 1002	Descriptive Astronomy	3	
CHM 1020	General Education Chemistry	3	
CHM 1045	General Chemistry and Qualitative Analysis	3	Pre/Co-Req CHM1025 & MAC1105/CHM1045L
ESC 1000	General Education Earth Science	3	
PHY 1020	General Education Physics	3	
PHY2048	Physics with Calculus 1	4	Pre/Co-Req HS physics, or PHY1025 or 2053, or dept. approval, and MAC2311/PHY2048L

PHY 2053	Physics (without Calculus) 1	3	Pre/Co-Req MAC1147, 1114, 1140/PHY2053L
<b>AND</b>			
<b>MDC Core: Life Sciences (3 credits)</b>			
BOT 1010	Botany	3	Co-Req BOT 1010L
BSC 1005	General Education Biology	3	
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology	3	Pre/Co-Req CHM 1045/BSC 2010L
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	
BSC 2085	Human Anatomy and Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
EVR 1001	Introduction to Environmental Sciences	3	
HUN 1201	Essentials of Human Nutrition	3	
OCB 1010	Introduction to Marine Biology	3	
PCB 2033	Introduction to Ecology	3	Pre-Req PSC 1515 or BSC 2011
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

## 6. Mathematics – 6 Credits Required

Select one course from STATE CORE **AND** one course from MDC CORE.

### State Core (3 credits)

MAC 1105	College Algebra (Gc)	3	Pre-Req MAT 1033 or placement score
MAC 2311	Calc & Analytical Geometry 1 (Gc)	5	Pre-Req MAC1140 & MAC1114 or MAC1147
MGF 1106	Math for Lib Arts 1 (Gc)	3	Pre-Req MAT0029 or MAT1033 or MGF1107
MGF 1107	Math for Lib Arts 2 (Gc)	3	Pre-Req Placement Score or exemption
STA 2023	Statistical Methods (Gc)	3	Pre-Req MAT 1033 or MGF 1106

---AND---

### MDC Core (3 credits)

MAC* (Gc)	MAS* (Gc)	STA 2023 (Gc)
MAD* (Gc)	MGF* (Gc)	MTG 2204 (Gc)
MAP* (Gc)	QMB 2100 (Gc)	

## 7. General Education Elective – 3 Credits Required

ACG 2021	AMH 2010	AMH 2020	ANT 2000	ANT 2410
ARC 2701	ARC 2702	ARH 1000	ARH 2050	ARH 2051
ARH 2740	ASL 2160C	ASL 2200C	<b>ASL*</b>	AST*
BOT*	BSC*	<b>CGS 1060C</b>	CIS 1000	CHM*
CLP 1006	<b>CHI*</b>	COP 1332	COP 1334	COP 2270
DAN 2130	DEP 2000	ECO 2013	ESC 1000	EDF 1005
EDF 2085	EEX 2000	ENC 2300	<b>FRE*</b>	FRW*
GEO 2420	<b>GER*</b>	GLY*	HBR*	HLP 1080
HLP 1081	HSC 2400	HUM 1020	HUN 1201	IND 1100
IND 1130	INR 2002	ISS 1120	ISS 1161	ISS 2270
<b>ITA*</b>	<b>JPN*</b>	LIT 2000	LIT 2120	LIT 2480
MAC*	MAD 2104	MAP*	MAS*	MET*
MGF*	MUH 2111	MUH 2112	MUL 1010	MUL 2380
OCE*	PCB 2033	PHI 2010	PHI 2604	PHY*
<b>POR*</b>	POS 2041	POS 2112	PSC*	PSY 2012
QMB 2100	REL 2300	<b>RUS*</b>	SPC 1017	<b>SPN*</b>
STA 2023	SYG 2000	SYG 2230	THE 2000	WOH 2012
WOH 2022	ZOO*			

**Note:** Courses in bold may fulfill other college requirements, including computer competency and foreign language. See those sections for details.

## LOWER DIVISION PREREQUISITE REQUIREMENTS – 43 Credits Required

FIL 1030	History of Film	3	
FIL 1100	Screenwriting 1	3	
FIL 1420C	Film Production 1	4	Co-Req: FIL 2552C
FIL 1431C	Film Production 2	4	Pre-Req: FIL 1420C & Co-Req: FIL 2553C

FIL 2131	Screenwriting 2	3	Pre-Req: FIL 1100
FIL 2552C	Editing: Level 1	3	
FIL 2553C	Editing: Level 2	3	Pre-Req: FIL 2552C
FIL 2560C	Editing: Level 3	3	Pre-Req: FIL 2553C
FIL 2480C	Film Production 3	4	Pre-Req: FIL 1431C & RTV 1240C
FIL 2515C	Film Production 4	4	Pre-Req: FIL 2480C
FIL 2611	Film Business, Marketing, Distribution & Exhibition	3	
RTV 1240C	Sound Design	3	
VIC 1000	Visual Communications	3	

**--- OR ---**

MMC 2000	Introduction to Mass Comm	3	
RTV 1000	Fundamentals of Broadcasting	3	
RTV 1240C	Sound Design	3	
RTV 1241C	TV Studio Production 1	4	
RTV 1242C	TV Studio Production 2	4	Pre-Req: RTV 1241C
RTV 2243C	TV Directing	3	Pre-Req: RTV 1242C
RTV 2245C	Electronic Field Production 1	4	Pre-Req: RTV 1242C
RTV 2246C	Electronic Field Production 2	4	Pre-Req: RTV 2245C
RTV 2300	Broadcast Writing	3	
FIL 2552C	Editing: Level 1	3	
FIL 2553C	Editing: Level 2	3	Pre-Req: FIL 2552C
FIL 2560C	Editing: Level 3	3	Pre-Req: FIL 2553C
VIC 1000	Visual Communications	3	

**Lower Division Electives – 6 Credits Required**

FIL 1030	History of Film***	3
FIL 1100	Screenwriting 1***	3
FIL 1055	American Independent Cinema	3
FIL 1060	Survey of Documentary Film	3
FIL 2413	Screenwriting 3	3
FIL 2945	Film Internship	3
FIL 2990	Special Topics	3
FIL 2950	Film Festival Experience	3
TPP*	Acting	3
RTV 2230C	Radio & TV Announcing	3
RTV 2940	TV Internship	3
RTV 2941	TV Practicum	3
RTV 2942	Spring TV Practicum	3
RTV 2943	Summer TV Practicum	3

\*\*\* Courses are State Pre-Requisites. Only TV majors may take them as electives

**UPPER DIVISION REQUIREMENTS – 32 Credits Required**

Course	Course Title	Credits	Pre-/Co-Requisites
DIG 3255C	Advanced Sound Design	3	Pre-Req: RTV 1240C
DIG 3347C	Advanced Cinematography	3	Pre-Req: FIL 2515C OR RTV 2246C
DIG 4345C	Digital Effects and Compositing	3	
FIL 3602	Production Management	3	Pre-Req: FIL 2611 OR MMC 2000
FIL 3651	Business Proposals for Film & Television	3	Pre-Req: FIL 2611 OR MMC 2000
FIL 4164	Advanced Film & Television Writing	3	Pre-Req: FIL 2131 OR RTV 2300
FIL 4585C	Production Workshop 1	4	Pre-Req: DIG 3347C AND FIL 3602
FIL 4586C	Production Workshop 2	4	Pre-Req: FIL 4585C
RTV 3810C	Broadcast Design & On Air Promotions	3	
RTV 3277C	Advanced Television Studio Workshop	3	Pre-Req: FIL 2515C OR RTV 2246C

**Upper Division Electives: (3 Credits Required)**

DIG3940	Upper Division Internship	3
RTV3263C	Advanced Post Production	3
RTV3408	Ethics & Research For Non Fiction Scripts	3
RTV3203	The Telemundo Academy	3

**Computer Competency Requirement**

Students must satisfy the requirement by successfully completing a course (CGS1060C or CTS0050, an equivalent college credit course), or passing MDC's Computer Skills Placement examination, or a test exemption.

**Foreign Language Competency Requirement**

Students must fulfill this requirement via three options:

**Option A:** Successful completion of two (2) credits (i.e., the equivalent of two years) in one (1) foreign language at the secondary (high school) level.

---OR---

**Option B:** Successful completion of the following courses at the elementary 2 level: ASL1150C, CHI1121, FRE1121, GER1121, ITA1121, JPN1121, POR1121, RUS1121, SPN1121. These credits count towards the Lower Division Requirements area.

---OR---

**Option C:** Students may demonstrate completion of the elementary 2 level through standardized examination that document the required foreign language competency.

**IMPORTANT INFORMATION****Program Credits Composition**

General Education Requirements.....36 credits  
Lower Division Requirements.....43 credits  
Upper Division Requirements.....32 credits  
Elective Requirements.....9 credits  
Total credits required for graduation....120 credits

**Civic Literacy Competency:** First time in college students for the 2018-2019 school year and thereafter must demonstrate competency in civic literacy to earn a baccalaureate. This requirement may be satisfied by passing AMH2020 or POS2041 (listed under the Social Sciences area), or an equivalent AP or CLEP exam.

**Computer Competency:** All MDC degree-seeking students with 16 or more credits must demonstrate computer competency prior to graduation. Students demonstrate this competency by passing the MDC computer competency test, currently known as CSP (Computer Skills Placement) examination or by enrolling in and successfully completing an equivalent course.

**Foreign Language:** Students admitted to the baccalaureate degree program without meeting the foreign language admissions requirement of at least 2 courses (8-10 credit hours) of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation.

**Required Credit Hours and GPA:** The baccalaureate requires student to earn a minimum of 120 unduplicated credit hours with a minimum cumulative grade point average of 2.0. All general education and all upper division requirements must be passed with the grade of "C" or better.

**Pursuing or Have Earned an Associate's Degree:** Students entering with an AS or AAS degree may have more than 24 elective credits and may need additional General Education credits to meet the 36 General Education credits required for the baccalaureate degree. Students entering with an AA degree may need additional electives to provide appropriate background for the baccalaureate program.

**Graduation Requirements:** This Program Sheet is effective for academic year 2020/2021. Additional requirements apply, which include, but are not limited to Gordon Rule (college level communication and computational skills) and residency (number of credits that must be earned at MDC). Students should review their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade College. Students are highly encouraged to meet with their academic advisor on a regular basis and review the College Catalog to learn about all requirements to receive the baccalaureate. The final responsibility for meeting graduation requirements rests with the student.

**PROGRAM OF STUDY: HEALTH SCIENCE W/OPTION IN PHYSICIAN ASSISTANT STUDIES**  
**(P5210)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (6.00 credits)

Gordon rule assigned

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

### 2. ORAL COMMUNICATION (3.00 credits)

Gordon rule assigned

☐ ENC 2300 - Advanced Composition and Communication (3 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

☐ LIT 2480 - Issues in Literature & Culture (3 credits)

### 3. HUMANITIES (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ARC 2701 - History of Architecture 1 (3 credits)

☐ IND 1100 - History of Interiors 1 (3 credits)

☐ ARH 1000 - Art Appreciation (3 credits)

☐ MUH 2111 - Survey of Music History 1 (3 credits)

☐ ARH 2050 - Art History 1 (3 credits)

☐ MUL 1010 - Music Appreciation (3 credits)

☐ DAN 2100 - Dance Appreciation (3 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

☐ HUM 1020 - Humanities (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ ARC 2702 - History of Architecture 2 (3 credits)

☐ LIT 2120 - A Survey of World Literature 2 (3 credits)

☐ ARH 2051 - Art History 2 (3 credits)

☐ MUH 2112 - Survey of Music History 2 (3 credits)

☐ ARH 2740 - Cinema Appreciation (3 credits)

☐ MUL 2380 - Jazz and Popular Music in America (3 credits)

☐ DAN 2130 - Dance History 1 (3 credits)

☐ PHI 2010 - Introduction to Philosophy (3 credits)

☐ IND 1130 - History of Interiors 2 (3 credits)

☐ THE 2000 - Theatre Appreciation (3 credits)

### 4. BEHAVIORAL/SOCIAL SCIENCE (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)

☐ ISS 1161 - The Individual in Society (3 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

☐ PSY 2012 - Introduction to Psychology (3 credits)

☐ DEP 2000 - Human Growth and Development (3 credits)

☐ SYG 2000 - Introduction to Sociology (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ AMH 2010 - History of the US to 1877 (3 credits)

☐ POS 2041 - American Federal Government (3 credits)

☐ AMH 2020 - History of the US since 1877 (3 credits)

☐ WOH 2012 - History of World Civilization to 1789 (3 credits)

☐ ECO 2013 - Principles of Economics (Macro) (3 credits)

☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

☐ ISS 1120 - The Social Environment (3 credits)

### 5. NATURAL SCIENCES (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ BOT 1010 - Botany (3 credits)

☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)

☐ BSC 1005 - General Education Biology (3 credits)

☐ BSC 2250 - Natural History of South Florida (3 credits)

☐ BSC 1030 - Social Issues in Biology (3 credits)

☐ HUN 1201 - Essentials of Human Nutrition (3 credits)

☐ BSC 1050 - Biology & Environment (3 credits)

☐ OCB 1010 - Introduction to Marine Biology (3 credits)

- ☐ BSC 1084 - Functional Human Anatomy (3 credits)
- ☐ BSC 2010 - Principles of Biology (3 credits)
- ☐ BSC 2020 - Human Biology: Fundamentals of Anatomy/Physiology (3 credits)

- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ ZOO 1010 - Zoology (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ AST 1002 - Descriptive Astronomy (3 credits)
- ☐ CHM\*
- ☐ ESC\*
- ☐ GLY\*
- ☐ MET\*

- ☐ OCE\*
- ☐ PHY\*
- ☐ PSC 1121 - General Education Physical Science (3 credits)
- ☐ PSC 1515 - Energy in the Natural Environment (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 6. MATHEMATICS (6.00 credits)

Gordon rule assigned

- ☐ MAC\*
- ☐ MAD\*
- ☐ MAP\*
- ☐ MAS\*

- ☐ MGF\*
- ☐ MTG 2204 - Geometry for Educators (3 credits)
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 7. GENERAL EDUCATION ELECTIVE (3.00 credits)

- ☐ AST\*
- ☐ BOT\*
- ☐ BSC\*
- ☐ CHM\*
- ☐ GLY\*
- ☐ MET\*
- ☐ OCE\*
- ☐ PHY\*
- ☐ PSC\*
- ☐ ZOO\*
- ☐ HUN 1201 - Essentials of Human Nutrition (3 credits)
- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ MAC\*
- ☐ MAD\*
- ☐ MAP\*
- ☐ MAS\*
- ☐ MGF\*
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)
- ☐ CHI2\*
- ☐ FRE2\*
- ☐ FRW2\*
- ☐ HBR2\*
- ☐ GER2\*
- ☐ ITA2\*
- ☐ JPN2\*
- ☐ POR2\*
- ☐ RUS2\*
- ☐ SPN2\*
- ☐ ASL 2160C - American Sign Language 3 (4 credits)
- ☐ ASL 2200C - American Sign Language 4 (4 credits)
- ☐ ACG 2021 - Financial Accounting (3 credits)
- ☐ AMH 2010 - History of the US to 1877 (3 credits)
- ☐ AMH 2020 - History of the US since 1877 (3 credits)

- ☐ COP 2270 - "C" for Engineers (4 credits)
- ☐ CIS 1000 - Introduction to Data Processing (4 credits)
- ☐ COP 1332 - Introduction to Visual Basic Programming (4 credits)
- ☐ COP 1334 - Introduction to C++ Programming (4 credits)
- ☐ DAN 2130 - Dance History 1 (3 credits)
- ☐ DEP 2000 - Human Growth and Development (3 credits)
- ☐ ECO 2013 - Principles of Economics (Macro) (3 credits)
- ☐ EDF 1005 - Introduction to the Teaching Profession (3 credits)
- ☐ EDF 2085 - Introduction to Diversity (3 credits)
- ☐ EEX 2000 - Introduction to Special Education (3 credits)
- ☐ ENC 2300 - Advanced Composition and Communication (3 credits)
- ☐ GEO 2420 - Introduction to Cultural Geography (3 credits)
- ☐ HLP 1080 - Wellness (2 credits)
- ☐ HLP 1081 - Fitness & Wellness for Life (3 credits)
- ☐ HSC 2400 - Basic Emergency Care (3 credits)
- ☐ HUM 1020 - Humanities (3 credits)
- ☐ IND 1100 - History of Interiors 1 (3 credits)
- ☐ IND 1130 - History of Interiors 2 (3 credits)
- ☐ INR 2002 - International Relations (3 credits)
- ☐ ISS 1120 - The Social Environment (3 credits)
- ☐ ISS 1161 - The Individual in Society (3 credits)
- ☐ ISS 2270 - Multicultural Communications and Relations (3 credits)
- ☐ LIT 2120 - A Survey of World Literature 2 (3 credits)
- ☐ LIT 2480 - Issues in Literature & Culture (3 credits)
- ☐ MUH 2111 - Survey of Music History 1 (3 credits)
- ☐ MUH 2112 - Survey of Music History 2 (3 credits)
- ☐ MUL 1010 - Music Appreciation (3 credits)
- ☐ MUL 2380 - Jazz and Popular Music in America (3 credits)
- ☐ PHI 2010 - Introduction to Philosophy (3 credits)
- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)
- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)
- ☐ POS 2041 - American Federal Government (3 credits)

- ☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)
- ☐ ARC 2701 - History of Architecture 1 (3 credits)
- ☐ ARC 2702 - History of Architecture 2 (3 credits)
- ☐ ARH 1000 - Art Appreciation (3 credits)
- ☐ ARH 2050 - Art History 1 (3 credits)
- ☐ ARH 2051 - Art History 2 (3 credits)
- ☐ ARH 2740 - Cinema Appreciation (3 credits)
- ☐ CGS 1060

- ☐ POS 2112 - State and Local Government in America (3 credits)
- ☐ PSY 2012 - Introduction to Psychology (3 credits)
- ☐ REL 2300 - Survey of World Religions (3 credits)
- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credit
- ☐ SYG 2000 - Introduction to Sociology (3 credits)
- ☐ SYG 2230 - Multi-Ethnic America (3 credits)
- ☐ THE 2000 - Theatre Appreciation (3 credits)
- ☐ WOH 2012 - History of World Civilization to 1789 (3 credits)
- ☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

## 8. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

## 9. PROGRAM PREREQUISITES (8.00 credits)

- ☐ BSC 2086 - Human Anatomy & Physiology 2 (3 credits)
- ☐ BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits)

- ☐ CHM 1033L - Chemistry for Health Sciences lab (1 credits)
- ☐ MCB 2010 - Microbiology (3 credits)

## 10. LOWER DIVISION REQUIREMENTS (56.00 credits)

- ☐ PAS 1800C - Physical Diagnosis 1 (2 credits)
- ☐ PAS 1801C - Physical Diagnosis 2 (2 credits)
- ☐ PAS 1810C - Surgical Problems & Procedures (5 credits)
- ☐ PAS 1811 - Introduction to Medicine 1 for PAs (5 credits)
- ☐ PAS 1812 - Behavioral & Community Medicine 1 for PAS (1 credits)
- ☐ PAS 1813 - Pathophysiological Basis of Disease 1 (2 credits)
- ☐ PAS 1820 - Introduction to Medicine 2 for PAs (5 credits)
- ☐ PAS 1821 - Behavioral & Community Education Medicine 2 for PAS (1 credits)
- ☐ PAS 1822C - Electrocardiography/Cardiology (2 credits)
- ☐ PAS 1823 - Pharmacology (2 credits)
- ☐ PAS 1824 - Pathophysiological (2 credits)

- ☐ PAS 1830 - Pharmacotherapeutics (4 credits)
- ☐ PAS 1831 - Clinical Diagnostic Imaging (1 credits)
- ☐ PAS 2840L - Internal Medicine (4 credits)
- ☐ PAS 2841L - Geriatrics (2 credits)
- ☐ PAS 2842L - Psychiatry (2 credits)
- ☐ PAS 2850L - Surgery (2 credits)
- ☐ PAS 2860L - Pediatrics (4 credits)
- ☐ PAS 2866L - Family Medicine (4 credits)
- ☐ PAS 2870L - Obstetrics/Gynecology (2 credits)
- ☐ PAS 2876L - Emergency Medicine (2 credits)

## 11. UPPER DIVISION CORE REQ. (30.00 credits)

Must take 18.0 credits from the following group.

- ☐ HSC 3057 - Introduction to Research Methods in Health Care (3 credits)
- ☐ HSC 3131 - Client Education in Health Care (3 credits)
- ☐ HSC 3181 - Alternative Medicine strategies (3 credits)

- ☐ HSC 3243 - Teaching Skills for Health Care (3 credits)
- ☐ HSC 3701 - Leadership and Management in Healthcare (3 credits)
- ☐ HSC 4942 - Community Service Learning Practicum (3 credits)

- - And - -

Must take 12.0 credits from the following group.

- ☐ PAS 4470 - Physician Assistant Practice Management (3 credits)
- ☐ PAS 4936 - Contemporary Issues for the PA (3 credits)
- ☐ PAS 4946 - Physician Assistant Capstone Course (6 credits)

\* End of Program Sheet \*





## Health Science – Histotechnology Concentration

*Bachelor of Applied Science | Code: P9212 | 130 credits*

**Effective Term: Fall 2022 (2227)**

The Bachelor of Applied Science (B.A.S.) in Health Sciences with concentration in Histotechnology is designed to accommodate the unique demands for entry and advancement within the health science industry. Histotechnologists process patient samples for the detection of tissue abnormalities in order to determine the best treatment for the diseases causing the abnormalities. In addition to the dyes and chemicals used to prepare and stain tissues for microscopy, immunological and DNA techniques are utilized to determine specific cell types in tumors. Histotechnologists work in conjunction with the pathology department at a variety of hospital, surgical and clinical locations. Upon completion of the program and the attainment of certification and license, histotechnologists are employed in a variety of health-care settings with the opportunity of upward mobility to supervisory and management positions.

Course	Course Title	Credits	Pre-/Co-Requisites
<b>GENERAL EDUCATION REQUIREMENTS – 36 Credits Required (MET WITH A GRADE of “C” OR HIGHER)</b>			
<b>Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
<b>Oral Communication – 3 Credits Required</b>			
<b>Select 3 Credits from the following</b>			
ENC 2300	Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
SPC 2608	Introduction to Public Speaking	3	
<b>Humanities – 6 Credits Required</b>			
<b>Group A – Select 3 Credits from the following (State Core):</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Humanities	3	
LIT 2000	Introduction to Literature	3	
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	
THE 2000	Theater Appreciation	3	
<b>*AND*</b>			
<b>Group B – Select 3 Credits from the following (MDC Core):</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	Pre-Req ARH 2050
ARH 2051	Art History 2	3	
ARH 2740	Cinema Appreciation	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1	3	
HUM 1020	Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2	3	
LIT 2000	Introduction to Literature	3	
LIT 2120	A Survey of World Literature	3	Pre-Req ENC 1101 or ENC 1102 or Equivalent
MUH 2111	Survey of Music History 1	3	

MUH 2112	Survey of Music History 2	3	Pre-Req MUH 2112
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz and Popular Music in America	3	
PHI 2010	Introduction to Philosophy	3	
PHI 2604	Critical Thinking and Ethics	3	
THE 2000	Theater Appreciation	3	

#### **Behavioral and Social Science – 3 Credits Required (State Core)**

##### ***Group A – Select 3 Credits from the following:***

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\***

##### ***Group B – Select 3 Credits from the following:***

AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
POS 2041	American Federal Government	3

**NOTE:** If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.

#### **Behavioral and Social Science – 3 Credits Required (MDC Core)**

##### ***Group A – Select 3 Credits from the following:***

ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\***

##### ***Group B – Select 3 Credits from the following:***

AMH 2010	History of the United States to 1877	3
AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government	3
WOH 2012	History of World Civilization to 1715	3
WOH 2022	History of World Civilization from 1715	3

**NOTE:** If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.

#### **Natural Science – 3 Credits Required (State Core)**

##### ***Group A – Select 3 Credits from the following (Life Sciences):***

BSC 2010	Principles of Biology	3
BSC 2085	Human Anatomy & Physiology	3

**\*OR\***

##### ***Group B - Select 3 Credits from the following (Physical Sciences):***

CHM 1020	General Education Chemistry	3
CHM 1045	General Chemistry & Qualitative Analysis	3
PHY 1020	Fundamentals of Physics	3
PHY 2048	Physics with Calculus 1	3
PHY 2053	Physics without Calculus 1	3

**NOTE:** If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to

complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.

### Natural Science – 3 Credits Required (MDC Core)

#### Group A – Select 3 Credits from the following (Life Sciences):

BSC 2085	Human Anatomy & Physiology 1	3	Co-Req BSC 2085L
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**\*OR\***

#### Group B - Select 3 Credits from the following (Physical Sciences):

CHM 1033	Chemistry for Health Sciences	3	Pre-Co-Req CHM 1033L, MAT 1033.
CHM 1045	General Chemistry and Qualitative Analysis	3	Pre-Req CHM 1025 or a passing score on the CART exam, MAC 1105;
			Co-requisite CHM 1045L

\* Any course with the following prefix excluding labs.

**NOTE:** If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.

### Mathematics – 6 Credits Required

#### Group A Must take 3 credits from the following group (State Core):

MAC 1105	College Algebra	3	Pre-Req MAT 1033
MAC 2311	Calculus & Analytical Geometry	5	Pre-Req MAC1106 and MAC1114, or MAC1114 and MAC1140, or MAC1147
MGF 1106	Math for Liberal Arts 1	3	Pre-Req MAT 0029 or MAT 1033 or MGF 1107
MGF 1107	Math for Liberal Arts 2	3	
STA 2023	Statistical Methods	3	Pre-Req MAT1033 or MGF 1106

**\*AND\***

#### Group B Must take 3 credits from the following group (MDC Core):

MAC*		
MAD 2104	Discrete Mathematics	3
MAP*		
MAS*		
MGF*		
MTG 2204	Geometry for Educators	3
QMB 2100	Basic Business Statistics	3
STA 2023	Statistical Methods	3

### General Education Elective – 3 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)

BSC 1005	General Education Biology	3
BSC 1005L	General Education Biology Laboratory	1
BSC 1030	Social Issues in Biology	3
BSC 1050	Biology and Environment	3
BSC 1084	Functional Human Anatomy	3
BSC 1949	Co-op Work Experience 1: BIO	3
BSC 2010	Principles of Biology	3
BSC 2010	Principles of Biology Laboratory	2
BSC 2011	Principles of Biology 2	3
BSC 2011L	Principles of Biology Laboratory 2	2
BSC 2020	Human Biology: Fundamentals of Anatomy/Physiology	3
BSC 2085	Human Anatomy and Physiology 1	3
BSC 2085L	Human Anatomy and Physiology 1 Laboratory	1
BSC 2086	Human Anatomy and Physiology 2	3
BSC 2086L	Human Anatomy and Physiology 2 Laboratory	1
BSC 2250	Natural History of South Florida	3

BSC 2423C	Methods and Applications of Cell Culture and Protein Biotechnology	3
BSC 2426	Biotechnology Methods and Applications 1	3
BSC 2426L	Biotechnology Methods and Applications 1 Lab	2
BSC 2427	Biotechnology Methods and Applications 2	3
BSC 2427L	Biotechnology Methods and Applications 2 Lab	2
BSC 2943L	Bioscience Internship	3-6
BSC 2949	Co-op Work Experience 2: BSC	3
CHM 1020	General Education Chemistry	3
CHM 1020L	General Education Chemistry Laboratory	1
CHM 1033	Chemistry for Health Sciences	3
CHM 1033L	Chemistry for Health Sciences Laboratory	1
CHM 1045	General Chemistry and Qualitative Analysis	3
CHM 1045L	General Chemistry and Qualitative Analysis Lab	2
CHM 1046	General Chemistry and Qualitative Analysis	3
CHM 1046L	General Chemistry and Qualitative Analysis Lab	2
CHM 1941	Principles & Techniques of Peer Tutoring in Chemistry	1
CHM 1949	Co-op Work Experience 1: CHM	3
CHM 2124C	Survey of Quantitative Analysis	4
CHM 2200	Survey of Organic Chemistry	3
CHM 2200L	Survey of Organic Chemistry Laboratory	1
CHM 2210	Organic Chemistry 1	3
CHM 2210L	Organic Chemistry 1 Laboratory	2
CHM 2211	Organic Chemistry 2	3
CHM 2211L	Organic Chemistry 2 Laboratory	2
CHM 2949	Co-op Work Experience 2: CHM	3
MCB 2010	Microbiology	3
MCB 2010L	Microbiology Laboratory	2
PHY 1004	Physics with Applications 1	3
PHY 1004	Physics with Applications 1 Lab	1
PHY 1005	Physics with Applications 2	3
PHY 1005	Physics with Applications 2 Lab	1
PHY 1020	General Education Physics	3
PHY 1025	Basic Physics	3
PHY 2048	Physics with Calculus 1	3
PHY 2048L	Physics with Calculus 1 Laboratory	1
PHY 2049	Physics with Calculus 2	3
PHY 2049L	Physics with Calculus 2 Laboratory	1
PHY 2053	Physics (without Calculus) 1	3
PHY 2053L	Physics (without Calculus) 1 Lab	1
PHY 2054	Physics (without Calculus) 2	3
PHY 2054L	Physics (without Calculus) 2 Lab	1

**LOWER DIVISION ELECTIVES – 24 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)**

**Group A – Must take 9 Credits from the following group**

BSC 1005	General Education Biology	3
BSC 1005L	General Education Biology Laboratory	1
BSC 1030	Social Issues in Biology	3
BSC 1050	Biology and Environment	3
BSC 1084	Functional Human Anatomy	3
BSC 1949	Co-op Work Experience 1: BIO	3
BSC 2010	Principles of Biology	3
BSC 2010	Principles of Biology Laboratory	2
BSC 2011	Principles of Biology 2	3

BSC 2011L	Principles of Biology Laboratory 2	2
BSC 2020	Human Biology: Fundamentals of Anatomy/Physiology	3
BSC 2085	Human Anatomy and Physiology 1	3
BSC 2085L	Human Anatomy and Physiology 1 Laboratory	1
BSC 2086	Human Anatomy and Physiology 2	3
BSC 2086L	Human Anatomy and Physiology 2 Laboratory	1
BSC 2250	Natural History of South Florida	3
BSC 2423C	Methods and Applications of Cell Culture and Protein Biotechnology	3
BSC 2426	Biotechnology Methods and Applications 1	3
BSC 2426L	Biotechnology Methods and Applications 1 Lab	2
BSC 2427	Biotechnology Methods and Applications 2	3
BSC 2427L	Biotechnology Methods and Applications 2 Lab	2
BSC 2943L	Bioscience Internship	3-6
BSC 2949	Co-op Work Experience 2: BSC	3

**\*AND\***

**Group B – Must take 9 credits from the following group**

CHM 1020	General Education Chemistry	3
CHM 1020L	General Education Chemistry Laboratory	1
CHM 1033	Chemistry for Health Sciences	3
CHM 1033L	Chemistry for Health Sciences Laboratory	1
CHM 1045	General Chemistry and Qualitative Analysis	3
CHM 1045L	General Chemistry and Qualitative Analysis Lab	2
CHM 1046	General Chemistry and Qualitative Analysis	3
CHM 1046L	General Chemistry and Qualitative Analysis Lab	2
CHM 1941	Principles & Techniques of Peer Tutoring in Chemistry	1
CHM 1949	Co-op Work Experience 1: CHM	3
CHM 2124C	Survey of Quantitative Analysis	4
CHM 2200	Survey of Organic Chemistry	3
CHM 2200L	Survey of Organic Chemistry Laboratory	1
CHM 2210	Organic Chemistry 1	3
CHM 2210L	Organic Chemistry 1 Laboratory	2
CHM 2211	Organic Chemistry 2	3
CHM 2211L	Organic Chemistry 2 Laboratory	2
CHM 2949	Co-op Work Experience 2: CHM	3

**\*AND\***

**Group C – Must take 6 credits from the following group**

ACG 2001	ANT*	CGS 2092	CRW*	EME*	FIL 2611
ACG 2001L	ARC*	CGS 2405	CTE 1401	ENC*	FIN 2100
ACG 2011	ARH*	CGS 2423	DAA*	ENG*	FRE*
ACG 2011L	ART*	CHI*	DAN*	ENL*	FRW*
ACG 2021	ASL 1140C	CHM*	DEP*	EUH*	GEA*
ACG 2021L	ASL 1150C	CJC 1000	EAP5*	EVR 1001	GEB 1011
ACG 2031	ASL 2160C	CJC 1162	EAP6*	FIL 1030	GEB 2112
ACG 2071	ASL 2200C	CJD*	ECO*	FIL 1055	GEB 2350
ACG 2071L	AST*	CJL 2062	EDF*	FIL 1100	GEO*
ACG 2100	BOT*	CJT*	EDG*	FIL 1360	GER*
ACG 2110	BSC*	CLP*	EEC*	FIL 1420C	GLY*
ACG 2170	BUL 2130	COP 1170	EEL*	FIL 1431C	GRA 1111C
ACG 2360	BUL 2241	COP 2004	EEX*	FIL 2130	GRA 2117C
ACG 2450	BUL 2242	COP 1220	EGN 2033	FIL 2515C	GRA 2190C
ACG 2630	CCJ*	COP 2171	EGS 1001C	FIL 2552C	GRA 2191C
AFH*	CGS 1021	COP 2800	EGS 1010	FIL 2553C	HAI*
AMH*	CGS 1060C	COP 2805	EGS 1111C	FIL 2560C	HBR*
AML*	CGS 1145	CPO*	EGS 2311	FIL 2572C	HFT 1000

HFT 1210	IDS 1153	MAN 2021	MUS*	PGY 2475	RTV 1100
HFT 1220	IND 1020	MAN 2300	MUT*	PGY 2800C	RUS*
HFT 1300	IND 1100	MAN 2604	MVB*	PHI*	SLS 1106
HFT 1454	IND 1130	MAP*	MVJ*	PHM*	SLS 1125
HFT 2223	IND 1200	MAR 1011	MVK*	PHY*	SLS 1401
HFT 2410	IND 2210	MAR 1720	MVO*	PLA 2003	SLS 1505
HFT 2421	IND 2220	MAR 2150	MVP*	PLA 2104	SLS 1510
HFT 2500	INP*	MAS*	MVS*	PLA 2114	SOP*
HFT 2501	INR*	MAT 1033	MVV*	PLA 2203	SOW*
HFT 2750	IPM 2112	MCB*	MVW*	PLA 2223	SPA*
HFT 2800	ISC*	MET*	OCB*	PLA 2273	SPC*
HLP 1080	ISS 1120	MGF*	OCE*	PLA 2303	SPN*
HLP 1081	ISS 1161	MLT*	OST 2335	PLA 2600	SPW*
HLP 1083	ISS 2270	MMC*	PAD*	PLA 2763	SUR 1001C
HLP 1087	ITA*	MNA 1345	PCB*	PLA 2800	STA*
HOS 1010	JOU*	MNA 2120	PCO*	POR*	SYG*
HSC 1400	JPN*	MTG*	PEP*	POS*	THE*
HSC 1121	JST*	MUC*	PET*	POT*	TPA*
HSC 2100	LAH*	MUE*	PGY 2110C	PSB*	TPP*
HSC 2400	LIN*	MUH*	PGY 2111C	PSC*	VIC*
HUM*	LIS*	MUL*	PGY 2112C	PSY*	WHO*
HUN*	LIT*	MUM 2704	PGY 2401C	PUR*	ZOO*
HUS*	MAC*	MUN*	PGY 2410C	QMB*	
IDS 1044	MAD*	MUO*	PGY 2470C	REL*	

#### **HISTOTECHNOLOGY COURSES (0 credits)**

MLT 1752	Quality Control Laboratory Mathematics	2
MLT 1191	Histotechnology 1	3
MLT 1191L	Histotechnology 1 Lab	2
MLT 1195C	Tissue Identification 1	3
MLT 1196	Laboratory Safety and Regulations	2
MLT 2192	Histotechnology 2	3
MLT 2192L	Histotechnology 2 Laboratory	2
MLT 2197C	Tissue Identification 2	4
MLT 2180C	Infectious Diseases & Control Practices	3
MLT 2198	Histochemistry	3
MLT 2198L	Histochemistry Laboratory	2
MLT 1840L	Histotechnology Practicum 1	5
MLT 2841L	Histotechnology Practicum 2	5
MLT 2931	Histotechnology Seminar	2

#### **HISTOTECHNOLOGY VALIDATION - 27 Credits Required**

MLS 3997 - Validated Medical Laboratory Technology Course	27
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#### **UPPER DIVISION REQUIREMENTS – 19 Credits Required**

HSC 3057	Research Methods and Issues in Health Science	3
HSC 3655	Theoretical Foundations of Health Care Ethics	3
HSC 3701	Leadership and Management in Healthcare	3
MLS 4193	Clinical Molecular Diagnostics	3
MLS 4621	Clinical Biochemistry	4
MLS 4705	Laboratory Operations and Management	3

#### **DISCIPLINE CONTENT CORE - 21 Credits Required**

##### ***Group A – Histotechnology Courses***

MLS 4181C	Immunohistochemistry	3
MLS 4195C	Enzyme Histochemistry	3
MLS 4196C	IN-SITU Hybridization or FISH	3
MLS 4198	Immunohistochemistry Clinical Concentration	5

MLS 4910	Advances in Histotechnology Capstone	7
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**HISTOTECHNOLOGY SPECIAL TOPICS – 3 Credits Required**

MLS 3150	Special Topics in Histotechnology	3
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## **Public Safety Management - Crime Scene Investigation Option**

*Bachelor of Applied Science | Code: P5106 | 120 credits*

### **Program Description:**

The four-year Bachelor of Applied Science degree is a workforce-driven baccalaureate degree in Public Safety Management designed to provide education and training, resulting in immediate employment possibilities for students in numerous careers in Public Safety. This comprehensive curriculum emphasizes critical thinking, analytical, written and oral communications, as well as research skills designed to prepare today's learners for entry-level, mid-management, and upper level supervisory positions within Public Safety agencies such as the FBI, DEA, ICE, U.S. Marshals Service, U.S. Secret Service and others.

### **GENERAL EDUCATION REQUIREMENTS**

1. COMMUNICATIONS (6.00 credits)

ENC 1101 - English Composition 1	(3 credits)
ENC 1102 - English Composition 2	(3 credits)
  
2. ORAL COMMUNICATION (3.00 credits)

ENC 2300 - Advanced Composition and Communication	(3 credits)
LIT 2480 - Issues in Literature & Culture	(3 credits)
SPC 1017 - Fundamentals of Speech Communication	(3 credits)
  
3. HUMANITIES (6.00 credits)

***Must take 3.0 credits from the following group.***

ARC 2701 - History of Architecture 1	(3 credits)
ARH 1000 - Art Appreciation	(3 credits)
ARH 2050 - Art History 1	(3 credits)
DAN 2100 - Dance Appreciation	(3 credits)
HUM 1020 - Humanities	(3 credits)
IND 1100 - History of Interiors 1	(3 credits)
MUH 2111 - Survey of Music History 1	(3 credits)
MUL 1010 - Music Appreciation	(3 credits)
PHI 2604 - Critical Thinking/Ethics	(3 credits)
<b><i>--- And ---</i></b>	
<b><i>Must take 3.0 credits from the following group.</i></b>	
ARC 2702 - History of Architecture 2	(3 credits)
ARH 2051 - Art History 2	(3 credits)
ARH 2740 - Cinema Appreciation	(3 credits)
DAN 2130 - Dance History 1	(3 credits)
IND 1130 - History of Interiors 2	(3 credits)



LIT 2120 - A Survey of World Literature 2	(3 credits)
MUH 2112 - Survey of Music History 2	(3 credits)
MUL 2380 - Jazz and Popular Music in America	(3 credits)
PHI 2010 - Introduction to Philosophy	(3 credits)
THE 2000 - Theatre Appreciation	(3 credits)

4. BEHAVIORAL/SOCIAL SCIENCE (6.00 credits)

***Must take 3.0 credits from the following group.***

ANT 2410 - Introduction to Cultural Anthropology	(3 credits)
CLP 1006 - Psychology of Personal Effectiveness	(3 credits)
DEP 2000 - Human Growth and Development	(3 credits)
ISS 1161 - The Individual in Society	(3 credits)
PSY 2012 - Introduction to Psychology	(3 credits)
SYG 2000 - Introduction to Sociology	(3 credits)

***--- And ---***

***Must take 3.0 credits from the following group.***

AMH 2010 - History of the US to 1877	(3 credits)
AMH 2020 - History of the US since 1877	(3 credits)
ECO 2013 - Principles of Economics (Macro)	(3 credits)
ISS 1120 - The Social Environment	(3 credits)
POS 2041 - American Federal Government	(3 credits)
WOH 2012 - History of World Civilization to 1789	(3 credits)
WOH 2022 - History of World Civilization from 1789	(3 credits)

5. NATURAL SCIENCES (6.00 credits)

***Must take 3.0 credits from the following group.***

BOT 1010 - Botany	(3 credits)
BSC 1005 - General Education Biology	(3 credits)
BSC 1030 - Social Issues in Biology	(3 credits)
BSC 1050 - Biology & Environment	(3 credits)
BSC 2085 - Human Anatomy and Physiology 1	(3 credits)
BSC 2250 - Natural History of South Florida	(3 credits)
HUN 1201 - Essentials of Human Nutrition	(3 credits)
OCB 1010 - Introduction to Marine Biology	(3 credits)
BSC 1084 - Functional Human Anatomy	(3 credits)
BSC 2010 - Principles of Biology	(3 credits)
BSC 2020 - Human Biology: Fundamentals of Anatomy/Physiology	(3 credits)
PCB 2033 - Introduction to Ecology	(3 credits)
ZOO 1010 - Zoology	(3 credits)

***NOTE - The following course(s) are not allowed for credit in this area: All Labs***

***--- And ---***

***Must take 3.0 credits from the following group.***

CHM*, ESC*, GLY*, MET*, OCE*, PHY*	
AST 1002 - Descriptive Astronomy	(3 credits)

PSC 1121 - General Education Physical Science (3 credits)  
PSC 1515 - Energy in the Natural Environment (3 credits)

**NOTE** - The following course(s) are not allowed for credit in this area: All Labs

6. **MATHEMATICS (6.00 credits)**

MAC\*, MAD\*, MAP\*, MAS\*, MGF\*

MTG 2204 - Geometry for Educators (3 credits)

QMB 2100 - Basic Business Statistics (3 credits)

STA 2023 - Statistical Methods (3 credits)

**NOTE** - The following course(s) are not allowed for credit in this area: All Labs

7. **GENERAL EDUCATION ELECTIVE (3.00 credits)**

*See Advisor for Appropriate Course Selection*

**COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C - Introduction to Computer Technology & Applications

**PROGRAM PREREQUISITES (9.00 credits)**

CCJ 1020 - Introduction to Criminal Justice (3 credits)

CCJ 1191 - Human Behavior in Criminal Justice (3 credits)

CJL 2062 - Constitutional Law and Legal Procedure or Evidence (3 credits)

**DISCIPLINE CONTENT (30.00 credits)**

CCJ 3032 - Crime and the Media (3 credits)

CCJ 3663 - Female Crime and Delinquency (3 credits)

CCJ 3666 - Victimology (3 credits)

CCJ 3700 - Methods of Research in Criminal Justice (3 credits)

CCJ 4054 - Ethics in the Criminal Justice System (3 credits)

CCJ 4450 - Criminal Justice Administration (3 credits)

CCJ 4641 - Organized Crime (3 credits)

CCJ 4651 - Drugs and Crime (3 credits)

CCJ 4660 - Crime, Violence, and Schools (3 credits)

CJE 3110 - Law Enforcement Systems (3 credits)

CJE 3115 - Police and Society (3 credits)

CJE 3444 - Crime Prevention (3 credits)

CJE 3574 - Interpersonal Communications for Law Enforcement (3 credits)

CJE 4668 - Computer Crime (3 credits)

CJL 3044 - Civil Law (3 credits)

CJL 3564 - Judicial Policy Making (3 credits)

DSC 4012 - Terrorism (3 credits)

**AREA ELECTIVE (15.00 credits)**

CJE 4647 - Advanced Crime Scene Technology	(3 credits)
CJE 4648 - Crime Scene Safety	(3 credits)
CJE 4650 - Advanced Crime Scene Investigations	(3 credits)
CJE 4675 - Modern Fingerprint Technology	(3 credits)
CJL 4133 - Criminal Evidence	(3 credits)

**REQUIRED ELECTIVES (30.00 credits)**

CCJ\*, CHI2\*, CJC\*, CJD\*, CJE\*, CJK\*, CJL\*, CJT\*  
FRE1\*, FRE2\*, FRW2\*, GER1\*, GER2\*, HBR1\*, HBR2\*, ITA1\*, ITA2\*, JPN1\*, JPN2\*, POR1\*,  
POR2\*, RUS1\*, RUS2\*, SPN1\*, SPN2\*

CCJ 1010 - Introduction to Criminology	(3 credits)
CCJ 2650 - Narcotics and Dangerous Substances	(3 credits)
CGS 1060C - Introduction to Computer Technology & Applications	(4 credits)
CJC 1000 - Introduction to Corrections	(3 credits)
CJC 1162 - Parole and Probation	(3 credits)
CJE 2600 - Criminal Investigation	(3 credits)
CJJ 2002 - Juvenile Delinquency	(3 credits)
CJL 1100 - Criminal Law	(3 credits)
DSC 1006 - Introduction to Homeland Security	(3 credits)
DSC 2242 - Transportation and Border Security	(3 credits)
DSC 2590 - Intelligence Analysis and Security Management	(3 credits)

**Public Safety Management - Criminal Justice Concentration**

**(CIP 1104399991)**

*Bachelor of Applied Science | Code: P5110 | 120 credits*

Effective Term: Fall 2018 (2187)

**Program Description:**

The four-year Bachelor of Applied Science degree is a workforce-driven baccalaureate degree in Public Safety Management designed to provide education and training, resulting in immediate employment possibilities for students in numerous careers in Public Safety. This comprehensive curriculum emphasizes critical thinking, analytical, written and oral communications, as well as research skills designed to prepare today's learners for entry-level, mid-management, and upper level supervisory positions within Public Safety agencies such as the FBI, DEA, ICE, U.S. Marshals Service, U.S. Secret Service and others.

**GENERAL EDUCATION REQUIREMENTS**

1. COMMUNICATIONS (6.00 credits)

ENC 1101 - English Composition 1	(3 credits)
ENC 1102 - English Composition 2	(3 credits)
  
2. ORAL COMMUNICATION (3.00 credits)

ENC 2300 - Advanced Composition and Communication	(3 credits)
LIT 2480 - Issues in Literature & Culture	(3 credits)
SPC 1017 - Fundamentals of Speech Communication	(3 credits)
SPC 2608 – Introduction to Public Speaking	(3 credits)
  
3. HUMANITIES (6.00 credits)  
***Must take 3.0 credits from the following group.***

ARC 2701 - History of Architecture 1	(3 credits)
ARH 1000 - Art Appreciation	(3 credits)
ARH 2050 - Art History 1	(3 credits)
DAN 2100 - Dance Appreciation	(3 credits)
HUM 1020 - Humanities	(3 credits)
IND 1100 - History of Interiors 1	(3 credits)
MUH 2111 - Survey of Music History 1	(3 credits)
MUL 1010 - Music Appreciation	(3 credits)
PHI 2604 - Critical Thinking/Ethics	(3 credits)
<b>--- And ---</b>	
<b><i>Must take 3.0 credits from the following group.</i></b>	
ARC 2702 - History of Architecture 2	(3 credits)
ARH 2051 - Art History 2	(3 credits)
ARH 2740 - Cinema Appreciation	(3 credits)
DAN 2130 - Dance History 1	(3 credits)
IND 1130 - History of Interiors 2	(3 credits)
LIT 2120 - A Survey of World Literature 2	(3 credits)
MUH 2112 - Survey of Music History 2	(3 credits)
MUL 2380 - Jazz and Popular Music in America	(3 credits)
PHI 2010 - Introduction to Philosophy	(3 credits)
THE 2000 - Theatre Appreciation	(3 credits)
  
4. BEHAVIORAL/SOCIAL SCIENCE (6.00 credits)  
***Must take 3.0 credits from the following group.***

ANT 2410 - Introduction to Cultural Anthropology	(3 credits)
CLP 1006 - Psychology of Personal Effectiveness	(3 credits)
DEP 2000 - Human Growth and Development	(3 credits)
ISS 1161 - The Individual in Society	(3 credits)
PSY 2012 - Introduction to Psychology	(3 credits)
SYG 2000 - Introduction to Sociology	(3 credits)

--- And ---

**Must take 3.0 credits from the following group.**

AMH 2010 - History of the US to 1877	(3 credits)
AMH 2020 - History of the US since 1877	(3 credits)
ECO 2013 - Principles of Economics (Macro)	(3 credits)
ISS 1120 - The Social Environment	(3 credits)
POS 2041 - American Federal Government	(3 credits)
WOH 2012 - History of World Civilization to 1789	(3 credits)
WOH 2022 - History of World Civilization from 1789	(3 credits)

5. NATURAL SCIENCES (6.00 credits)

**Must take 3.0 credits from the following group.**

BOT 1010 - Botany	(3 credits)
BSC 1005 - General Education Biology	(3 credits)
BSC 1030 - Social Issues in Biology	(3 credits)
BSC 1050 - Biology & Environment	(3 credits)
BSC 2085 - Human Anatomy and Physiology 1	(3 credits)
BSC 2250 - Natural History of South Florida	(3 credits)
HUN 1201 - Essentials of Human Nutrition	(3 credits)
OCB 1010 - Introduction to Marine Biology	(3 credits)
BSC 1084 - Functional Human Anatomy	(3 credits)
BSC 2010 - Principles of Biology	(3 credits)
BSC 2020 - Human Biology: Fundamentals of Anatomy/Physiology	(3 credits)
PCB 2033 - Introduction to Ecology	(3 credits)
ZOO 1010 - Zoology	(3 credits)

**NOTE** - The following course(s) are not allowed for credit in this area: All Labs

--- And ---

**Must take 3.0 credits from the following group.**

CHM*, ESC*, GLY*, MET*, OCE*, PHY*	
AST 1002 - Descriptive Astronomy	(3 credits)
PSC 1121 - General Education Physical Science	(3 credits)
PSC 1515 - Energy in the Natural Environment	(3 credits)

**NOTE** - The following course(s) are not allowed for credit in this area: All Labs

6. MATHEMATICS (6.00 credits)

MAC*, MAD*, MAP*, MAS*, MGF*	
MTG 2204 - Geometry for Educators	(3 credits)
QMB 2100 - Basic Business Statistics	(3 credits)
STA 2023 - Statistical Methods	(3 credits)

**NOTE** - The following course(s) are not allowed for credit in this area: All Labs

7. GENERAL EDUCATION ELECTIVE (3.00 credits)

See Advisor for Appropriate Course Selection

**COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C - Introduction to Computer Technology & Applications

**PROGRAM PREREQUISITES (12.00 credits)**

CCJ 1010 - Introduction to Criminology	(3 credits)
CCJ 1020 - Introduction to Criminal Justice	(3 credits)
CJC 1000 - Introduction to Corrections	(3 credits)
CJL 2062 - Constitutional Law and Legal Procedure or Evidence	(3 credits)

**DISCIPLINE CONTENT (30.00 credits)**

CCJ 3032 - Crime and the Media	(3 credits)
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CCJ 3663 - Female Crime and Delinquency	(3 credits)
CCJ 3666 - Victimology	(3 credits)
CCJ 3700 - Methods of Research in Criminal Justice	(3 credits)
CCJ 4054 - Ethics in the Criminal Justice System	(3 credits)
CCJ 4450 - Criminal Justice Administration	(3 credits)
CCJ 4651 - Drugs and Crime	(3 credits)
CCJ 4660 - Crime, Violence, and Schools	(3 credits)
CJE 3110 - Law Enforcement Systems	(3 credits)
CJE 3444 - Crime Prevention	(3 credits)
CJE 3574 - Interpersonal Communications for Law Enforcement	(3 credits)
CJE 4668 - Computer Crime	(3 credits)
CJL 3044 - Civil Law	(3 credits)
CJL 3564 - Judicial Policy Making	(3 credits)

**AREA ELECTIVE (15.00 credits)**

CCJ 4641 - Organized Crime	(3 credits)
CJC 4163 - Advanced Probation & Parole	(3 credits)
CJE 3115 - Police and Society	(3 credits)
CJE 4615 - Advanced Criminal Investigations	(3 credits)
DSC 4012 - Terrorism	(3 credits)

**REQUIRED ELECTIVES (27.00 credits)**

ASL\*, CCJ\*, CHI2\*, CJC\*, CJD\*, CJE\*, CJK\*, CJL\*, CJT\*, FRE1\*, FRE2\*, FRW2\*, GER1\*, GER2\*, HBR1\*, HBR2\*, ITA1\*, ITA2\*, JPN1\*, JPN2\*, POR1\*, POR2\*, RUS1\*, RUS2\*, SPN1\*, SPN2\*

CCJ 1191	Human Behavior in Criminal Justice	(3 credits)
CCJ 2650	Narcotics and Dangerous Substances	(3 credits)
CGS 1060C	Introduction to Computer Technology & Applications	(4 credits)
CJC 1162	Parole and Probation	(3 credits)
CJE 2600	Criminal Investigation	(3 credits)
CJJ 2002	Juvenile Delinquency	(3 credits)
CJL 1100	Criminal Law	(3 credits)
DSC 1006	Introduction to Homeland Security	(3 credits)
DSC 2242	Transportation and Border Security	(3 credits)
DSC 2590	Intelligence Analysis and Security Management	(3 credits)

**PROGRAM OF STUDY: PUBLIC SAFETY MANAGEMENT-EMERGENCY MANAGEMENT**  
**CONCENTRATION (P5105)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (6.00 credits)

Gordon rule assigned

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

### 2. ORAL COMMUNICATION (3.00 credits)

Gordon rule assigned

☐ ENC 2300 - Advanced Composition and Communication (3 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credit

☐ LIT 2480 - Issues in Literature & Culture (3 credits)

### 3. HUMANITIES (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ARC 2701 - History of Architecture 1 (3 credits)

☐ IND 1100 - History of Interiors 1 (3 credits)

☐ ARH 1000 - Art Appreciation (3 credits)

☐ MUH 2111 - Survey of Music History 1 (3 credits)

☐ ARH 2050 - Art History 1 (3 credits)

☐ MUL 1010 - Music Appreciation (3 credits)

☐ DAN 2100 - Dance Appreciation (3 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

☐ HUM 1020 - Humanities (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ ARC 2702 - History of Architecture 2 (3 credits)

☐ LIT 2120 - A Survey of World Literature 2 (3 credits)

☐ ARH 2051 - Art History 2 (3 credits)

☐ MUH 2112 - Survey of Music History 2 (3 credits)

☐ ARH 2740 - Cinema Appreciation (3 credits)

☐ MUL 2380 - Jazz and Popular Music in America (3 credits)

☐ DAN 2130 - Dance History 1 (3 credits)

☐ PHI 2010 - Introduction to Philosophy (3 credits)

☐ IND 1130 - History of Interiors 2 (3 credits)

☐ THE 2000 - Theatre Appreciation (3 credits)

### 4. BEHAVIORAL/SOCIAL SCIENCE (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)

☐ ISS 1161 - The Individual in Society (3 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

☐ PSY 2012 - Introduction to Psychology (3 credits)

☐ DEP 2000 - Human Growth and Development (3 credits)

☐ SYG 2000 - Introduction to Sociology (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ AMH 2010 - History of the US to 1877 (3 credits)

☐ POS 2041 - American Federal Government (3 credits)

☐ AMH 2020 - History of the US since 1877 (3 credits)

☐ WOH 2012 - History of World Civilization to 1789 (3 credits)

☐ ECO 2013 - Principles of Economics (Macro) (3 credits)

☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

☐ ISS 1120 - The Social Environment (3 credits)

### 5. NATURAL SCIENCES (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ BOT 1010 - Botany (3 credits)

☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)

☐ BSC 1005 - General Education Biology (3 credits)

☐ BSC 2250 - Natural History of South Florida (3 credits)

☐ BSC 1030 - Social Issues in Biology (3 credits)

☐ HUN 1201 - Essentials of Human Nutrition (3 credits)

☐ BSC 1050 - Biology & Environment (3 credits)

☐ OCB 1010 - Introduction to Marine Biology (3 credits)

- ☐ BSC 1084 - Functional Human Anatomy (3 credits)
- ☐ BSC 2010 - Principles of Biology (3 credits)
- ☐ BSC 2020 - Human Biology: Fundamentals of Anatomy/Physiology (3 credits)

- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ ZOO 1010 - Zoology (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ AST 1002 - Descriptive Astronomy (3 credits)
- ☐ CHM\*
- ☐ GLY\*
- ☐ MET\*
- ☐ OCE\*

- ☐ PHY\*
- ☐ PSC 1121 - General Education Physical Science (3 credits)
- ☐ PSC 1515 - Energy in the Natural Environment (3 credits)
- ☐ ESC\*

The following course(s) are not allowed for credit in this area.

All Labs

## 6. MATHEMATICS (6.00 credits)

Gordon rule assigned

- ☐ MAC\*
- ☐ MAD\*
- ☐ MAP\*
- ☐ MAS\*

- ☐ MGF\*
- ☐ MTG 2204 - Geometry for Educators (3 credits)
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 7. GENERAL EDUCATION ELECTIVE (3.00 credits)

- ☐ AST\*
- ☐ BOT\*
- ☐ BSC\*
- ☐ CHM\*
- ☐ GLY\*
- ☐ MET\*
- ☐ OCE\*
- ☐ PHY\*
- ☐ PSC\*
- ☐ ZOO\*
- ☐ HUN 1201 - Essentials of Human Nutrition (3 credits)
- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ MAC\*
- ☐ MAD\*
- ☐ MAP\*
- ☐ MAS\*
- ☐ MGF\*
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)
- ☐ CHI2\*
- ☐ FRE2\*
- ☐ FRW2\*
- ☐ HBR2\*
- ☐ GER2\*
- ☐ ITA2\*
- ☐ JPN2\*
- ☐ POR2\*
- ☐ RUS2\*
- ☐ SPN2\*
- ☐ ASL 2160C - American Sign Language 3 (4 credits)
- ☐ ASL 2200C - American Sign Language 4 (4 credits)
- ☐ ACG 2021 - Financial Accounting (3 credits)
- ☐ AMH 2010 - History of the US to 1877 (3 credits)
- ☐ AMH 2020 - History of the US since 1877 (3 credits)

- ☐ COP 2270 - "C" for Engineers (4 credits)
- ☐ CIS 1000 - Introduction to Data Processing (4 credits)
- ☐ COP 1332 - Introduction to Visual Basic Programming (4 credits)
- ☐ COP 1334 - Introduction to C++ Programming (4 credits)
- ☐ DAN 2130 - Dance History 1 (3 credits)
- ☐ DEP 2000 - Human Growth and Development (3 credits)
- ☐ ECO 2013 - Principles of Economics (Macro) (3 credits)
- ☐ EDF 1005 - Introduction to the Teaching Profession (3 credits)
- ☐ EDF 2085 - Introduction to Diversity (3 credits)
- ☐ EEX 2000 - Introduction to Special Education (3 credits)
- ☐ ENC 2300 - Advanced Composition and Communication (3 credits)
- ☐ GEO 2420 - Introduction to Cultural Geography (3 credits)
- ☐ HLP 1080 - Wellness (2 credits)
- ☐ HLP 1081 - Fitness & Wellness for Life (3 credits)
- ☐ HSC 2400 - Basic Emergency Care (3 credits)
- ☐ HUM 1020 - Humanities (3 credits)
- ☐ IND 1100 - History of Interiors 1 (3 credits)
- ☐ IND 1130 - History of Interiors 2 (3 credits)
- ☐ INR 2002 - International Relations (3 credits)
- ☐ ISS 1120 - The Social Environment (3 credits)
- ☐ ISS 1161 - The Individual in Society (3 credits)
- ☐ ISS 2270 - Multicultural Communications and Relations (3 credits)
- ☐ LIT 2120 - A Survey of World Literature 2 (3 credits)
- ☐ LIT 2480 - Issues in Literature & Culture (3 credits)
- ☐ MUH 2111 - Survey of Music History 1 (3 credits)
- ☐ MUH 2112 - Survey of Music History 2 (3 credits)
- ☐ MUL 1010 - Music Appreciation (3 credits)
- ☐ MUL 2380 - Jazz and Popular Music in America (3 credits)
- ☐ PHI 2010 - Introduction to Philosophy (3 credits)
- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)
- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)
- ☐ POS 2041 - American Federal Government (3 credits)



- ☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)
- ☐ ARC 2701 - History of Architecture 1 (3 credits)
- ☐ ARC 2702 - History of Architecture 2 (3 credits)
- ☐ ARH 1000 - Art Appreciation (3 credits)
- ☐ ARH 2050 - Art History 1 (3 credits)
- ☐ ARH 2051 - Art History 2 (3 credits)
- ☐ ARH 2740 - Cinema Appreciation (3 credits)
- ☐ CGS 1060

- ☐ POS 2112 - State and Local Government in America (3 credits)
- ☐ PSY 2012 - Introduction to Psychology (3 credits)
- ☐ REL 2300 - Survey of World Religions (3 credits)
- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credit
- ☐ SYG 2000 - Introduction to Sociology (3 credits)
- ☐ SYG 2230 - Multi-Ethnic America (3 credits)
- ☐ THE 2000 - Theatre Appreciation (3 credits)
- ☐ WOH 2012 - History of World Civilization to 1789 (3 credits)
- ☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

## 8. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

## 9. PROGRAM PREREQUISITES (30.00 credits)

- ☐ CCJ 1010 - Introduction to Criminology (3 credits)
- ☐ CCJ 1020 - Introduction to Criminal Justice (3 credits)
- ☐ CCJ 1191 - Human Behavior in Criminal Justice (3 credits)
- ☐ CJL 1100 - Criminal Law (3 credits)
- ☐ CJJ 2002 - Juvenile Delinquency (3 credits)

- ☐ CCJ 2650 - Narcotics and Dangerous Substances (3 credits)
- ☐ CJC 1000 - Introduction to Corrections (3 credits)
- ☐ CJC 1162 - Parole and Probation (3 credits)
- ☐ CJL 2062 - Constitutional Law and Legal Procedure or Evidenc  
credits)
- ☐ CJE 2600 - Criminal Investigation (3 credits)

## 10. DISCIPLINE CONTENT (30.00 credits)

- ☐ CCJ 3032 - Crime and the Media (3 credits)
- ☐ CJL 3564 - Judicial Policy Making (3 credits)
- ☐ CJE 3574 - Interpersonal Communications for Law Enforcement  
(3 credits)
- ☐ CCJ 3663 - Female Crime and Delinquency (3 credits)
- ☐ CCJ 3666 - Victimology (3 credits)
- ☐ CCJ 3700 - Methods of Research in Criminal Justice (3 credits)
- ☐ CCJ 4450 - Criminal Justice Administration (3 credits)
- ☐ CCJ 4054 - Ethics in the Criminal Justice System (3 credits)
- ☐ CCJ 4641 - Organized Crime (3 credits)

- ☐ CCJ 4651 - Drugs and Crime (3 credits)
- ☐ CCJ 4660 - Crime, Violence, and Schools (3 credits)
- ☐ CJE 3110 - Law Enforcement Systems (3 credits)
- ☐ CJE 3115 - Police and Society (3 credits)
- ☐ CJE 3444 - Crime Prevention (3 credits)
- ☐ CJE 4668 - Computer Crime (3 credits)
- ☐ CJL 3044 - Civil Law (3 credits)
- ☐ DSC 4012 - Terrorism (3 credits)

## 11. AREA ELECTIVE (15.00 credits)

- ☐ DSC 4014 - Domestic & International Terrorism (3 credits)
- ☐ DSC 4214 - Catastrophic Event Response Management (3 credits)
- ☐ DSC 4215 - Emergency Planning & Security Measures (3 credits)
- ☐ FES 4003 - Public Policy in Emergency Management (3 credits)
- ☐ FES 4823 - Integrated Emergency Management Planning Syst  
(3 credits)

## 12. REQUIRED ELECTIVES (9.00 credits)

- ☐ CCJ\*
- ☐ CGS 1060
- ☐ CHI2\*
- ☐ CJC\*
- ☐ CJD\*
- ☐ CJE\*
- ☐ CJK\*
- ☐ CJL\*
- ☐ CJT\*
- ☐ FRE2\*
- ☐ FRW2\*
- ☐ HBR2\*
- ☐ GER2\*
- ☐ ITA2\*
- ☐ JPN2\*
- ☐ POR2\*
- ☐ RUS2\*
- ☐ SPN2\*
- ☐ CCJ 1010 - Introduction to Criminology (3 credits)
- ☐ CCJ 1020 - Introduction to Criminal Justice (3 credits)

- ☐ CCJ 1191 - Human Behavior in Criminal Justice (3 credits)
- ☐ CJL 1100 - Criminal Law (3 credits)
- ☐ CJJ 2002 - Juvenile Delinquency (3 credits)
- ☐ CCJ 2650 - Narcotics and Dangerous Substances (3 credits)
- ☐ CJC 1000 - Introduction to Corrections (3 credits)
- ☐ CJC 1162 - Parole and Probation (3 credits)
- ☐ CJL 2062 - Constitutional Law and Legal Procedure or Evidenc  
credits)
- ☐ CJE 2600 - Criminal Investigation (3 credits)
- ☐ FRE1\*
- ☐ HBR1\*
- ☐ GER1\*
- ☐ ITA1\*
- ☐ JPN1\*
- ☐ POR1\*
- ☐ RUS1\*
- ☐ SPN1\*
- ☐ DSC 1006 - Introduction to Homeland Security (3 credits)
- ☐ DSC 2242 - Transportation and Border Security (3 credits)
- ☐ DSC 2590 - Intelligence Analysis and Security Management (3  
credits)

The following course(s) are not allowed for credit in this area.  
CCJ1010 CCJ1020 CCJ1191 CJL1100 CJJ2002 CCJ2650 CJC1000  
CJC1162 CJL2062 CJE2600

\* End of Program Sheet \*



**Supervision and Management – Accounting Concentration**  
*Bachelor in Applied Science | Code: P9203 | 120 Credits*

CIP (1105202991)

**Program Description:**

The Bachelor of Applied Science (BAS) degree in Supervision and Management prepares students to meet the needs of a dynamic and global business environment with the abilities and skills to succeed as a manager or supervisor. In addition, students may complete the general degree or one of three concentrations in Accounting, Hospitality Management, or Human Resource Management.

Course	Course Title	Credits	Pre-/Co-Requisites
<b><u>GENERAL EDUCATION REQUIREMENTS – 36 Credits Required (MET WITH A GRADE of “C” OR HIGHER)</u></b>			
<b>Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
<b>Oral Communication – 3 Credits Required</b>			
<b><i>Select 3 Credits from the following</i></b>			
ENC 2300	Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
SPC 2608	Introduction to Public Speaking	3	
<b>Humanities – 6 Credits Required</b>			
<b><i>Group A – Select 3 Credits from the following (State Core):</i></b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Humanities	3	
LIT 2000	Introduction to Literature	3	
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	
THE 2000	Theater Appreciation	3	
<b>*AND*</b>			
<b><i>Group B – Select 3 Credits from the following (MDC Core):</i></b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	Pre-Req ARH 2050
ARH 2051	Art History 2	3	
ARH 2740	Cinema Appreciation	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1	3	
HUM 1020	Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2	3	
LIT 2000	Introduction to Literature	3	
LIT 2120	A Survey of World Literature	3	Pre-Req ENC 1101 or ENC 1102 or Equivalent
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2	3	Pre-Req MUH 2112
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz and Popular Music in America	3	
PHI 2010	Introduction to Philosophy	3	
PHI 2604	Critical Thinking and Ethics	3	
THE 2000	Theater Appreciation	3	

**Behavioral and Social Science – 3 Credits Required (State Core)****Group A – Select 3 Credits from the following:**

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\*****Group B – Select 3 Credits from the following:**

AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
POS 2041	American Federal Government	3

**NOTE:** If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.

**Behavioral and Social Science – 3 Credits Required (MDC Core)****Group A – Select 3 Credits from the following:**

ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\*****Group B – Select 3 Credits from the following:**

AMH 2010	History of the United States to 1877	3
AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government	3
WOH 2012	History of World Civilization to 1715	3
WOH 2022	History of World Civilization from 1715	3

**NOTE:** If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.

**Natural Science – 3 Credits Required (State Core)****Group A – Select 3 Credits from the following (Life Sciences):**

BSC 1005	General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 2010	Principles of Biology	3	
BSC 2085	Human Anatomy & Physiology	3	
EVR 1001	Introduction to Environmental Science	3	

**\*OR\*****Group B - Select 3 Credits from the following (Physical Sciences):**

AST 1002	Descriptive Astronomy
CHM 1020	General Education Chemistry
CHM 1045	General Chemistry & Qualitative Analysis
ESC 1000	General Education Earth Science
PHY 1020	Fundamentals of Physics
PHY 2048	Physics with Calculus 1
PHY 2053	Physics without Calculus 1

**NOTE:** If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.

**Natural Science – 3 Credits Required (MDC Core)****Group A – Select 3 Credits from the following (Life Sciences):**

BOT 1010	Botany	3	Co-Req BOT 1010L
BSC 1005	General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology 1	3	Pre/Co-Req BSC 2010L, CHM 1045
BSC 2020	Human Biology:		
	Fundamental of Anatomy & Physiology	3	
BSC 2085	Human Anatomy & Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
EVR 1001	Introduction to Environmental Science	3	
HUN 1201	Essentials of Nutrition	3	HUN 1201L (Optional Laboratory)
OCB 1010	Introduction to Marine Biology	3	OCB 1010L (Optional Laboratory)
PCB 2033	Introduction to Ecology	3	Pre-Req BSC 2011 or PSC 1515
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**\*OR\*****Group B - Select 3 Credits from the following (Physical Sciences):**

AST 1002	Descriptive Astronomy	3	
CHM*		3	
GLY*		3	
ESC*		3	
MET*		3	
OCE*		3	
PHY*		3	
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	

\* Any course with the following prefix excluding labs.

**NOTE:** If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.

**Mathematics – 6 Credits Required****Group A Must take 3 credits from the following group (State Core):**

MAC 1105	College Algebra	3	Pre-Req MAT 1033
MAC 2311	Calculus & Analytical Geometry	5	Pre-Req MAC1106 and MAC1114, or MAC1114 and MAC1140, or MAC1147
MGF 1106	Math for Liberal Arts 1	3	Pre-Req MAT 0029 or MAT 1033 or MGF 1107
MGF 1107	Math for Liberal Arts 2	3	
STA 2023	Statistical Methods	3	Pre-Req MAT1033 or MGF 1106

**\*AND\*****Group B Must take 3 credits from the following group (MDC Core):**

QMB 2100	Basic Business Statistics	3	Co-Req QMB 2100L
STA 2023	Statistical Methods	3	Pre-Req MAT1033 or MGF 1106

**General Education Elective – 3 Credits Required (MET WITH A “D” LETTER GRADE OR HIGHER)**

- Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor).

**LOWER DIVISION ELECTIVES – 24 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)**

- Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor).

**UPPER DIVISION REQUIREMENTS – 60 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)****Business Core – 33 Credits Required**

FIN 3400	Finance for Non-Financial Managers	3	
MAN 3025	Organization Management	3	
MAN 3065	Business Ethics	3	
MAN 3240	Organizational Behavior	3	
MAN 3301	Human Resources Management	3	
MAN 4113	Managing Diversity	3	
MAN 4120	Leadership Challenges and Supervision	3	
MAN 4720	Strategic Management Decision Making	3	
MAN 4900	Capstone Project in Supervision and Management	3	Senior Status or Departmental Permission
MAN 4941	Management Internship	3	Senior Status or Departmental Permission
MAR3803	Marketing for Managers	3	

**Accounting Concentration – 18 Credits Required**

ACG 3103	Intermediate Financial Accounting I	3	Pre-Req: ACG 2071, MAC 2233, QMB 2100
ACG 3113	Intermediate Financial Accounting II	3	Pre-Req: ACG 3103
ACG 3343	Cost Accounting and Controls	3	Pre-Req: ACG 2071
ACG 4632	Auditing	3	Pre-Req: ACG 3113
TAX 4001	Federal Income Tax I	3	Pre-Req: ACG 3103
TAX 4011	Federal Income Tax II	3	Pre-Req: TAX 4001

**BUSINESS ELECTIVES – 9 Credits Required (MET WITH A “D” LETTER GRADE OR HIGHER)**

ACG*	GEB*	MKA*	QMB*
BUL*	HFT*	MNA*	SBM*
ECO*	MAN*	OST*	TAX*
FIN*	MAR*	PUR*	



**Supervision and Management – Hospitality Management Concentration**  
*Bachelor in Applied Science | Code: P9201 | 120 Credits*

CIP (1105202991)

**Program Description:**

The Bachelor of Applied Science (BAS) degree in Supervision and Management prepares students to meet the needs of a dynamic and global business environment with the abilities and skills to succeed as a manager or supervisor. In addition, students may complete the general degree or one of three concentrations in Accounting, Hospitality Management, or Human Resource Management.

Course	Course Title	Credits	Pre-/Co-Requisites
<b>GENERAL EDUCATION REQUIREMENTS – 36 Credits Required (MET WITH A GRADE of “C” OR HIGHER)</b>			
<b>Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
<b>Oral Communication – 3 Credits Required</b>			
<b>Select 3 Credits from the following</b>			
ENC 2300	Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
SPC 2608	Introduction to Public Speaking	3	
<b>Humanities – 6 Credits Required</b>			
<b>Group A – Select 3 Credits from the following (State Core):</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Humanities	3	
LIT 2000	Introduction to Literature	3	
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	
THE 2000	Theater Appreciation	3	
<b>*AND*</b>			
<b>Group B – Select 3 Credits from the following (MDC Core):</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	Pre-Req ARH 2050
ARH 2051	Art History 2	3	
ARH 2740	Cinema Appreciation	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1	3	
HUM 1020	Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2	3	
LIT 2000	Introduction to Literature	3	
LIT 2120	A Survey of World Literature	3	Pre-Req ENC 1101 or ENC 1102 or Equivalent
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2	3	Pre-Req MUH 2112
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz and Popular Music in America	3	
PHI 2010	Introduction to Philosophy	3	
PHI 2604	Critical Thinking and Ethics	3	
THE 2000	Theater Appreciation	3	

**Behavioral and Social Science – 3 Credits Required (State Core)****Group A – Select 3 Credits from the following:**

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\*****Group B – Select 3 Credits from the following:**

AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
POS 2041	American Federal Government	3

**NOTE:** If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.

**Behavioral and Social Science – 3 Credits Required (MDC Core)****Group A – Select 3 Credits from the following:**

ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\*****Group B – Select 3 Credits from the following:**

AMH 2010	History of the United States to 1877	3
AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government	3
WOH 2012	History of World Civilization to 1715	3
WOH 2022	History of World Civilization from 1715	3

**NOTE:** If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.

**Natural Science – 3 Credits Required (State Core)****Group A – Select 3 Credits from the following (Life Sciences):**

BSC 1005	General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 2010	Principles of Biology	3	
BSC 2085	Human Anatomy & Physiology	3	
EVR 1001	Introduction to Environmental Science	3	

**\*OR\*****Group B - Select 3 Credits from the following (Physical Sciences):**

AST 1002	Descriptive Astronomy
CHM 1020	General Education Chemistry
CHM 1045	General Chemistry & Qualitative Analysis
ESC 1000	General Education Earth Science
PHY 1020	Fundamentals of Physics
PHY 2048	Physics with Calculus 1
PHY 2053	Physics without Calculus 1

**NOTE:** If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.



**Natural Science – 3 Credits Required (MDC Core)****Group A – Select 3 Credits from the following (Life Sciences):**

BOT 1010	Botany	3	Co-Req BOT 1010L
BSC 1005	General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology 1	3	Pre/Co-Req BSC 2010L, CHM 1045
BSC 2020	Human Biology:		
	Fundamental of Anatomy & Physiology	3	
BSC 2085	Human Anatomy & Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
EVR 1001	Introduction to Environmental Science	3	
HUN 1201	Essentials of Nutrition	3	HUN 1201L (Optional Laboratory)
OCB 1010	Introduction to Marine Biology	3	OCB 1010L (Optional Laboratory)
PCB 2033	Introduction to Ecology	3	Pre-Req BSC 2011 or PSC 1515
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**\*OR\*****Group B - Select 3 Credits from the following (Physical Sciences):**

AST 1002	Descriptive Astronomy	3	
CHM*		3	
GLY*		3	
ESC*		3	
MET*		3	
OCE*		3	
PHY*		3	
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	

\* Any course with the following prefix excluding labs.

**NOTE:** If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.

**Mathematics – 6 Credits Required****Group A Must take 3 credits from the following group (State Core):**

MAC 1105	College Algebra	3	Pre-Req MAT 1033
MAC 2311	Calculus & Analytical Geometry	5	Pre-Req MAC1106 and MAC1114, or MAC1114 and MAC1140, or MAC1147
MGF 1106	Math for Liberal Arts 1	3	Pre-Req MAT 0029 or MAT 1033 or MGF 1107
MGF 1107	Math for Liberal Arts 2	3	
STA 2023	Statistical Methods	3	Pre-Req MAT1033 or MGF 1106

**\*AND\*****Group B Must take 3 credits from the following group (MDC Core):**

QMB 2100	Basic Business Statistics	3	Co-Req QMB 2100L
STA 2023	Statistical Methods	3	Pre-Req MAT1033 or MGF 1106

**General Education Elective – 3 Credits Required (MET WITH A “D” LETTER GRADE OR HIGHER)**

- Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor).

**LOWER DIVISION ELECTIVES – 24 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)**

- Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor).

**UPPER DIVISION REQUIREMENTS – 60 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)****Business Core – 33 Credits Required**

FIN 3400	Finance for Non-Financial Managers	3	
MAN 3025	Organization Management	3	
MAN 3065	Business Ethics	3	
MAN 3240	Organizational Behavior	3	
MAN 3301	Human Resources Management	3	
MAN 4113	Managing Diversity	3	
MAN 4120	Leadership Challenges and Supervision	3	
MAN 4720	Strategic Management Decision Making	3	
MAN 4900	Capstone Project in Supervision and Management	3	Senior Status or Departmental Permission
MAN 4941	Management Internship	3	Senior Status or Departmental Permission
MAR3803	Marketing for Managers	3	

**Hospitality Management Concentration – 18 Credits Required**

HFT 3263	Restaurant Management	3
HFT 3603	Hospitality Law	3
HFT 4064	Bar and Beverage Management	3
HFT 4253	Hotel Management	3
HFT 4468	Revenue Management in the Hospitality Industry	3
HFT 4809	Food Service Management	3

**BUSINESS ELECTIVES – 9 Credits Required (MET WITH A “D” LETTER GRADE OR HIGHER)**

ACG*	MKA*
BUL*	MNA*
ECO*	OST*
FIN*	PUR*
GEB*	QMB*
HFT*	SBM*
MAN*	TAX*
MAR*	



**Supervision and Management – Human Resource Management Concentration**  
*Bachelor in Applied Science | Code: P9202 | 120 Credits*

CIP (1105202991)

**Program Description:**

The Bachelor of Applied Science (BAS) degree in Supervision and Management prepares students to meet the needs of a dynamic and global business environment with the abilities and skills to succeed as a manager or supervisor. In addition, students may complete the general degree or one of three concentrations in Accounting, Hospitality Management, or Human Resource Management.

Course	Course Title	Credits	Pre-/Co-Requisites
<b><u>GENERAL EDUCATION REQUIREMENTS – 36 Credits Required (MET WITH A GRADE of “C” OR HIGHER)</u></b>			
<b>Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
<b>Oral Communication – 3 Credits Required</b>			
<b><i>Select 3 Credits from the following</i></b>			
ENC 2300	Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
SPC 2608	Introduction to Public Speaking	3	
<b>Humanities – 6 Credits Required</b>			
<b><i>Group A – Select 3 Credits from the following (State Core):</i></b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Humanities	3	
LIT 2000	Introduction to Literature	3	
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	
THE 2000	Theater Appreciation	3	
<b>*AND*</b>			
<b><i>Group B – Select 3 Credits from the following (MDC Core):</i></b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	Pre-Req ARH 2050
ARH 2051	Art History 2	3	
ARH 2740	Cinema Appreciation	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1	3	
HUM 1020	Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2	3	
LIT 2000	Introduction to Literature	3	
LIT 2120	A Survey of World Literature	3	Pre-Req ENC 1101 or ENC 1102 or Equivalent
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2	3	Pre-Req MUH 2112
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz and Popular Music in America	3	
PHI 2010	Introduction to Philosophy	3	
PHI 2604	Critical Thinking and Ethics	3	
THE 2000	Theater Appreciation	3	

**Behavioral and Social Science – 3 Credits Required (State Core)****Group A – Select 3 Credits from the following:**

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\*****Group B – Select 3 Credits from the following:**

AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
POS 2041	American Federal Government	3

**NOTE:** If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.

**Behavioral and Social Science – 3 Credits Required (MDC Core)****Group A – Select 3 Credits from the following:**

ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**\*OR\*****Group B – Select 3 Credits from the following:**

AMH 2010	History of the United States to 1877	3
AMH 2020	History of the United States from 1877	3
ECO 2013	Principles of Economics	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government	3
WOH 2012	History of World Civilization to 1715	3
WOH 2022	History of World Civilization from 1715	3

**NOTE:** If a behavioral science course is selected from the State Core, then a social science course must be selected from the MDC Core. If a social science course is selected from the State core, then a behavioral science course must be selected from the MDC core.

**Natural Science – 3 Credits Required (State Core)****Group A – Select 3 Credits from the following (Life Sciences):**

BSC 1005	General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 2010	Principles of Biology	3	
BSC 2085	Human Anatomy & Physiology	3	
EVR 1001	Introduction to Environmental Science	3	

**\*OR\*****Group B - Select 3 Credits from the following (Physical Sciences):**

AST 1002	Descriptive Astronomy
CHM 1020	General Education Chemistry
CHM 1045	General Chemistry & Qualitative Analysis
ESC 1000	General Education Earth Science
PHY 1020	Fundamentals of Physics
PHY 2048	Physics with Calculus 1
PHY 2053	Physics without Calculus 1

**NOTE:** If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.

**Natural Science – 3 Credits Required (MDC Core)****Group A – Select 3 Credits from the following (Life Sciences):**

BOT 1010	Botany	3	Co-Req BOT 1010L
BSC 1005	General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology 1	3	Pre/Co-Req BSC 2010L, CHM 1045
BSC 2020	Human Biology:		
	Fundamental of Anatomy & Physiology	3	
BSC 2085	Human Anatomy & Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
EVR 1001	Introduction to Environmental Science	3	
HUN 1201	Essentials of Nutrition	3	HUN 1201L (Optional Laboratory)
OCB 1010	Introduction to Marine Biology	3	OCB 1010L (Optional Laboratory)
PCB 2033	Introduction to Ecology	3	Pre-Req BSC 2011 or PSC 1515
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**\*OR\*****Group B - Select 3 Credits from the following (Physical Sciences):**

AST 1002	Descriptive Astronomy	3	
CHM*		3	
GLY*		3	
ESC*		3	
MET*		3	
OCE*		3	
PHY*		3	
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	

\* Any course with the following prefix excluding labs.

**NOTE:** If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.

**Mathematics – 6 Credits Required****Group A Must take 3 credits from the following group (State Core):**

MAC 1105	College Algebra	3	Pre-Req MAT 1033
MAC 2311	Calculus & Analytical Geometry	5	Pre-Req MAC1106 and MAC1114, or MAC1114 and MAC1140, or MAC1147
MGF 1106	Math for Liberal Arts 1	3	Pre-Req MAT 0029 or MAT 1033 or MGF 1107
MGF 1107	Math for Liberal Arts 2	3	
STA 2023	Statistical Methods	3	Pre-Req MAT1033 or MGF 1106

**\*AND\*****Group B Must take 3 credits from the following group (MDC Core):**

QMB 2100	Basic Business Statistics	3	Co-Req QMB 2100L
STA 2023	Statistical Methods	3	Pre-Req MAT1033 or MGF 1106

**General Education Elective – 3 Credits Required (MET WITH A “D” LETTER GRADE OR HIGHER)**

- Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor).

**LOWER DIVISION ELECTIVES – 24 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)**

- Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor).

**UPPER DIVISION REQUIREMENTS – 60 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)****Business Core – 33 Credits Required**

FIN 3400	Finance for Non-Financial Managers	3	
MAN 3025	Organization Management	3	
MAN 3065	Business Ethics	3	
MAN 3240	Organizational Behavior	3	
MAN 3301	Human Resources Management	3	
MAN 4113	Managing Diversity	3	
MAN 4120	Leadership Challenges and Supervision	3	
MAN 4720	Strategic Management Decision Making	3	
MAN 4900	Capstone Project in Supervision and Management	3	Senior Status or Departmental Permission
MAN 4941	Management Internship	3	Senior Status or Departmental Permission
MAR3803	Marketing for Managers	3	

**Human Resource Management Concentration – 18 Credits Required**

MAN3322	Human Resources Information Systems	3	Pre-Req MAN 3025 and MAN 3301
MAN4330	Compensation Management	3	Pre-Req MAN 3025 and MAN 3301
MAN4335	Employee Benefit Planning	3	Pre-Req MAN 3025 and MAN 3301
MAN4352	Effective Employee Training	3	Pre-Req MAN 3025 and MAN 3301
MAN4361	Organizational Staffing	3	Pre-Req MAN 3025 and MAN 3301
MAN4402	Employment Law and Regulation	3	Pre-Req MAN 3025 and MAN 3301

**BUSINESS ELECTIVES – 9 Credits Required (MET WITH A “D” LETTER GRADE OR HIGHER)**

ACG*	MKA*
BUL*	MNA*
ECO*	OST*
FIN*	PUR*
GEB*	QMB*
HFT*	SBM*
MAN*	TAX*
MAR*	

**Supervision and Management**
**CIP (1105202991)**
*Bachelor in Applied Science | Code: P5200/P9200 | 120 Credits*
**Program Description:**

The Bachelor of Applied Science Degree in Supervision and Management provides an opportunity for students completing an Associate's degree to seamlessly complete a Bachelors degree. Graduates of the Bachelor in Applied Science in Supervision and Management will be prepared with the abilities and skills needed to succeed as a manager or supervisor in the dynamic and global business environment. The Bachelor in Applied Science in Management and Supervision prepares graduates with the hands-on training necessary to meet workforce demands.

Course	Course Title	Credits	Pre-/Co-Requisites
<b><u>GENERAL EDUCATION REQUIREMENTS – 36 Credits Required (MET WITH A GRADE of “C” OR HIGHER)</u></b>			
<b>Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
<b>Oral Communication – 3 Credits Required</b>			
<i>Select 3 Credits from the following</i>			
ENC 2300	Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
<b>Humanities – 6 Credits Required</b>			
<i>Group A – Select 3 Credits from the following:</i>			
ARC 2701	History of Architecture	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	
DAN 2100	Dance Appreciation	3	
HUM 1020	Humanities	3	
IND 1100	History of Interiors 1	3	
MUH 2111	Survey of Music History I	3	
MUL 1010	Music Appreciation	3	
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1102
<b>*AND*</b>			
<i>Group B – Select 3 Credits from the following:</i>			
ARC 2702	History of Architecture 2	3	
ARH 2051	Art History 2	3	Pre-Req ARH 2050
ARH 2740	Cinema Appreciation	3	
DAN 2130	Dance History 1	3	
IND 1130	History of Interiors 2	3	
LIT 2120	A Survey of World Literature	3	Pre-Req ENC 1101 or ENC 1102 or Equivalent
MUH 2112	Survey of Music History 2	3	Pre-Req MUH 2112
MUL 2380	Jazz & Popular Music in America	3	
PHI 2010	Introduction to Philosophy	3	
THE 2000	Theatre Appreciation	3	
<b>Behavioral and Social Science – 6 Credits Required</b>			
<i>Group A – Select 3 Credits from the following:</i>			
ANT 2410	Introduction to Cultural Anthropology	3	
CLP 1006	Psychology of Personal Effectiveness	3	
DEP 2000	Human Growth & Development	3	
ISS 1161	Individual in Society	3	
PSY 2012	Introduction to Psychology	3	
SYG 2000	Introduction to Sociology	3	
<b>*AND*</b>			
<i>Group B – Select 3 Credits from the following:</i>			
AMH 2010	History of the United States to 1877	3	
AMH 2020	History of the United States since 1877	3	

ECO 2013	Principles of Economics (Macro)	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government	3
WOH 2012	History of World Civilizations to 1715	3
WOH 2022	History of World Civilizations from 1715	3

#### Natural Science – 6 Credits Required

##### Group A – Select 3 Credits from the following

BOT 1010	Botany	3	Co-Req BOT 1010L
BSC 1005	General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology I	3	Pre/Co-Req BSC 2010L, CHM 1045
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	
BSC 2085*	Human Anatomy & Physiology I	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
HUN 1201	Essentials of Nutrition	3	HUN 1201L (Optional Laboratory)
OCB 1010	Introduction to Marine Biology	3	OCB 1010L (Optional Laboratory)
PCB 2033	Introduction to Ecology	3	Pre-Req BSC 2011 or PSC 1515
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

\* Students are strongly recommended to complete CHM 1033/1033L prior to course registration.

#### \*AND\*

##### Group B – Select 3 Credits from the following

AST 1002	Descriptive Astronomy	3	
CHM*		3	
GLY*		3	
ESC*		3	
MET*		3	
OCE*		3	
PHY*		3	
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	

\* Any course with the following prefix excluding labs.

#### Mathematics – 6 Credits Required

##### Group A Must take 3 credits from the following group:

MAC*		
MAD*		
MAP*		
MAS*		
MGF*		
MTG 2204	Geometry for Educators	3

#### \*AND\*

##### Group B Must take 3 credits from the following group:

QMB 2100	Basic Business Statistics	3	Co-Req QMB 2100L; Pre-Req MAT1033
STA 2023	Statistical Methods	3	Pre-Req MAT1033

#### General Education Elective – 3 Credits Required (MET WITH A “D” LETTER GRADE OR HIGHER)

➤ Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor).

#### LOWER DIVISION PREREQUISITE REQUIREMENTS – 24 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)

##### Group A Must take 11 credits from the following group:

Course	Course Title	Credits	Pre-/Co-Requisites
ACG 2021	Financial Accounting	3	Co-Req ACG 2021L
ACG 2021L	Financial Accounting Lab	1	Co-Req ACG 2021
ACG 2071	Managerial Accounting	3	Pre-Req ACG 2011 and ACG 2001 or ACG 2021; Co-Req ACG 2071L
ACG 2071L	Managerial Accounting Lab	1	Co-Req ACG 2071
MAN 2021	Principles of Management	3	

#### \*AND\*



**Group B Must take 13 credits from the following group:**

ACG*	BUL*	ECO*	FIN1*	FIN2*	GEB*	HFT*
MAN1*	MAN2*	MAR*	MAR1011	MAR2150	OST*	PUR*
QMB*	SBM*	TAX*				

**UPPER DIVISION REQUIREMENTS – 39 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)**

**Supervision and Management Core Requirements – 25 Credits Required**

MAN 3025	Organization Management	3	Pre-Req MAN 2021
MAN 3065	Business Ethics	3	Pre-Req MAN 2021
MAN 3240	Organizational Behavior	3	Pre-Req MAN 2021
MAN 3301	Human Resources Management	3	Pre-Req MAN 2021
MAN 3894	Applied Case Studies in Management	3	Pre-Req MAN 2021
MAN 4120	Leadership Challenges and Supervision	3	Senior Status or Departmental Permission
MAN 4162	Customer Relations for Managers	3	Senior Status or Departmental Permission
MAN 4900	Capstone Project in Supervision and Management	4	Senior Status or Departmental Permission

**Discipline Content Core – 11 Credits Required**

FIN 3400	Finance for Non-financial Managers	3	Pre-Req ACG2071; STA2023 or QMB 2100
ISM 4011	Introduction to Management Information Systems	4	Senior Status or Departmental Permission
MAN 4720	Strategic Management Decision Making	4	Senior Status or Departmental Permission

**Internship – 3 Credits Required**

MAN 4941	Management Internship	3
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**ELECTIVES – 21 Credits Required (MET WITH A “D” LETTER GRADE OR HIGHER)**

➤ ***Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor) or may be chosen from the list below.***

CHI*, FRE*, FRW*, GER*, HBR*, ITA*, JPN*, SPN*			
FIN4303	Financial Markets and Institutions	3	Pre-Req FIN3400, ACG2071, ECO2013
MAN4350	Professional Development	1	Pre-Req MAN2021
MAR4804	Marketing Strategy	3	Pre-Req MAR1011, or MAR2150
MSL3201	Leadership and Problem Solving	3	Pre-Req ROTC or MAN 2021
MSL3202	Leadership and Ethics	3	Pre-Req ROTC or MAN 2021

**ADDITIONAL INFORMATION**

**Computer Competency:** By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass

**Or**

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test**.

**Foreign Language:** Students admitted to the baccalaureate degree program without meeting the foreign language admission requirement of at least 2 courses (8-10 credit hours) of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation.

**Additional Information:**

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements.

A minimum cumulative grade point average of 2.0 is required for graduation.

Students must successfully complete 30 semester hours of 3000-4000 level course work.

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements

The final responsibility for meeting graduation requirements rests with the student.



**Supply Chain Management – Procurement Management Concentration**  
*Bachelor of Applied Science | Code: P9301 | 120 Credits*  
**Effective Term: Spring 2022 (2223)**

CIP (1105202032)

Supply chain management is an interdisciplinary field that emphasizes cross-functional integration of diverse business functions, facilities, and activities and seeks to manage those activities to enhance a company's competitive advantage. The Bachelor of Applied Science in Supply Chain Management (BAS-SCM) is designed to provide knowledge of the supply chain while exploring the risks, operations, logistics, economics, regulatory issues, change management, forecasting, resource allocation, production planning, inventory management, customer delivery, after-sales support and service and other functions basic to business.

**GENERAL EDUCATION – 36 CREDITS REQUIRED**

**Communications – 6 Credits Required**

ENC 1101 English Composition 1	3	Pre-Req Approved Placement Scores
ENC 1102 English Composition 2	3	Pre-Req ENC 1101

**Oral Communications – 3 Credits Required**

ENC 2300 Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480 Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017 Fundamentals of Speech Communications	3	

**Humanities – 6 Credits Required**

***Group A – Select 3 Credits from the following:***

ARH 1000 Art Appreciation	3
DAN 2100 Dance Appreciation	3
HUM 1020 Humanities	3
MUL 1010 Music Appreciation	3
PHI 2010 Introduction to Philosophy	3

***\*AND\****

***Group B – Select 3 Credits from the following:***

ARH 2740 Cinema Appreciation	3	
MUL 2380 Jazz & Popular Music in America	3	
PHI 2604 Critical Thinking/Ethics	3	Pre-Req ENC 1102
THE 2000 Theatre Appreciation	3	

**Behavioral and Social Science – 6 Credits Required**

***Group A – Select 3 Credits from the following:***

ANT 2410 Introduction to Cultural Anthropology	3
CLP 1006 Psychology of Personal Effectiveness	3
DEP 2000 Human Growth & Development	3
ISS 1161 Individual in Society	3
PSY 2012 Introduction to Psychology	3
SYG 2000 Introduction to Sociology	3

***\*AND\****

***Group B – Select 3 Credits from the following:***

AMH 2010 History of the United States to 1877	3
AMH 2020 History of the United States since 1877	3
ECO 2013 Principles of Economics (Macro) <b>[CPC]</b>	3
ISS 1120 The Social Environment	3
POS 2041 American Federal Government	3
WOH 2012 History of World Civilizations to 1715	3
WOH 2022 History of World Civilizations from 1715	3

**Natural Science – 6 Credits Required**

***Group A – Select 3 Credits from the following***

BOT 1010 Botany	3	Pre/Co-Req BOT 1010L
BSC 1005 General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 1030 Social Issues in Biology	3	
BSC 1050 Biology & Environment	3	
BSC 1084 Functional Human Anatomy	3	BSC 1084 (Optional Laboratory)

BSC 2010	Principles of Biology 1	3	Pre/Co-Req BSC 2010L, CHM 1045
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	BSC 2020L (Optional Laboratory)
BSC 2085	Human Anatomy & Physiology 1	3	Pre/Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
HUN 1201	Essentials of Nutrition	3	HUN 1201L (Optional Laboratory)
OCB 1010	Introduction to Marine Biology	3	OCB 1010L (Optional Laboratory)
PCB 2033	Introduction to Ecology	3	
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**\*AND\***

**Group B – Select 3 Credits from the following**

AST 1002	Descriptive Astronomy	3	
CHM*			
GLY*			
MET*			
OCE*			
PHY*			
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	

*\* Any course with the following prefix excluding labs.*

**Mathematics – 6 Credits Required**

**Group A - Select 3 Credits from the following**

MAC*		
MAD*		
MAP*		
MAS*		
MGF*		
MTG 2204 Geometry for Educators		3

**Group B - Select 3 Credits from the following**

QMB 2100	Basic Business Statistics <b>[Recommended]</b>	3	
STA 2023	Statistical Methods	3	Pre-Req MAT 1033 or MGF 1106

*\* Any course with the following prefix excluding labs.*

**General Education Elective – 3 Credits Required**

Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor)

**Computer Competency Requirement**

Computer Competency Test (CCT)

**Or**

CGS 1060 Introduction to Microcomputer Usage

*\*Credits count towards the Program Elective.*

**LOWER DIVISION/COMMON PREREQUISITE REQUIREMENTS – 24 Credits Required**

**GROUP A – Common Prerequisite Course Requirements 17 Credits**

ACG 2021	Financial Accounting <b>[CPC]</b>	3	Co-Req ACG 2021L
ACG 2021L	Financial Accounting Lab <b>[CPC]</b>	1	Co-Req ACG 2021
ACG 2071	Managerial Accounting <b>[CPC]</b>	3	Pre-Req ACG 2001, 2011 or 2021; Co-Req ACG 2071L
ACG 2071L	Managerial Accounting Lab <b>[CPC]</b>	1	Pre-Req ACG 2021, 2021L; Co-Req ACG 2071
ECO 2013	Principles of Economics (Macro) <b>[CPC]</b>	GE	
ECO 2023	Principles of Economics (Micro) <b>[CPC]</b>	3	
TRA 1154	Intro to Supply Chain Management <b>[CPC]</b>	3	
TRA 2010	Intro to Logistics and Transportation <b>[CPC]</b>	3	

**\*AND\***

**GROUP B – 7 Credits**

ACG*			
BAN*	GEB*		
BUL*	HFT*	MAR*	
CGS*	ISM*	QMB*	
FIN*	MAC*	STA*	
	MAN*	TAX*	
		TRA	

**UPPER DIVISION CORE REQUIREMENTS – 33 Credits Required**

BUL 4461 Law of International Trade	3	Pre-Req GEB 3358
FIN 3403 Financial Management	3	Pre-Req ACG 2071/L, QMB 2100 or STA 2023
GEB 3358 International Negotiations and Transactions	3	Pre-Req TRA 1154
MAN 3506 Operations Management	3	Pre-Req QMB 2100 or STA 2023
MAN 3554 Safety and Risk Management	1	
MAN 3562 Purchasing, Inventory and Warehouse Management	3	
MAN 3583 Project Management	3	
MAN 4520 Quality Management	3	
MAN 4523 Production Information Systems	3	
MAN 4597 Global Supply Chain Management	3	Pre-Req MAN 3506
MAN 4940 Field Study and Research	2	Pre-Req MAN 3583, TRA 1154
MAR 4203 Supply Chain Marketing	3	Pre-Req MAN 3506, TRA 1154

**CONCENTRATION CORE – 27 CREDITS REQUIRED****GROUP A – CONCENTRATION CORE – 9 CREDITS REQUIRED**

MAN 3577 Procurement for Major Projects	3
MAN 3731 Assessing and Managing Project Risk	3
MAN 4570 Purchasing for Industry	3

**\*AND\***

**GROUP B – UPPER DIVISION ELECTIVES – 9 CREDITS REQUIRED**

GEB 4363 Import/Export Management	3	Pre-Req TRA 2010
MAN 3504 Production Operations and Logistics Management	3	Pre-Req TRA 1154
MAN 3786 Sustainable Enterprise Planning	3	
MAN 4593 Supply Chain Management Theory & Methodology	2	Pre-Req MAN 3583, 4523
TRA 3034 Transportation & Traffic Management	3	Pre-Req TRA 1154
TRA 3132 Purchasing and Inventory Management	3	Pre-Req TRA 1154
TRA 4234 Warehouse Management	3	Pre-Req MAN 3506, QMB 2100 or STA 2023

**\*AND\***

**GROUP C - ELECTIVES – 9 CREDITS REQUIRED**

ACG*	GEB*	MAR*
BAN*	HFT*	QMB*
BUL*	ISM*	STA*
CGS*	MAC*	TAX*
FIN*	MAN*	TRA*



**Supply Chain Management – Project Management Concentration**  
*Bachelor of Applied Science | Code: P9302 | 120 Credits*  
**Effective Term: Spring 2022 (2223)**

CIP (1105202032)

Supply chain management is an interdisciplinary field that emphasizes cross-functional integration of diverse business functions, facilities, and activities and seeks to manage those activities to enhance a company's competitive advantage. The Bachelor of Applied Science in Supply Chain Management (BAS-SCM) with a concentration in Project Management, is designed to provide knowledge of the supply chain while exploring the risks, operations, logistics, economics, regulatory issues, change management, forecasting, resource allocation, production planning, inventory management, customer delivery, after-sales support and service and other functions basic to business with particular emphasis in Project Management.

**GENERAL EDUCATION – 36 CREDITS REQUIRED**

**Communications – 6 Credits Required**

ENC 1101 English Composition 1	3	Pre-Req Approved Placement Scores
ENC 1102 English Composition 2	3	Pre-Req ENC 1101

**Oral Communications – 3 Credits Required**

ENC 2300 Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480 Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017 Fundamentals of Speech Communications	3	

**Humanities – 6 Credits Required**

***Group A – Select 3 Credits from the following:***

ARH 1000 Art Appreciation	3
DAN 2100 Dance Appreciation	3
HUM 1020 Humanities	3
MUL 1010 Music Appreciation	3
PHI 2010 Introduction to Philosophy	3

**\*AND\***

***Group B – Select 3 Credits from the following:***

ARH 2740 Cinema Appreciation	3	
MUL 2380 Jazz & Popular Music in America	3	
PHI 2604 Critical Thinking/Ethics	3	Pre-Req ENC 1102
THE 2000 Theatre Appreciation	3	

**Behavioral and Social Science – 6 Credits Required**

***Group A – Select 3 Credits from the following:***

ANT 2410 Introduction to Cultural Anthropology	3
CLP 1006 Psychology of Personal Effectiveness	3
DEP 2000 Human Growth & Development	3
ISS 1161 Individual in Society	3
PSY 2012 Introduction to Psychology	3
SYG 2000 Introduction to Sociology	3

**\*AND\***

***Group B – Select 3 Credits from the following:***

AMH 2010 History of the United States to 1877	3
AMH 2020 History of the United States since 1877	3
ECO 2013 Principles of Economics (Macro) <b>[CPC]</b>	3
ISS 1120 The Social Environment	3
POS 2041 American Federal Government	3
WOH 2012 History of World Civilizations to 1715	3
WOH 2022 History of World Civilizations from 1715	3

**Natural Science – 6 Credits Required**

***Group A – Select 3 Credits from the following***

BOT 1010 Botany	3	Pre/Co-Req BOT 1010L
BSC 1005 General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 1030 Social Issues in Biology	3	
BSC 1050 Biology & Environment	3	
BSC 1084 Functional Human Anatomy	3	BSC 1084 (Optional Laboratory)

BSC 2010	Principles of Biology 1	3	Pre/Co-Req BSC 2010L, CHM 1045
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	BSC 2020L (Optional Laboratory)
BSC 2085	Human Anatomy & Physiology 1	3	Pre/Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
HUN 1201	Essentials of Nutrition	3	HUN 1201L (Optional Laboratory)
OCB 1010	Introduction to Marine Biology	3	OCB 1010L (Optional Laboratory)
PCB 2033	Introduction to Ecology	3	
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**\*AND\***

**Group B – Select 3 Credits from the following**

AST 1002	Descriptive Astronomy	3	
CHM*			
GLY*			
MET*			
OCE*			
PHY*			
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	

\* Any course with the following prefix excluding labs.

**Mathematics – 6 Credits Required**

**Group A - Select 3 Credits from the following**

MAC*		
MAD*		
MAP*		
MAS*		
MGF*		
MTG 2204 Geometry for Educators		3

**Group B - Select 3 Credits from the following**

QMB 2100	Basic Business Statistics [Recommended]	3	
STA 2023	Statistical Methods	3	Pre-Req MAT 1033 or MGF 1106

\* Any course with the following prefix excluding labs.

**General Education Elective – 3 Credits Required**

Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor)

**Computer Competency Requirement**

Computer Competency Test (CCT)

**Or**

CGS 1060 Introduction to Microcomputer Usage

\*Credits count towards the Program Elective

**LOWER DIVISION/COMMON PREREQUISITE REQUIREMENTS – 24 Credits Required**

**GROUP A – Common Prerequisite Course Requirements 17 Credits**

ACG 2021	Financial Accounting [CPC]	3	Co-Req ACG 2021L
ACG 2021L	Financial Accounting Lab [CPC]	1	Co-Req ACG 2021
ACG 2071	Managerial Accounting [CPC]	3	Pre-Req ACG 2001, 2011 or 2021; Co-Req ACG 2071L
ACG 2071L	Managerial Accounting Lab [CPC]	1	Pre-Req ACG 2021, 2021L; Co-Req ACG 2071
ECO 2013	Principles of Economics (Macro) [CPC]	GE	
ECO 2023	Principles of Economics (Micro) [CPC]	3	
TRA 1154	Intro to Supply Chain Management [CPC]	3	
TRA 2010	Intro to Logistics and Transportation [CPC]	3	

**\*AND\***

**GROUP B – 7 Credits**

ACG*	GEB*	MAR*
BAN*	HFT*	QMB*
BUL*	ISM*	STA*
CGS*	MAC*	TAX*
FIN*	MAN*	TRA*

**UPPER DIVISION CORE REQUIREMENTS – 33 Credits Required**

BUL 4461 Law of International Trade	3	Pre-Req GEB 3358
FIN 3403 Financial Management	3	Pre-Req ACG 2071/L, QMB 2100 or STA 2023
GEB 3358 International Negotiations and Transactions	3	Pre-Req TRA 1154
MAN 3506 Operations Management	3	Pre-Req QMB 2100 or STA 2023
MAN 3554 Safety and Risk Management	1	
MAN 3562 Purchasing, Inventory and Warehouse Management	3	
MAN 3583 Project Management	3	
MAN 4520 Quality Management	3	
MAN 4523 Production Information Systems	3	
MAN 4597 Global Supply Chain Management	3	Pre-Req MAN 3506
MAN 4940 Field Study and Research	2	Pre-Req MAN 3583, TRA 1154
MAR 4203 Supply Chain Marketing	3	Pre-Req MAN 3506, TRA 1154

**CONCENTRATION CORE – 27 CREDITS REQUIRED****GROUP A – CONCENTRATION CORE – 9 CREDITS REQUIRED**

MAN 3731 Assessing and Managing Project Risk	3
MAN 3888 Project Leadership	3
MAN 4887 Project Planning and Control Systems for SCM	3

**\*AND\***

**GROUP B – UPPER DIVISION ELECTIVES – 9 CREDITS REQUIRED**

GEB 4363 Import/Export Management	3	Pre-Req TRA 2010
MAN 3504 Production Operations and Logistics Management	3	Pre-Req TRA 1154
MAN 3786 Sustainable Enterprise Planning	3	
MAN 4593 Supply Chain Management Theory & Methodology	2	Pre-Req MAN 3583, 4523
TRA 3034 Transportation & Traffic Management	3	Pre-Req TRA 1154
TRA 3132 Purchasing and Inventory Management	3	Pre-Req TRA 1154
TRA 4234 Warehouse Management	3	Pre-Req MAN 3506, QMB 2100 or STA 2023

**\*AND\***

**GROUP C - ELECTIVES – 9 CREDITS REQUIRED**

ACG*	GEB*	MAR*
BAN*	HFT*	QMB*
BUL*	ISM*	STA*
CGS*	MAC*	TAX*
FIN*	MAN*	TRA*



**Supply Chain Management – Supply Chain Analytics Concentration**  
*Bachelor of Applied Science | Code: P9303 | 120 Credits*  
**Effective Term: Spring Term 2022 (2223)**

CIP (1105202032)

Supply chain management is an interdisciplinary field that emphasizes cross-functional integration of diverse business functions, facilities, and activities and seeks to manage those activities to enhance a company's competitive advantage. The Bachelor of Applied Science in Supply Chain Management (BAS-SCM) is designed to provide knowledge of the supply chain while exploring the risks, operations, logistics, economics, regulatory issues, change management, forecasting, resource allocation, production planning, inventory management, customer delivery, after-sales support and service and other functions basic to business.

**GENERAL EDUCATION – 36 CREDITS REQUIRED**

**Communications – 6 Credits Required**

ENC 1101 English Composition 1	3	Pre-Req Approved Placement Scores
ENC 1102 English Composition 2	3	Pre-Req ENC 1101

**Oral Communications – 3 Credits Required**

ENC 2300 Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480 Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017 Fundamentals of Speech Communications	3	

**Humanities – 6 Credits Required**

**Group A – Select 3 Credits from the following:**

ARH 1000 Art Appreciation	3
DAN 2100 Dance Appreciation	3
HUM 1020 Humanities	3
MUL 1010 Music Appreciation	3
PHI 2010 Introduction to Philosophy	3

**\*AND\***

**Group B – Select 3 Credits from the following:**

ARH 2740 Cinema Appreciation	3	
MUL 2380 Jazz & Popular Music in America	3	
PHI 2604 Critical Thinking/Ethics	3	Pre-Req ENC 1102
THE 2000 Theatre Appreciation	3	

**Behavioral and Social Science – 6 Credits Required**

**Group A – Select 3 Credits from the following:**

ANT 2410 Introduction to Cultural Anthropology	3
CLP 1006 Psychology of Personal Effectiveness	3
DEP 2000 Human Growth & Development	3
ISS 1161 Individual in Society	3
PSY 2012 Introduction to Psychology	3
SYG 2000 Introduction to Sociology	3

**\*AND\***

**Group B – Select 3 Credits from the following:**

AMH 2010 History of the United States to 1877	3
AMH 2020 History of the United States since 1877	3
ECO 2013 Principles of Economics (Macro) <b>[CPC]</b>	3
ISS 1120 The Social Environment	3
POS 2041 American Federal Government	3
WOH 2012 History of World Civilizations to 1715	3
WOH 2022 History of World Civilizations from 1715	3

**Natural Science – 6 Credits Required**

**Group A – Select 3 Credits from the following**

BOT 1010 Botany	3	Pre/Co-Req BOT 1010L
BSC 1005 General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 1030 Social Issues in Biology	3	
BSC 1050 Biology & Environment	3	
BSC 1084 Functional Human Anatomy	3	BSC 1084 (Optional Laboratory)



BSC 2010	Principles of Biology 1	3	Pre/Co-Req BSC 2010L, CHM 1045
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	BSC 2020L (Optional Laboratory)
BSC 2085	Human Anatomy & Physiology 1	3	Pre/Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
HUN 1201	Essentials of Nutrition	3	HUN 1201L (Optional Laboratory)
OCB 1010	Introduction to Marine Biology	3	OCB 1010L (Optional Laboratory)
PCB 2033	Introduction to Ecology	3	
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**\*AND\***

**Group B – Select 3 Credits from the following**

AST 1002	Descriptive Astronomy	3	
CHM*			
GLY*			
MET*			
OCE*			
PHY*			
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	

*\* Any course with the following prefix excluding labs.*

**Mathematics – 6 Credits Required**

**Group A - Select 3 Credits from the following**

MAC*		
MAD*		
MAP*		
MAS*		
MGF*		
MTG 2204 Geometry for Educators		3

**Group B - Select 3 Credits from the following**

QMB 2100	Basic Business Statistics <b>[Recommended]</b>	3	
STA 2023	Statistical Methods	3	Pre-Req MAT 1033 or MGF 1106

*\* Any course with the following prefix excluding labs.*

**General Education Elective – 3 Credits Required**

Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor)

**Computer Competency Requirement**

Computer Competency Test (CCT)

**Or**

CGS 1060 Introduction to Microcomputer Usage

*\*Credits count towards the Program Elective*

**LOWER DIVISION/COMMON PREREQUISITE REQUIREMENTS – 24 Credits Required**

**GROUP A – Common Prerequisite Course Requirements 17 Credits**

ACG 2021	Financial Accounting <b>[CPC]</b>	3	Co-Req ACG 2021L
ACG 2021L	Financial Accounting Lab <b>[CPC]</b>	1	Co-Req ACG 2021
ACG 2071	Managerial Accounting <b>[CPC]</b>	3	Pre-Req ACG 2001, 2011 or 2021; Co-Req ACG 2071L
ACG 2071L	Managerial Accounting Lab <b>[CPC]</b>	1	Pre-Req ACG 2021, 2021L; Co-Req ACG 2071
ECO 2013	Principles of Economics (Macro) <b>[CPC]</b>	GE	
ECO 2023	Principles of Economics (Micro) <b>[CPC]</b>	3	
TRA 1154	Intro to Supply Chain Management <b>[CPC]</b>	3	
TRA 2010	Intro to Logistics and Transportation <b>[CPC]</b>	3	

**\*AND\***

**GROUP B – 7 Credits**

ACG*	GEB*	MAR*
BAN*	HFT*	QMB*
BUL*	ISM*	STA*
CGS*	MAC*	TAX*
FIN*	MAN*	TRA*

**UPPER DIVISION CORE REQUIREMENTS – 33 Credits Required**

BUL 4461 Law of International Trade	3	Pre-Req GEB 3358
FIN 3403 Financial Management	3	Pre-Req ACG 2071/L, QMB 2100 or STA 2023
GEB 3358 International Negotiations and Transactions	3	Pre-Req TRA 1154
MAN 3506 Operations Management	3	Pre-Req QMB 2100 or STA 2023
MAN 3554 Safety and Risk Management	1	
MAN 3562 Purchasing, Inventory and Warehouse Management	3	
MAN 3583 Project Management	3	
MAN 4520 Quality Management	3	
MAN 4523 Production Information Systems	3	
MAN 4597 Global Supply Chain Management	3	Pre-Req MAN 3506
MAN 4940 Field Study and Research	2	Pre-Req MAN 3583, TRA 1154
MAR 4203 Supply Chain Marketing	3	Pre-Req MAN 3506, TRA 1154

**CONCENTRATION CORE – 27 CREDITS REQUIRED****GROUP A – CONCENTRATION CORE – 9 CREDITS REQUIRED**

MAN 4552 Supply Chain Analytics and Decision Making	3	
MAN 4719 Challenges in the Digital Supply Chain	3	Pre-Req MAN3506, (QMB2100 OR STA2023)
MAN 4732 Business Intelligence for Supply Chain	3	

**\*AND\***

**GROUP B – UPPER DIVISION ELECTIVES – 9 CREDITS REQUIRED**

GEB 4363 Import/Export Management	3	Pre-Req TRA 2010
MAN 3504 Production Operations and Logistics Management	3	Pre-Req TRA 1154
MAN 3786 Sustainable Enterprise Planning	3	
MAN 4593 Supply Chain Management Theory & Methodology	2	Pre-Req MAN 3583, 4523
TRA 3034 Transportation & Traffic Management	3	Pre-Req TRA 1154
TRA 3132 Purchasing and Inventory Management	3	Pre-Req TRA 1154
TRA 4234 Warehouse Management	3	Pre-Req MAN 3506, QMB 2100 or STA 2023

**\*AND\***

**GROUP C - ELECTIVES – 9 CREDITS REQUIRED**

ACG*	GEB*	MAR*
BAN*	HFT*	QMB*
BUL*	ISM*	STA*
CGS*	MAC*	TAX*
FIN*	MAN*	TRA*



## Supply Chain Management

CIP (1105202032)

Bachelor Of Applied Science | Code: P9300 | 120 Credits

Effective Term: Spring 2022 (2223)

Supply chain management is an interdisciplinary field that emphasizes cross-functional integration of diverse business functions, facilities, and activities and seeks to manage those activities to enhance a company's competitive advantage. The Bachelor of Applied Science with a major in Supply Chain Management (BAS-SCM) is designed to provide knowledge of the supply chain while exploring the risks, operations, logistics, economics, regulatory issues, change management, forecasting, resource allocation, production planning, inventory management, customer delivery, after-sales support and service and other functions basic to business.

### GENERAL EDUCATION – 36 CREDITS REQUIRED

#### **Communications – 6 Credits Required**

ENC 1101 English Composition 1	3	Pre-Req Approved Placement Scores
ENC 1102 English Composition 2	3	Pre-Req ENC 1101

#### **Oral Communications – 3 Credits Required**

ENC 2300 Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480 Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017 Fundamentals of Speech Communications	3	

#### **Humanities – 6 Credits Required**

##### ***Group A – Select 3 Credits from the following:***

ARH 1000 Art Appreciation	3
DAN 2100 Dance Appreciation	3
HUM 1020 Humanities	3
MUL 1010 Music Appreciation	3
PHI 2010 Introduction to Philosophy	3

**\*AND\***

##### ***Group B – Select 3 Credits from the following:***

ARH 2740 Cinema Appreciation	3	
MUL 2380 Jazz & Popular Music in America	3	
PHI 2604 Critical Thinking/Ethics	3	Pre-Req ENC 1102
THE 2000 Theatre Appreciation	3	

#### **Behavioral and Social Science – 6 Credits Required**

##### ***Group A – Select 3 Credits from the following:***

ANT 2410 Introduction to Cultural Anthropology	3
CLP 1006 Psychology of Personal Effectiveness	3
DEP 2000 Human Growth & Development	3
ISS 1161 Individual in Society	3
PSY 2012 Introduction to Psychology	3
SYG 2000 Introduction to Sociology	3

**\*AND\***

##### ***Group B – Select 3 Credits from the following:***

AMH 2010 History of the United States to 1877	3
AMH 2020 History of the United States since 1877	3
ECO 2013 Principles of Economics (Macro)	3
ISS 1120 The Social Environment	3
POS 2041 American Federal Government	3
WOH 2012 History of World Civilizations to 1715	3
WOH 2022 History of World Civilizations from 1715	3

#### **Natural Science – 6 Credits Required**

##### ***Group A – Select 3 Credits from the following***

BOT 1010 Botany	3	Pre/Co-Req BOT 1010L
BSC 1005 General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 1030 Social Issues in Biology	3	
BSC 1050 Biology & Environment	3	

BSC 1084	Functional Human Anatomy	3	BSC 1084 (Optional Laboratory)
BSC 2010	Principles of Biology 1	3	Pre/Co-Req BSC 2010L, CHM 1045
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	BSC 2020L (Optional Laboratory)
BSC 2085	Human Anatomy & Physiology 1	3	Pre/Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
HUN 1201	Essentials of Nutrition	3	HUN 1201L (Optional Laboratory)
OCB 1010	Introduction to Marine Biology	3	OCB 1010L (Optional Laboratory)
PCB 2033	Introduction to Ecology	3	
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**\*AND\***

**Group B – Select 3 Credits from the following**

AST 1002	Descriptive Astronomy	3
CHM*		
GLY*		
MET*		
OCE*		
PHY*		

PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	

\* Any course with the following prefix excluding labs.

**Mathematics – 6 Credits Required**

**Group A - Select 3 Credits from the following**

MAC*		
MAD*		
MAP*		
MAS*		
MGF*		
MTG 2204	Geometry for Educators	3

**Group B - Select 3 Credits from the following**

QMB 2100	Basic Business Statistics <b>[Recommended]</b>	3
STA 2023	Statistical Methods	3

\* Any course with the following prefix excluding labs.

**General Education Elective – 3 Credits Required**

Electives may include any appropriate transferrable (Credit Type 1 or 2) courses (Check with Advisor)

**Computer Competency Requirement**

Computer Competency Test (CCT)

**Or**

CGS 1060 Introduction to Microcomputer Usage

**\*Credits count towards the Program Elective**

**LOWER DIVISION/COMMON PREREQUISITE REQUIREMENTS – 24 Credits Required**

**GROUP A – Common Prerequisite Course Requirements 17 Credits**

ACG 2021	Financial Accounting <b>[CPC]</b>	3	Co-Req ACG 2021L
ACG 2021L	Financial Accounting Lab <b>[CPC]</b>	1	Co-Req ACG 2021
ACG 2071	Managerial Accounting <b>[CPC]</b>	3	Pre-Req ACG 2001, 2011 or 2021; Co-Req ACG 2071L
ACG 2071L	Managerial Accounting Lab <b>[CPC]</b>	1	Pre-Req ACG 2021, 2021L; Co-Req ACG 2071
ECO 2013	Principles of Economics (Macro) <b>[CPC]</b>	GE	
ECO 2023	Principles of Economics (Micro) <b>[CPC]</b>	3	
TRA 1154	Intro to Supply Chain Management <b>[CPC]</b>	3	
TRA 2010	Intro to Logistics and Transportation <b>[CPC]</b>	3	

**\*AND\***

**GROUP B – 7 Credits**

ACG*	GEB*	MAR*
BAN*	HFT*	QMB*
BUL*	ISM*	STA*
CGS*	MAC*	TAX*
FIN*	MAN*	TRA*

**UPPER DIVISION CORE REQUIREMENTS – 33 Credits Required**

BUL 4461 Law of International Trade	3	Pre-Req GEB 3358
FIN 3403 Financial Management	3	Pre-Req ACG 2071/L, QMB 2100 or STA 2023
GEB 3358 International Negotiations and Transactions	3	Pre-Req TRA 1154
MAN 3506 Operations Management	3	Pre-Req QMB 2100 or STA 2023
MAN 3554 Safety and Risk Management	1	
MAN 3583 Project Management	3	
MAN 4520 Quality Management	3	
MAN 4523 Production Information Systems	3	
MAN 4597 Global Supply Chain Management	3	Pre-Req MAN 3506
MAN 4940 Field Study and Research	2	Pre-Req MAN 3583, TRA 1154
MAN 3562 Purchasing, Inventory and Warehouse Management	3	
MAR 4203 Supply Chain Marketing	3	Pre-Req MAN 3506, TRA 1154

**ELECTIVES – 27 CREDITS REQUIRED****GROUP A - UPPER DIVISION ELECTIVES – 15 CREDITS REQUIRED**

GEB 4363 Import/Export Management	3	Pre-Req TRA 2010
MAN 3504 Production Operations and Logistics Management	3	Pre-Req TRA 1154
MAN 3786 Sustainable Enterprise Planning	3	
MAN 4593 Supply Chain Management Theory & Methodology	2	Pre-Req MAN 3583, 4523
TRA 3034 Transportation & Traffic Management	3	Pre-Req TRA 1154
TRA 3132 Purchasing and Inventory Management	3	Pre-Req TRA 1154
TRA 4234 Warehouse Management	3	Pre-Req MAN 3506, QMB 2100 or STA 2023

**\*AND\*****GROUP B - ELECTIVES – 12 CREDITS REQUIRED**

ACG*	GER*	MAR*
BAN*	HBR*	POR*
BUL*	HFT*	PUR*
CHI*	ISM*	QMB*
FIN*	ITA*	SPN*
FRE*	JPN*	STA*
FRW*	MAC*	TAX*
GEB*	MAN*	TRA*

**PROGRAM OF STUDY: BIOLOGICAL SCIENCES - BIOPHARMACEUTICAL SCIENCES CONC**  
**(S5201)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## **I. GENERAL EDUCATION REQUIREMENTS**

### **1. COMMUNICATIONS (6.00 credits)**

Gordon rule assigned

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

The following course(s) are not allowed for credit in this area.  
 All Labs

### **2. ORAL COMMUNICATION (3.00 credits)**

Gordon rule assigned

☐ ENC 2300 - Advanced Composition and Communication (3 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credit

☐ LIT 2480 - Issues in Literature & Culture (3 credits)

The following course(s) are not allowed for credit in this area.  
 All Labs

### **3. HUMANITIES (6.00 credits)**

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ARC 2701 - History of Architecture 1 (3 credits)

☐ ARH 1000 - Art Appreciation (3 credits)

☐ ARH 2050 - Art History 1 (3 credits)

☐ DAN 2100 - Dance Appreciation (3 credits)

☐ HUM 1020 - Humanities (3 credits)

☐ IND 1100 - History of Interiors 1 (3 credits)

☐ MUH 2111 - Survey of Music History 1 (3 credits)

☐ MUL 1010 - Music Appreciation (3 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ ARC 2702 - History of Architecture 2 (3 credits)

☐ ARH 2051 - Art History 2 (3 credits)

☐ ARH 2740 - Cinema Appreciation (3 credits)

☐ DAN 2130 - Dance History 1 (3 credits)

☐ IND 1130 - History of Interiors 2 (3 credits)

☐ LIT 2120 - A Survey of World Literature 2 (3 credits)

☐ MUH 2112 - Survey of Music History 2 (3 credits)

☐ MUL 2380 - Jazz and Popular Music in America (3 credits)

☐ PHI 2010 - Introduction to Philosophy (3 credits)

☐ THE 2000 - Theatre Appreciation (3 credits)

### **4. SOCIAL SCIENCE (6.00 credits)**

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)

☐ DEP 2000 - Human Growth and Development (3 credits)

☐ ISS 1161 - The Individual in Society (3 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

☐ PSY 2012 - Introduction to Psychology (3 credits)

☐ SYG 2000 - Introduction to Sociology (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ AMH 2010 - History of the US to 1877 (3 credits)

☐ AMH 2020 - History of the US since 1877 (3 credits)

☐ ECO 2013 - Principles of Economics (Macro) (3 credits)

☐ ISS 1120 - The Social Environment (3 credits)

☐ POS 2041 - American Federal Government (3 credits)

☐ WOH 2012 - History of World Civilization to 1789 (3 credits)

☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

### **5. NATURAL SCIENCE (6.00 credits)**

Gordon rule assigned

Must take 3.0 credits from the following group.

- ☐ BOT 1010 - Botany (3 credits)
- ☐ BSC 1005 - General Education Biology (3 credits)
- ☐ BSC 1030 - Social Issues in Biology (3 credits)
- ☐ BSC 1050 - Biology & Environment (3 credits)
- ☐ BSC 1084 - Functional Human Anatomy (3 credits)
- ☐ BSC 2010 - Principles of Biology (3 credits)
- ☐ BSC 2020 - Human Biology: Fundamentals of Anatomy/Physiology (3 credits)

- ☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)
- ☐ BSC 2250 - Natural History of South Florida (3 credits)
- ☐ HUN 1201 - Essentials of Human Nutrition (3 credits)
- ☐ OCB 1010 - Introduction to Marine Biology (3 credits)
- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ ZOO 1010 - Zoology (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ AST 1002 - Descriptive Astronomy (3 credits)
- ☐ CHM 1045 - General Chemistry and Qualitative Analysis (3 credits)
- ☐ GLY\*
- ☐ MET\*

- ☐ OCE\*
- ☐ PHY\*
- ☐ PSC 1121 - General Education Physical Science (3 credits)
- ☐ PSC 1515 - Energy in the Natural Environment (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

#### 6. MATHEMATICS (6.00 credits)

Gordon rule assigned

- ☐ MAC\*
- ☐ MAD 2104 - Discrete Mathematics (3 credits)
- ☐ MAP\*
- ☐ MAS\*

- ☐ MGF\*
- ☐ MTG 2204 - Geometry for Educators (3 credits)
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

#### 7. GENERAL EDUCATION ELECTIVES (3.00 credits)

- ☐ BSC 2011 - Principles of Biology 2 (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

#### 8. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

The following course(s) are not allowed for credit in this area.

All Labs

#### 9. LOWER DIV. COMMON PREREQ. REQ. (24.00 credits)

Must take 21.0 credits from the following group.

- ☐ BSC 2010L - Principles of Biology 1 Laboratory (2 credits)
- ☐ BSC 2011L - Principles of Biology Lab 2 (2 credits)
- ☐ CHM 1045L - General Chemistry and Qualitative Analysis Lab (2 credits)
- ☐ CHM 1046 - General Chemistry and Qualitative Analysis (3 credits)
- ☐ CHM 1046L - General Chemistry & Qualitative Analysis Lab (2 credits)

- ☐ CHM 2210 - Organic Chemistry 1 (3 credits)
- ☐ CHM 2210L - Organic Chemistry 1 Laboratory (2 credits)
- ☐ CHM 2211 - Organic Chemistry 2 (3 credits)
- ☐ CHM 2211L - Organic Chemistry 2 Laboratory (2 credits)

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ MAC 2241 - Life Science Calculus (3 credits)

- ☐ MAC 2311 - Calculus and Analytical Geometry 1 (5 credits)

#### 10. LOWER DIVISION REQUIREMENTS (8.00 credits)

Must take 8.0 credits from the following group.

- |  |  |
|--|--|
| <input type="checkbox"/> PHY 2048 - Physics with Calculus 1 (4 credits)      | <input type="checkbox"/> PHY 2049 - PHYSICS WITH CALCULUS 2 (4 credits)      |
| <input type="checkbox"/> PHY 2048L - Physics with Calculus 1 Lab (1 credits) | <input type="checkbox"/> PHY 2049L - Physics with Calculus 2 Lab (1 credits) |

----- Or -----

Must take 8.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> PHY 2053 - Physics (without Calculus) 1 (3 credits)      | <input type="checkbox"/> PHY 2054 - Physics (without Calculus) 2 (3 credits)      |
| <input type="checkbox"/> PHY 2053L - Physics (without Calculus) 1 Lab (1 credits) | <input type="checkbox"/> PHY 2054L - Physics (without Calculus) 2 Lab (1 credits) |

#### 11. UPPER DIV. BIO. SCI. CORE (22.00 credits)

- |   |  |
|---|--|
| <input type="checkbox"/> BCH 3023 - Introductory Biochemistry (3 credits)             | <input type="checkbox"/> PCB 3060 - Principles of Genetics (3 credits)             |
| <input type="checkbox"/> BCH 3023L - Introductory Biochemistry Laboratory (2 credits) | <input type="checkbox"/> PCB 3060L - Principles of Genetics Laboratory (2 credits) |
| <input type="checkbox"/> BSC 3930 - Biological Sciences Seminar (1 credits)           | <input type="checkbox"/> PCB 4023 - Molecular and Cell Biology (3 credits)         |
| <input type="checkbox"/> MCB 3023 - Principles of Microbiology (3 credits)            | <input type="checkbox"/> PCB 4674 - Evolution (3 credits)                          |
| <input type="checkbox"/> MCB 3023L - Principles of Microbiology Lab (2 credits)       |  |

#### 12. UPPER DIVISION INTERNSHIP (3.00 credits)

- ☐ BSC 4940 - Senior Specialty Internship (3 credits)

#### 13. BIOLOGICAL SCI. SPECIALTY AREA (18.00 credits)

Must take 13.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> BOT 3015 - Survey of Plant Diversity (3 credits) | <input type="checkbox"/> PCB 4233C - Fundamentals of Immunology (4 credits) |
| <input type="checkbox"/> PCB 4097 - Human Physiology (3 credits)          | <input type="checkbox"/> ZOO 3021 - Survey of Animal Diversity (3 credits)  |

----- And -----

Must take 1.0 credits from the following group.

- |   |  |
|---|--|
| <input type="checkbox"/> BOT 3015L - Survey of Plant Diversity Laboratory (1 credits) | <input type="checkbox"/> ZOO 3021L - Survey of Animal Diversity Laboratory (1 credits) |
|---|--|

----- And -----

Must take 4.0 credits from the following group.

- |   |  |
|---|--|
| <input type="checkbox"/> BSC 4434 - Bioinformatics for Biologists (4 credits) | <input type="checkbox"/> PCB*  |
| <input type="checkbox"/> MCB 4503 - Virology (3 credits)                      | <input type="checkbox"/> ZOO*  |
| <input type="checkbox"/> BOT*   | <input type="checkbox"/> CHM*  |
| <input type="checkbox"/> BSC*   | <input type="checkbox"/> BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits) |
| <input type="checkbox"/> MCB*   |  |

#### 14. ELECTIVES (10.00 credits)

- |   |                               |
|---|-------------------------------|
| <input type="checkbox"/> BOT*                                     | <input type="checkbox"/> GER* |
| <input type="checkbox"/> BSC*                                     | <input type="checkbox"/> HBR* |
| <input type="checkbox"/> PCB*                                     | <input type="checkbox"/> ITA* |
| <input type="checkbox"/> PHI 3633 - Biomedical Ethics (3 credits) | <input type="checkbox"/> JPN* |
| <input type="checkbox"/> ZOO*                                     | <input type="checkbox"/> POR* |
| <input type="checkbox"/> CHI*                                     | <input type="checkbox"/> RUS* |
| <input type="checkbox"/> FRE*                                     | <input type="checkbox"/> SPN* |
| <input type="checkbox"/> FRW*                                     |                               |

\* End of Program Sheet \*



**PROGRAM OF STUDY: BIOLOGICAL SCIENCES - BIOTECHNOLOGY CONCENTRATION (S5200)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## **I. GENERAL EDUCATION REQUIREMENTS**

### **1. COMMUNICATIONS (6.00 credits)**

Gordon rule assigned

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

The following course(s) are not allowed for credit in this area.  
 All Labs

### **2. ORAL COMMUNICATION (3.00 credits)**

Gordon rule assigned

☐ ENC 2300 - Advanced Composition and Communication (3 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

☐ LIT 2480 - Issues in Literature & Culture (3 credits)

The following course(s) are not allowed for credit in this area.  
 All Labs

### **3. HUMANITIES (6.00 credits)**

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ARC 2701 - History of Architecture 1 (3 credits)

☐ ARH 1000 - Art Appreciation (3 credits)

☐ ARH 2050 - Art History 1 (3 credits)

☐ DAN 2100 - Dance Appreciation (3 credits)

☐ HUM 1020 - Humanities (3 credits)

☐ IND 1100 - History of Interiors 1 (3 credits)

☐ MUH 2111 - Survey of Music History 1 (3 credits)

☐ MUL 1010 - Music Appreciation (3 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ ARC 2702 - History of Architecture 2 (3 credits)

☐ ARH 2051 - Art History 2 (3 credits)

☐ ARH 2740 - Cinema Appreciation (3 credits)

☐ DAN 2130 - Dance History 1 (3 credits)

☐ IND 1130 - History of Interiors 2 (3 credits)

☐ LIT 2120 - A Survey of World Literature 2 (3 credits)

☐ MUH 2112 - Survey of Music History 2 (3 credits)

☐ MUL 2380 - Jazz and Popular Music in America (3 credits)

☐ PHI 2010 - Introduction to Philosophy (3 credits)

☐ THE 2000 - Theatre Appreciation (3 credits)

### **4. SOCIAL SCIENCE (6.00 credits)**

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)

☐ DEP 2000 - Human Growth and Development (3 credits)

☐ ISS 1161 - The Individual in Society (3 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

☐ PSY 1012 - Introduction to Psychology (3 credits)

☐ SYG 2000 - Introduction to Sociology (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ AMH 1010 - History of the US to 1877 (3 credits)

☐ AMH 2020 - History of the US since 1877 (3 credits)

☐ ECO 2013 - Principles of Economics (Macro) (3 credits)

☐ ISS 1120 - The Social Environment (3 credits)

☐ POS 2041 - American Federal Government (3 credits)

☐ WOH 1012 - History of World Civilization to 1789 (3 credits)

☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

### **5. NATURAL SCIENCE (6.00 credits)**

Gordon rule assigned

Must take 3.0 credits from the following group.

- ☐ BOT 1010 - Botany (3 credits)
- ☐ BSC 1005 - General Education Biology (3 credits)
- ☐ BSC 1030 - Social Issues in Biology (3 credits)
- ☐ BSC 1050 - Biology & Environment (3 credits)
- ☐ BSC 1084 - Functional Human Anatomy (3 credits)
- ☐ BSC 2020 - Human Biology: Fundamentals of Anatomy/Physiology (3 credits)
- ☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)

- ☐ BSC 2250 - Natural History of South Florida (3 credits)
- ☐ HUN 1201 - Essentials of Human Nutrition (3 credits)
- ☐ OCB 1010 - Introduction to Marine Biology (3 credits)
- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ ZOO 1010 - Zoology (3 credits)
- ☐ BSC 2010 - Principles of Biology (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

- - And - - -

Must take 3.0 credits from the following group.

- ☐ AST 1002 - Descriptive Astronomy (3 credits)
- ☐ CHM 1045 - General Chemistry and Qualitative Analysis (3 credits)
- ☐ GLY\*
- ☐ MET\*

- ☐ OCE\*
- ☐ PHY\*
- ☐ PSC 1121 - General Education Physical Science (3 credits)
- ☐ PSC 1515 - Energy in the Natural Environment (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 6. MATHEMATICS (6.00 credits)

Gordon rule assigned

- ☐ MAC\*
- ☐ MAD 2104 - Discrete Mathematics (3 credits)
- ☐ MAP\*
- ☐ MAS\*

- ☐ MGF\*
- ☐ MTG 2204 - Geometry for Educators (3 credits)
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 7. GENERAL EDUCATION ELECTIVES (3.00 credits)

- ☐ CGS 1060

The following course(s) are not allowed for credit in this area.

All Labs

## 8. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

The following course(s) are not allowed for credit in this area.

All Labs

## 9. LOWER DIV. COMMON PREREQ. REQ. (36.00 credits)

Must take 30.0 credits from the following group.

- ☐ BSC 2010 - Principles of Biology (3 credits)
- ☐ BSC 2010L - Principles of Biology 1 Laboratory (2 credits)
- ☐ BSC 2011 - Principles of Biology 2 (3 credits)
- ☐ BSC 2011L - Principles of Biology Lab 2 (2 credits)
- ☐ CHM 1045 - General Chemistry and Qualitative Analysis (3 credits)
- ☐ CHM 1045L - General Chemistry and Qualitative Analysis Lab (2 credits)

- ☐ CHM 1046 - General Chemistry and Qualitative Analysis (3 credits)
- ☐ CHM 1046L - General Chemistry & Qualitative Analysis Lab (2 credits)
- ☐ CHM 2210 - Organic Chemistry 1 (3 credits)
- ☐ CHM 2210L - Organic Chemistry 1 Laboratory (2 credits)
- ☐ CHM 2211 - Organic Chemistry 2 (3 credits)
- ☐ CHM 2211L - Organic Chemistry 2 Laboratory (2 credits)

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ MAC 2241 - Life Science Calculus (3 credits)
- ☐ MAC 2311 - Calculus and Analytical Geometry 1 (5 credits)

The following course(s) are not allowed for credit in this area.

All Labs

- - And - - -

Must take 3.0 credits from the following group.

- |  |   |
|--|---|
| <input type="checkbox"/> MAC 2312 - Calculus and Analytical Geometry 2 (4 credits) | <input type="checkbox"/> STA 2023 - Statistical Methods (3 credits) |
|--|---|

#### 10. LOWER DIVISION REQUIREMENTS (8.00 credits)

Must take 8.0 credits from the following group.

- |  |  |
|--|--|
| <input type="checkbox"/> PHY 2048 - Physics with Calculus 1 (4 credits)      | <input type="checkbox"/> PHY 2049 - PHYSICS WITH CALCULUS 2 (4 credits)      |
| <input type="checkbox"/> PHY 2048L - Physics with Calculus 1 Lab (1 credits) | <input type="checkbox"/> PHY 2049L - Physics with Calculus 2 Lab (1 credits) |

- - Or - - -

Must take 8.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> PHY 2053 - Physics (without Calculus) 1 (3 credits)      | <input type="checkbox"/> PHY 2054 - Physics (without Calculus) 2 (3 credits)      |
| <input type="checkbox"/> PHY 2053L - Physics (without Calculus) 1 Lab (1 credits) | <input type="checkbox"/> PHY 2054L - Physics (without Calculus) 2 Lab (1 credits) |

#### 11. UPPER DIV. BIO. SCI. CORE (22.00 credits)

- |   |  |
|---|--|
| <input type="checkbox"/> BCH 3023 - Introductory Biochemistry (3 credits)             | <input type="checkbox"/> PCB 3060 - Principles of Genetics (3 credits)             |
| <input type="checkbox"/> BCH 3023L - Introductory Biochemistry Laboratory (2 credits) | <input type="checkbox"/> PCB 3060L - Principles of Genetics Laboratory (2 credits) |
| <input type="checkbox"/> BSC 3930 - Biological Sciences Seminar (1 credits)           | <input type="checkbox"/> PCB 4023 - Molecular and Cell Biology (3 credits)         |
| <input type="checkbox"/> MCB 3023 - Principles of Microbiology (3 credits)            | <input type="checkbox"/> PCB 4674 - Evolution (3 credits)                          |
| <input type="checkbox"/> MCB 3023L - Principles of Microbiology Lab (2 credits)       |  |

#### 12. UPPER DIVISION INTERNSHIP (3.00 credits)

- ☐ BSC 4940 - Senior Specialty Internship (3 credits)

#### 13. BIOLOGICAL SCI. SPECIALTY AREA (19.00 credits)

- |  |   |
|--|---|
| <input type="checkbox"/> BSC 2426 - Biotechnology Methods and Applications 1 (3 credits)           | <input type="checkbox"/> BSC 4422 - Biotechnology Methods and Applications - III (3 credits)      |
| <input type="checkbox"/> BSC 2426L - Biotechnology Methods & Applications 1 Laboratory (2 credits) | <input type="checkbox"/> BSC 4422L - Biotechnology Methods and Applications - III Lab (2 credits) |
| <input type="checkbox"/> BSC 2427 - Biotechnology Methods and Applications 2 (3 credits)           | <input type="checkbox"/> PCB 4233C - Fundamentals of Immunology (4 credits)                       |
| <input type="checkbox"/> BSC 2427L - Biotechnology Methods & Applications 2 Laboratory (2 credits) |   |

#### 14. ELECTIVES (8.00 credits)

- |   |                               |
|---|-------------------------------|
| <input type="checkbox"/> BOT*                                     | <input type="checkbox"/> FRW* |
| <input type="checkbox"/> BSC*                                     | <input type="checkbox"/> GER* |
| <input type="checkbox"/> MCB*                                     | <input type="checkbox"/> HBR* |
| <input type="checkbox"/> PCB*                                     | <input type="checkbox"/> ITA* |
| <input type="checkbox"/> PHI 3633 - Biomedical Ethics (3 credits) | <input type="checkbox"/> JPN* |
| <input type="checkbox"/> ZOO*                                     | <input type="checkbox"/> POR* |
| <input type="checkbox"/> CHI*                                     | <input type="checkbox"/> RUS* |
| <input type="checkbox"/> FRE*                                     | <input type="checkbox"/> SPN* |

\* End of Program Sheet \*

**PROGRAM OF STUDY: BIOLOGICAL SCIENCES - SCIENCE EDUCATION (S5202)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (6.00 credits)

Gordon rule assigned

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

The following course(s) are not allowed for credit in this area.  
 All Labs

### 2. ORAL COMMUNICATION (3.00 credits)

Gordon rule assigned

☐ ENC 2300 - Advanced Composition and Communication (3 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credit

☐ LIT 2480 - Issues in Literature & Culture (3 credits)

The following course(s) are not allowed for credit in this area.  
 All Labs

### 3. HUMANITIES (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ARC 2701 - History of Architecture 1 (3 credits)

☐ ARH 1000 - Art Appreciation (3 credits)

☐ ARH 2050 - Art History 1 (3 credits)

☐ DAN 2100 - Dance Appreciation (3 credits)

☐ HUM 1020 - Humanities (3 credits)

☐ IND 1100 - History of Interiors 1 (3 credits)

☐ MUH 2111 - Survey of Music History 1 (3 credits)

☐ MUL 1010 - Music Appreciation (3 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ ARC 2702 - History of Architecture 2 (3 credits)

☐ ARH 2051 - Art History 2 (3 credits)

☐ ARH 2740 - Cinema Appreciation (3 credits)

☐ DAN 2130 - Dance History 1 (3 credits)

☐ IND 1130 - History of Interiors 2 (3 credits)

☐ LIT 2120 - A Survey of World Literature 2 (3 credits)

☐ MUH 2112 - Survey of Music History 2 (3 credits)

☐ MUL 2380 - Jazz and Popular Music in America (3 credits)

☐ PHI 2010 - Introduction to Philosophy (3 credits)

☐ THE 2000 - Theatre Appreciation (3 credits)

### 4. SOCIAL SCIENCE (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)

☐ DEP 2000 - Human Growth and Development (3 credits)

☐ ISS 1161 - The Individual in Society (3 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

☐ PSY 2012 - Introduction to Psychology (3 credits)

☐ SYG 2000 - Introduction to Sociology (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ AMH 2010 - History of the US to 1877 (3 credits)

☐ AMH 2020 - History of the US since 1877 (3 credits)

☐ ECO 2013 - Principles of Economics (Macro) (3 credits)

☐ ISS 1120 - The Social Environment (3 credits)

☐ POS 2041 - American Federal Government (3 credits)

☐ WOH 2012 - History of World Civilization to 1789 (3 credits)

☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

### 5. NATURAL SCIENCE (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

- ☐ BOT 1010 - Botany (3 credits)
- ☐ BSC 1005 - General Education Biology (3 credits)
- ☐ BSC 1030 - Social Issues in Biology (3 credits)
- ☐ BSC 1050 - Biology & Environment (3 credits)
- ☐ BSC 1084 - Functional Human Anatomy (3 credits)
- ☐ BSC 2010 - Principles of Biology (3 credits)
- ☐ BSC 2020 - Human Biology: Fundamentals of Anatomy/Physiology (3 credits)

- ☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)
- ☐ BSC 2250 - Natural History of South Florida (3 credits)
- ☐ HUN 1201 - Essentials of Human Nutrition (3 credits)
- ☐ OCB 1010 - Introduction to Marine Biology (3 credits)
- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ ZOO 1010 - Zoology (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ AST 1002 - Descriptive Astronomy (3 credits)
- ☐ CHM 1045 - General Chemistry and Qualitative Analysis (3 credits)
- ☐ GLY\*
- ☐ MET\*

- ☐ OCE\*
- ☐ PHY\*
- ☐ PSC 1121 - General Education Physical Science (3 credits)
- ☐ PSC 1515 - Energy in the Natural Environment (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 6. MATHEMATICS (6.00 credits)

Gordon rule assigned

- ☐ MAC 2241 - Life Science Calculus (3 credits)
- ☐ MAC 2311 - Calculus and Analytical Geometry 1 (5 credits)

- ☐ MAC 2312 - Calculus and Analytical Geometry 2 (4 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 7. GENERAL EDUCATION ELECTIVES (3.00 credits)

- ☐ BSC 2011 - Principles of Biology 2 (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 8. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

The following course(s) are not allowed for credit in this area.

All Labs

## 9. LOWER DIV. COMMON PREREQ. REQ. (24.00 credits)

Must take 21.0 credits from the following group.

- ☐ BSC 2010L - Principles of Biology 1 Laboratory (2 credits)
- ☐ BSC 2011L - Principles of Biology Lab 2 (2 credits)
- ☐ CHM 1045L - General Chemistry and Qualitative Analysis Lab (2 credits)
- ☐ CHM 1046 - General Chemistry and Qualitative Analysis (3 credits)
- ☐ CHM 1046L - General Chemistry & Qualitative Analysis Lab (2 credits)

- ☐ CHM 2210 - Organic Chemistry 1 (3 credits)
- ☐ CHM 2210L - Organic Chemistry 1 Laboratory (2 credits)
- ☐ CHM 2211 - Organic Chemistry 2 (3 credits)
- ☐ CHM 2211L - Organic Chemistry 2 Laboratory (2 credits)

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ MAC 2241 - Life Science Calculus (3 credits)
- ☐ MAC 2311 - Calculus and Analytical Geometry 1 (5 credits)

- ☐ MAC 2312 - Calculus and Analytical Geometry 2 (4 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

## 10. LOWER DIVISION REQUIREMENTS (8.00 credits)

Must take 8.0 credits from the following group.

- ☐ PHY 2048 - Physics with Calculus 1 (4 credits)
- ☐ PHY 2048L - Physics with Calculus 1 Lab (1 credits)

- ☐ PHY 2049 - PHYSICS WITH CALCULUS 2 (4 credits)
- ☐ PHY 2049L - Physics with Calculus 2 Lab (1 credits)

----- Or -----

Must take 8.0 credits from the following group.

- ☐ PHY 2053 - Physics (without Calculus) 1 (3 credits)
- ☐ PHY 2053L - Physics (without Calculus) 1 Lab (1 credits)

- ☐ PHY 2054 - Physics (without Calculus) 2 (3 credits)
- ☐ PHY 2054L - Physics (without Calculus) 2 lab (1 credits)

#### 11. UPPER DIV. BIO. SCI. CORE (22.00 credits)

- ☐ BCH 3023 - Introductory Biochemistry (3 credits)
- ☐ BCH 3023L - Introductory Biochemistry Laboratory (2 credits)
- ☐ BSC 3930 - Biological Sciences Seminar (1 credits)
- ☐ MCB 3023 - Principles of Microbiology (3 credits)
- ☐ MCB 3023L - Principles of Microbiology Lab (2 credits)

- ☐ PCB 3060 - Principles of Genetics (3 credits)
- ☐ PCB 3060L - Principles of Genetics Laboratory (2 credits)
- ☐ PCB 4023 - Molecular and Cell Biology (3 credits)
- ☐ PCB 4674 - Evolution (3 credits)

#### 12. UPPER DIVISION INTERNSHIP (3.00 credits)

- ☐ BSC 4940 - Senior Specialty Internship (3 credits)

#### 13. BIOLOGICAL SCI. SPECIALTY AREA (18.00 credits)

- ☐ EDG 2311 - Substitute Training (1 credits)
- ☐ EDG 3321 - General Teaching Skills (3 credits)
- ☐ EDG 3443 - Classroom and Behavior Management (3 credits)
- ☐ EDF 4430 - Measurement and Assessment in Education (3 credits)

- ☐ EME 3430 - Instructional Technology in Mathematics and Science (2 credits)
- ☐ RED 3013 - Foundations of Reading Instruction (3 credits)
- ☐ SCE 4362 - Methods of Teaching Science (3 credits)

#### 14. ELECTIVES (9.00 credits)

- ☐ BOT\*
- ☐ BSC\*
- ☐ MCB\*
- ☐ PCB\*
- ☐ PHI 3633 - Biomedical Ethics (3 credits)
- ☐ ZOO\*
- ☐ CHI \*
- ☐ FRE \*

- ☐ FRW\*
- ☐ HBR\*
- ☐ GER\*
- ☐ ITA\*
- ☐ JPN\*
- ☐ POR\*
- ☐ RUS\*
- ☐ SPN\*

\* End of Program Sheet \*

## Cybersecurity

Bachelor of Science | Code: S9515 | 120 credits

**C.I.P. (1101110031)**

The Bachelor of Science (BS) in Cybersecurity degree is designed to help meet the local need for cyber security professionals. Students in this program gain detailed understanding and hands-on skills regarding the tools and protocols needed to use and manage cybersecurity infrastructure, risks, and vulnerabilities in real-world situations. The program curriculum includes courses in network defense, penetration testing, computer and network forensics, risk management and ethics, among others. These courses prepare students for multiple industry certifications such as Certified Ethical Hacker, Computer Hacking Forensics Investigator and Certified Information Security Manager.

### **GENERAL EDUCATION REQUIREMENTS – 36 Credits Required**

Courses require a grade of "C" or higher to satisfy the general education requirement.

		<b>Credits</b>	<b>Requisites</b>
<b>1. Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1 (Gw)	3	Appropriate college placement
ENC 1102	English Composition 2 (Gw)	3	Pre-Req ENC 1101
<b>2. Oral Communications – 3 Credits Required</b>			
Select one course from the following offerings.			
ENC 2300	Advanced Composition & Communication (Gw)	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture (Gw)	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications (Gw)	3	
SPC 2608	Introduction to Public Speaking (Gw)	3	
<b>3. Humanities – 6 Credits Required</b>			
Select one course from Group A-State Core <u>AND</u> one course from Group B-MDC Core. At least one Gordon Rule Writing (Gw) course must be selected from Group A or Group B.			
<b>Group A: State Core (3 credits)</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
<b>---AND---</b>			
<b>Group B: MDC Core (3 credits)</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2 (Gw)	3	
ARH 2050	Art History 1	3	
ARH 2051	Art History 2 (Gw)	3	Pre-Req ARH 2050
ARH 2740	Cinema Appreciation (Gw)	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1 (Gw)	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2 (Gw)	3	
LIT 2120	A Survey of World Literature 2 (Gw)	3	Pre-Req ENC 1101, 1102
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2 (Gw)	3	Pre-Req MUH 2111
MUL 2380	Jazz & Popular Music in America (Gw)	3	
PHI 2604	Critical Thinking/Ethics (Gw)	3	Pre-Req ENC 1101

#### 4. Behavioral and Social Science – 6 Credits Required

Choose two courses from Option A OR Option B. Within selected option, one course must be State Core and one MDC Core. Selecting AMH2020 or POS2041 ( ) is recommended as these courses also fulfill the civic literacy graduation requirement.

**Option A (6 credits):** Choose one course from State Core A-Behavioral Sciences and one course from MDC Core A-Social Sciences.

##### State Core A: Behavioral Sciences (3 credits)

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**AND**

##### MDC Core A: Social Sciences (3 credits)

AMH 2010	History of the US to 1877	3
AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro)	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government (♦)	3
WOH 2012	History of World Civilization to 1789	3
WOH 2022	History of World Civilization from 1789	3

**--- OR ---**

**Option B (6 credits):** Choose one course from State Core B-Social Sciences and one course from MDC Core B-Behavioral Sciences.

##### State Core B: Social Sciences (3 credits)

AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro)	3
POS 2041	American Federal Government (♦)	3

**AND**

##### State Core B: Behavioral Sciences (3 credits)

ANT 2000	Introduction to Anthropology	3
ANT2410	Introduction to Cultural Anthropology	3
CLP1006	Psychology of Personal Effectiveness	3
DEP2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

#### 5. Natural Science – 6 Credits Required

Choose two courses from Option A OR Option B. Within selected option, one course must be State Core and one MDC Core. Laboratory courses do not fulfill this area's requirements.

**Option A (6 credits):** Choose one course from State Core A-Life Sciences and one course from MDC Core A-Physical Sciences

##### State Core A: Life Sciences (3 credits)

BSC 1005	General Education Biology	3
BSC 2010	Principles of Biology	3
BSC 2085	Human Anatomy and Physiology 1	3
EVR 1001	Introduction to Environmental Science	3

Pre/Co-Req CHM 1045/BSC 2010L  
Co-Req BSC2085L

**AND**

##### MDC Core A: Physical Sciences (3 credits)

AST 1002	Descriptive Astronomy	3
ESC 1000	General Education Earth Science	3
PSC 1121	General Education Physical Science	3
PSC 1515	Energy in the Natural Environment	3
Any course with prefix CHM*, GLY*, MET*, OCE*, PHY*		3

Pre-Req MAT 1033

**--- OR ---**

**Option B (6 credits):** Choose one course from State Core B-Physical Sciences and one course from MDC Core B-Life Sciences

##### State Core B: Physical Sciences (3 credits)

AST 1002	Descriptive Astronomy	3
CHM 1020	General Education Chemistry	3
CHM 1045	General Chemistry and Qualitative Analysis	3
ESC 1000	General Education Earth Science	3

Pre/Co-Req CHM1025 &  
MAC1105/CHM1045L



PHY 1020	General Education Physics	3	
PHY2048	Physics with Calculus 1	4	Pre/Co-Req HS physics, or PHY1025 or 2053, or dept. approval, and MAC2311/PHY2048L
PHY 2053	Physics (without Calculus) 1	3	Pre/Co-Req MAC1147, 1114, 1140/PHY2053L

**AND**

**MDC Core B: Life Sciences (3 credits)**

BOT 1010	Botany	3	Co-Req BOT 1010L
BSC 1005	General Education Biology	3	
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology	3	Pre/Co-Req CHM 1045/BSC 2010L
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	
BSC 2085	Human Anatomy and Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
EVR 1001	Introduction to Environmental Sciences	3	
HUN 1201	Essentials of Human Nutrition	3	
OCB 1010	Introduction to Marine Biology	3	
PCB 2033	Introduction to Ecology	3	Pre-Req PSC1515 or BSC2011
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**6. Mathematics – 6 Credits Required**

MAC 1105	College Algebra (Gc)	3	Pre-Req MAT 1033
STA 2023	Statistical Methods (Gc)	3	Pre-Req MAT 1033 or MGF 1106

MAC 1105 may be replaced by a higher-level mathematics with prefix MAC\*, MAD\*, MAS\*, or MAP\*. All courses accepted in this section fulfill the Gordon Rule Computation (Gc) graduation requirements.

**7. General Education Elective – 3 Credits Required**

See Academic Advisor for approved selection.

**Computer Competency Requirement**

Students must satisfy the requirement by successfully completing a course (CGS1060C or CTS0050, an equivalent college credit course), or passing MDC's Computer Skills Placement examination, or a test exemption.

**Foreign Language Competency Requirement**

Students must fulfill this requirement via three options:

**Option A:** Successful completion of two (2) credits (i.e., the equivalent of two years) in one (1) foreign language at the secondary (high school) level.

---OR---

**Option B:** Successful completion of the following courses at the elementary 2 level: ASL1150C, CHI1121, FRE1121, GER1121, ITA1121, JPN1121, POR1121, RUS1121, SPN1121. These credits count towards the Lower Division Requirements area.

---OR---

**Option C:** Students may demonstrate completion of the elementary 2 level through standardized examination that document the required foreign language competency.

**LOWER DIVISION REQUIREMENTS – 36 Credits Required**

**Group A: 12 credits**

CTS 1111	Linux +	4	Pre-Req CGS1060C or Computer Competence
CTS 1120	Cybersecurity Fundamentals	4	
CTS 1134	Networking Technologies	4	

**Group B: 4 credits**

Select one course from the following offerings.

CIS 1531	Introduction to Secure Scripting	4	
COP1047C	Introduction to Python Programming	4	
COP1334	Introduction to C++ Programming	4	Pre-Req CGS1060C or Computer Competence

**Group C: 20 credits**

Any transferrable type-1 or type-2 courses. Please see academic advisor.

**UPPER DIVISION REQUIREMENTS – 36 Credits Required**

CIS 3215	Ethics in Cybersecurity	4	
CIS 3360	Principles of Information Security	4	Pre-Req CTS 1134 or CTS 1650
CIS 3361	Information Security Management	4	Pre-Req CIS 3360
CIS 4204	Ethical Hacking I	4	Pre-Req CIS 3360
CIS 4378	Ethical Hacking II	4	Pre-Req CIS 4204
CIS 4364	Intrusion Detection and Incident Response	4	Pre-Req CIS 3360
CIS 4366	Computer Forensics	4	Pre-Req CIS 3360
CIS 4388	Advanced Computer Forensics	4	Pre-Req CIS 4366
CIS 4891	Capstone Project	4	Departmental Approval Required

**PROGRAM ELECTIVES – 12 Credits Required**

Electives are restricted to 3000 or 4000 level courses with the following prefixes:

CAP 3*	CIS 3*
CAP 4*	CIS 4*
CET 3*	CNT 4*
CET 4*	COP 4*
CGS 3*	CTS 3*

**IMPORTANT INFORMATION**

**Civic Literacy Competency:** First time in college students for the 2018-2019 school year and thereafter must demonstrate competency in civic literacy to earn a baccalaureate. This requirement may be satisfied by passing AMH2020 or POS2041 (listed under the Social Sciences area), or an equivalent AP or CLEP exam.

**Computer Competency:** All MDC degree-seeking students with 16 or more credits must demonstrate computer competency prior to graduation. Students demonstrate this competency by passing the MDC computer competency test, currently known as CSP (Computer Skills Placement) examination or by enrolling in and successfully completing an equivalent course.

**Foreign Language:** Students admitted to the baccalaureate degree program without meeting the foreign language admissions requirement of at least 2 courses (8-10 credit hours) of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation.

**Required Credit Hours and GPA:** The baccalaureate requires student to earn a minimum of 120 unduplicated credit hours with a minimum cumulative grade point average of 2.0. All general education and all upper division requirements must be passed with the grade of "C" or better.

**Pursuing or Have Earned an Associate's Degree:** Students entering with an AS or AAS degree may have more than 24 elective credits and may need additional General Education credits to meet the 36 General Education credits required for the baccalaureate degree. Students entering with an AA degree may need additional electives to provide appropriate background for the baccalaureate program.

**Graduation Requirements:** This Program Sheet is effective for academic year 2020/2021. Additional requirements apply, which include, but are not limited to Gordon Rule (college level communication and computational skills) and residency (number of credits that must be earned at MDC). Students should review their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade College. Students are highly encouraged to meet with their academic advisor on a regular basis and review the College Catalog to learn about all requirements to receive the baccalaureate. The final responsibility for meeting graduation requirements rests with the student.

## Data Analytics

(CIP 1101101011)

Bachelor of Science | Code: S5510/S9510 | 120 credits

Effective Term: Summer 2020 (2205)

The Bachelor of Science (BS) in Data Analytics program is designed to train and supply a workforce of skilled graduates in data manipulation and analysis across a spectrum of industries. Through the cross-disciplinary curriculum, students will learn to clean, organize, analyze, and interpret unstructured data, to derive knowledge and communicate discoveries using sophisticated visualization techniques. Students will demonstrate competence with fundamental algorithmic approaches to analyzing large data sets.

### **GENERAL EDUCATION REQUIREMENTS – 36 Credits Required**

Courses require a grade of "C" or higher to satisfy the general education requirement.

		<b>Credits</b>	<b>Requisites</b>
<b>1. Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1 (Gw)	3	Appropriate college placement
ENC 1102	English Composition 2 (Gw)	3	Pre-Req ENC 1101
<b>2. Oral Communications – 3 Credits Required</b>			
Select one course from the following offerings.			
ENC 2300	Advanced Composition & Communication (Gw)	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture (Gw)	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications (Gw)	3	
SPC 2608	Introduction to Public Speaking (Gw)	3	
<b>3. Humanities – 6 Credits Required</b>			
Select one course from Group A-State Core <u>AND</u> one course from Group B-MDC Core. At least one Gordon Rule Writing (Gw) course must be selected from Group A or Group B.			
<b>Group A: State Core (3 credits)</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
---AND---			
<b>Group B: MDC Core (3 credits)</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2 (Gw)	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	
ARH 2051	Art History 2 (Gw)	3	Pre-Req ARH 2050
ARH 2740	Cinema Appreciation (Gw)	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1 (Gw)	3	
HUM 1020	Introduction to Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2 (Gw)	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
LIT 2120	A Survey of World Literature 2 (Gw)	3	Pre-Req ENC 1101, 1102
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2 (Gw)	3	Pre-Req MUH 2111
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz & Popular Music in America (Gw)	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
PHI 2604	Critical Thinking/Ethics (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
<b>4. Behavioral and Social Science – 6 Credits Required</b>			

Choose two courses from Option A OR Option B. Within selected option, one course must be State Core and one MDC Core. Selecting AMH2020 or POS2041 (♦) is recommended as these courses also fulfill the civic literacy graduation requirement.

**Option A (6 credits):** Choose one course from State Core A-Behavioral Sciences and one course from MDC Core A-Social Sciences.

**State Core A: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**AND**

**MDC Core A: Social Sciences (3 credits)**

AMH 2010	History of the US to 1877	3
AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government (♦)	3
WOH 2012	History of World Civilization to 1789	3
WOH 2022	History of World Civilization from 1789	3

**--- OR ---**

**Option B (6 credits):** Choose one course from State Core B-Social Sciences and one course from MDC Core B-Behavioral Sciences.

**State Core B: Social Sciences (3 credits)**

AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
POS 2041	American Federal Government (♦)	3

**AND**

**MDC Core B: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
ANT2410	Introduction to Cultural Anthropology	3
CLP1006	Psychology of Personal Effectiveness	3
DEP2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**5. Natural Science – 6 Credits Required**

Choose two courses from Option A OR Option B. Within selected option, one course must be State Core and one MDC Core. Laboratory courses do not fulfill this area's requirements.

**Option A (6 credits):** Choose one course from State Core A-Life Sciences and one course from MDC Core A-Physical Sciences

**State Core A: Life Sciences (3 credits)**

BSC 1005	General Education Biology	3	
BSC 2010	Principles of Biology	3	Pre/Co-Req CHM 1045/BSC 2010L
BSC 2085	Human Anatomy and Physiology 1	3	Co-Req BSC 2085L
EVR 1001	Introduction to Environmental Science	3	

**AND**

**MDC Core A: Physical Sciences (3 credits)**

AST 1002	Descriptive Astronomy	3	
ESC 1000	General Education Earth Science	3	
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	
Any course with prefix CHM*, GLY*, MET*, OCE*, PHY*		3	

**--- OR ---**

**Option B (6 credits):** Choose one course from State Core B-Physical Sciences and one course from MDC Core B-Life Sciences

**State Core B: Physical Sciences (3 credits)**

AST 1002	Descriptive Astronomy	3	
CHM 1020	General Education Chemistry	3	
CHM 1045	General Chemistry and Qualitative Analysis	3	Pre/Co-Req CHM1025 & MAC1105/CHM1045L
ESC 1000	General Education Earth Science	3	
PHY 1020	General Education Physics	3	
PHY 2048	Physics with Calculus 1	4	Pre/Co-Req HS physics, or PHY1025 or 2053, or dept. approval, and MAC2311/PHY2048L
PHY 2053	Physics (without Calculus) 1	3	Pre/Co-Req MAC1147, 1114, 1140/PHY2053L

**AND**

**MDC Core B: Life Sciences (3 credits)**

BOT 1010	Botany	3	Co-Req BOT 1010L
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BSC 1005	General Education Biology	3	
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology	3	Pre/Co-Req CHM 1045/BSC 2010L
BSC 2020	Human Biology: Fund. of Anatomy & Physiology	3	
BSC 2085	Human Anatomy and Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
EVR 1001	Introduction to Environmental Sciences	3	
HUN 1201	Essentials of Human Nutrition	3	
OCB 1010	Introduction to Marine Biology	3	
PCB 2033	Introduction to Ecology	3	Pre-Req PSC 1515 or BSC 2011
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

#### 6. Mathematics – 6 Credits Required

MAC 1105 may be replaced by a higher-level mathematics with prefix MAC\* or MAP\*. All courses accepted in this section fulfill the Gordon Rule Computation (Gc) graduation requirements.

MAC 1105	College Algebra (Gc)	3	Pre-Req MAT 1033
STA 2023	Statistical Methods (Gc)	3	Pre-Req MAT 1033 or MGF 1106

#### 7. General Education Elective – 3 Credits Required

See Academic Advisor for approved selection.

#### Computer Competency Requirement

Students must satisfy the requirement by successfully completing a course (CGS1060C or CTS0050, an equivalent college credit course), or passing MDC's Computer Skills Placement examination, or a test exemption.

#### Foreign Language Competency Requirement

Students must fulfill this requirement via three options:

**Option A:** Successful completion of two (2) credits (i.e., the equivalent of two years) in one (1) foreign language at the secondary (high school) level.

---OR---

**Option B:** Successful completion of the following courses at the elementary 2 level: ASL 1150C, CHI 1121, FRE 1121, GER 1121, ITA 1121, JPN 1121, POR 1121, RUS 1121, SPN 1121. These credits count towards the Lower Division Requirements area.

---OR---

**Option C:** Students may demonstrate completion of the elementary 2 level through standardized examination that document the required foreign language competency.

#### LOWER DIVISION TECHNOLOGY – 24 Credits Required

##### **Group A: 20 credits**

CAP 1788	Introduction to Data Analytics	4	
CGS 1540C	Database Concepts and Design	4	
CTS 1437	Microsoft SQL Administration	4	Recommended CGS 1540C or CGS 1541
CTS 2433	Microsoft SQL Implementation	4	Pre-Req CTS 1437
COP 1047C	Introduction to Python Programming	4	

##### **Group B: 4 credits**

Any transferable credit type 01 and credit type 02 course. Please see academic advisor.

#### UPPER DIVISION REQUIREMENTS – 40 Credits Required

##### **Program Core: 28 credits**

CAP 4631C	Machine Learning for Data Analytics I	4	Pre-Req COP 1047C & STA 3164 or CAP 3330
CAP 4633C	Machine Learning for Data Analytics II	4	Pre-Req CAP 4631C
CAP 4744	Data Visualization	4	Pre-Req CTS 3452
CAP 4767	Data Mining	4	
CAP 4784	Big Data	4	Pre-Req CTS 1437 and CTS 2433
CAP 4910	Data Analytics Capstone	4	Departmental Approval Required
CTS 3452	Business Intelligence	4	

##### **Upper-Division Statistics: 4 credits**

Select one course from the following offerings.

CAP 3330	Programming R for Statistics	4	Pre-Req STA 2023
STA 3164	Statistical Methods II	4	Pre-Req STA 2023

##### **Topics in Data Analytics: 8 credits**

Select two courses from the following offerings. *Special Topics courses may be repeated as long as the topics are different.*

CAP 4936	Special Topics in Data Analytics	4	Departmental Approval Required
CIS 3368	Data Security & Governance	4	

### **PROGRAM ELECTIVES – 20 Credits Required**

Electives are restricted to courses listed below:

ACG2\*, CAP\*, CGS\*, CIS\*, CNT\*, COP\*, CTS\*, FIN2\*, GEB\*, MAD\*, MAN\*, QMB2\*, STA\*, ASL 1150C, CHI 1121, FRE 1121, GER 1121, ITA 1121, JPN 1121, POR 1121, RUS 1121, SPN 1121

### **IMPORTANT INFORMATION**

**Civic Literacy Competency:** First time in college students for the 2018-2019 school year and thereafter must demonstrate competency in civic literacy to earn a baccalaureate. This requirement may be satisfied by passing AMH 2020 or POS 2041 (listed under the Social Sciences area), or an equivalent AP or CLEP exam.

**Computer Competency:** All MDC degree-seeking students with 16 or more credits must demonstrate computer competency prior to graduation. Students demonstrate this competency by passing the MDC computer competency test, currently known as CSP (Computer Skills Placement) examination or by enrolling in and successfully completing an equivalent course.

**Foreign Language:** Students admitted to the baccalaureate degree program without meeting the foreign language admissions requirement of at least 2 courses (8-10 credit hours) of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation.

**Required Credit Hours and GPA:** The baccalaureate requires student to earn a minimum of 120 unduplicated credit hours with a minimum cumulative grade point average of 2.0. All general education and all upper division requirements must be passed with the grade of "C" or better.

**Pursuing or Have Earned an Associate's Degree:** Students entering with an AS or AAS degree may have more than 24 elective credits and may need additional General Education credits to meet the 36 General Education credits required for the baccalaureate degree. Students entering with an AA degree may need additional electives to provide appropriate background for the baccalaureate program.

**Graduation Requirements:** This Program Sheet is effective for academic year 2020/2021. Additional requirements apply, which include, but are not limited to Gordon Rule (college level communication and computational skills) and residency (number of credits that must be earned at MDC). Students should review their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade College. Students are highly encouraged to meet with their academic advisor on a regular basis and review the College Catalog to learn about all requirements to receive the baccalaureate. The final responsibility for meeting graduation requirements rests with the student.

**PROGRAM OF STUDY: EARLY CHILDHOOD EDUCATION (S9400)**  
**EFFECTIVE TERM: Fall 2020 (2207)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMMUNICATIONS** (6.00 credits)

Gordon rule assigned

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

The following course(s) are not allowed for credit in this area.  
All Labs

**2. ORAL COMMUNICATION** (3.00 credits)

Gordon rule assigned

☐ LIT 2480 - Issues in Literature & Culture (3 credits)

The following course(s) are not allowed for credit in this area.  
All Labs

**3. HUMANITIES** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ARC 2701 - History of Architecture 1 (3 credits)

☐ ARH 1000 - Art Appreciation (3 credits)

☐ ARH 2050 - Art History 1 (3 credits)

☐ DAN 2100 - Dance Appreciation (3 credits)

☐ HUM 1020 - Humanities (3 credits)

☐ IND 1100 - History of Interiors 1 (3 credits)

☐ MUH 2111 - Survey of Music History 1 (3 credits)

☐ MUL 1010 - Music Appreciation (3 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

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- - - And - - -

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Must take 3.0 credits from the following group.

☐ ARC 2702 - History of Architecture 2 (3 credits)

☐ ARH 2051 - Art History 2 (3 credits)

☐ ARH 2740 - Cinema Appreciation (3 credits)

☐ DAN 2130 - Dance History 1 (3 credits)

☐ IND 1130 - History of Interiors 2 (3 credits)

☐ LIT 2120 - A Survey of World Literature 2 (3 credits)

☐ MUH 2112 - Survey of Music History 2 (3 credits)

☐ MUL 2380 - Jazz and Popular Music in America (3 credits)

☐ PHI 2010 - Introduction to Philosophy (3 credits)

☐ THE 2000 - Theatre Appreciation (3 credits)

**4. SOCIAL SCIENCE** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)

☐ DEP 2000 - Human Growth and Development (3 credits)

☐ ISS 1161 - The Individual in Society (3 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

☐ PSY 2112 - Introduction to Psychology (3 credits)

☐ SYG 2000 - Introduction to Sociology (3 credits)

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- - - And - - -

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Must take 3.0 credits from the following group.

☐ AMH 2010 - History of the US to 1877 (3 credits)

☐ AMH 2020 - History of the US since 1877 (3 credits)

☐ ECO 2013 - Principles of Economics (Macro) (3 credits)

☐ ISS 1120 - The Social Environment (3 credits)

☐ POS 2041 - American Federal Government (3 credits)

☐ WOH 2012 - History of World Civilization to 1789 (3 credits)

☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

**5. NATURAL SCIENCE** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ BOT 1010 - Botany (3 credits)

☐ BSC 1005 - General Education Biology (3 credits)

☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)

☐ BSC 2250 - Natural History of South Florida (3 credits)

- ☐ BSC 1030 - Social Issues in Biology (3 credits)
- ☐ BSC 1050 - Biology & Environment (3 credits)
- ☐ BSC 1084 - Functional Human Anatomy (3 credits)
- ☐ BSC 2010 - Principles of Biology (3 credits)
- ☐ BSC 2020 - Human Biology: Fundamentals of Anatomy/Physiology (3 credits)

- ☐ HUN 1201 - Essentials of Human Nutrition (3 credits)
- ☐ OCB 1010 - Introduction to Marine Biology (3 credits)
- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ ZOO 1010 - Zoology (3 credits)

The following course(s) are not allowed for credit in this area.  
All Labs

--- And ---

Must take 3.0 credits from the following group.

- ☐ AST 1002 - Descriptive Astronomy (3 credits)
- ☐ CHM\*
- ☐ ESC\*
- ☐ GLY\*
- ☐ MET\*
- ☐ OCE\*
- ☐ PHY\*
- ☐ PSC 1121 - General Education Physical Science (3 credits)
- ☐ PSC 1515 - Energy in the Natural Environment (3 credits)

The following course(s) are not allowed for credit in this area.  
All Labs

## 6. MATHEMATICS (6.00 credits)

Gordon rule assigned

- ☐ MAC\*
- ☐ MAD 2104 - Discrete Mathematics (3 credits)
- ☐ MAP\*
- ☐ MAS\*
- ☐ MGF\*
- ☐ MTG 2204 - Geometry for Educators (3 credits)
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

The following course(s) are not allowed for credit in this area. All Labs

## 7. GENERAL EDUCATION ELECTIVES (3.00 credits)

- ☐ EEC 1000 - Introduction to Early Childhood Education (3 credits)
- ☐ EEC 1001 - Introduction to Early Childhood Infant/Toddler Education (3 credits)

The following course(s) are not allowed for credit in this area. All Labs

## 8. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

The following course(s) are not allowed for credit in this area. All Labs

## 9. COMMON PREREQUISITES (3.00 credits)

- ☐ EDF 1005 - Introduction to the Teaching Profession (3 credits)

The following course(s) are not allowed for credit in this area. All Labs

## 10. LOWER DIVISION REQUIREMENTS (15.00 credits)

- ☐ EDF 2085 - Introduction to Diversity (3 credits)
- ☐ EEC 2224 - Emergent Literacy through the Use of Children's Literature (3 credits)
- ☐ EEC 2271 - Working with Young Children with Special Needs and their Families (3 credits)
- ☐ EEC 2401 - Family Interaction and Cultural Continuity (3 credits)
- ☐ EEC 2407 - Facilitating Social Development (3 credits)
- ☐ EEC 2601 - Observation and Assessment in Early Childhood (3 credits)
- ☐ EME 2040 - Introduction to Technology for Educators (3 credits)

The following course(s) are not allowed for credit in this area. All Labs

## 11. LOWER DIVISION ELECTIVES (12.00 credits)



- ☐ CHI\*
- ☐ FRE\*
- ☐ FRW\*
- ☐ HBR\*
- ☐ GER\*
- ☐ ITA\*
- ☐ JPN\*
- ☐ POR\*
- ☐ RUS\*
- ☐ SPN\*
- ☐ BSC 1005L - General Education Biology Laboratory (1 credits)
- ☐ BSC 2010L - Principles of Biology 1 Laboratory (2 credits)
- ☐ CHM 1020L - General Education Chemistry Laboratory (1 credits) ☐ CHM 1033L - Chemistry for Health Sciences lab (1 credits)
- ☐ CHM 1045L - General Chemistry and Qualitative Analysis Lab (2 credits)
- ☐ ESC 1000L
- ☐ GLY 1010L - Physical Geology Laboratory (1 credits)
- ☐ GLY 1100L - Historical Geology Laboratory (1 credits)
- ☐ MCB 2010L - Microbiology Laboratory (2 credits)
- ☐ MET 1010L - Introduction to Weather Laboratory (1 credits)

- ☐ OCE 1001L
- ☐ PHY 1004L - Physics with Applications 1 Lab (1 credits)
- ☐ PHY 2053L - Physics (without Calculus) 1 Lab (1 credits)
- ☐ PSC 1121L
- ☐ PSC 1515L - Energy in the Natural Environment Laboratory (1 credits)
- ☐ EEC1\*
- ☐ EEC2\*
- ☐ EEX2\*
- ☐ EDG\*
- ☐ CGS 1060
- ☐ DEP\*
- ☐ CLP\*
- ☐ PSY\*
- ☐ WOH\*
- ☐ POS\*
- ☐ SPC\*
- ☐ LIT\*
- ☐ MUL\*
- ☐ ECO\*
- ☐ CRW\*

## 12. PROFESSIONAL EDUCATION CORE (15.00 credits)

- ☐ EDF 3115 - Child Development for Inclusive Settings (3 credits)
- ☐ EEC 3301 - General Teaching Methods for Early Childhood Education (3 credits)
- ☐ EEX 3226 - Assessment of All Young Children (3 credits)
- ☐ EEX 3603 - Positive Behavior Supports in Inclusive Settings (3 credits)
- ☐ RED 3009 - Early and Emergent Literacy (3 credits)

## 13. DISCIPLINE CONTENT (21.00 credits)

- ☐ EEC 3211 - Science, Technology, and Mathematics (STEM) Methods for ECE I (3 credits)
- ☐ EEC 3212 - Integrated Social Sciences, Humanities, and Arts (3 credits)
- ☐ EEC 4219 - Science, Technology, and Mathematics (STEM) Methods for ECE II (3 credits)
- ☐ EEC 4268 - Designing and Implementing an Integrated (Practicum) (3 credits)
- ☐ LAE 4211 - Methods and Resources for Literacy Development in Young Children (3 credits)
- ☐ TSL 3080 - ESOL in ECE I (3 credits)
- ☐ TSL 4310 - ESOL in ECE II (3 credits)

## 14. STUDENT TEACHING/INTERNSHIP (12.00 credits)

- ☐ EEC 4936 - Student Teaching Seminar I: ECE (1 credits)
- ☐ EEC 4936C - Student Teaching Seminar II: ECE (1 credits)
- ☐ EEC 4940 - Internship in Early Childhood Education I (5 credit)
- ☐ EEC 4940C - Internship in Early Childhood Education II (5 credits)

## 15. ADDITIONAL DIVERSITY

- ☐ AMH 2020 - History of the US since 1877 (3 credits)
- ☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)
- ☐ ECO 2013 - Principles of Economics (Macro) (3 credits)
- ☐ EEC 1200 - Early Childhood Curriculum 1 (3 credits)
- ☐ EEC 2201 - Developing Curriculum for Infants and Toddlers (3 credits)
- ☐ EEX 2000 - Introduction to Special Education (3 credits)
- ☐ EUH 2032 - History of the Holocaust (3 credits)
- ☐ GEO 2420 - Introduction to Cultural Geography (3 credits)
- ☐ INR 2002 - International Relations (3 credits)
- ☐ ISS 1120 - The Social Environment (3 credits)
- ☐ ISS 1161 - The Individual in Society (3 credits)
- ☐ ISS 2270 - Multicultural Communications and Relations (3 credits)
- ☐ LIT 2120 - A Survey of World Literature 2 (3 credits)
- ☐ LIT 2480 - Issues in Literature & Culture (3 credits)
- ☐ SYG 2000 - Introduction to Sociology (3 credits)
- ☐ SYG 2230 - Multi-Ethnic America (3 credits)
- ☐ WOH 2003 - History of Genocide (3 credits)
- ☐ WOH 2012 - History of World Civilization to 1789 (3 credits)
- ☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

## Electrical and Computer Engineering Technology

Bachelor of Science | Code: S9100 | 134 credits

**C.I.P. (15.0303, Track 1)**

Electrical and Computer Engineering Technology (ECET) is part of almost everything society depends on. The ECET program at Miami Dade College is designed to provide students with a well-rounded hands-on education in electrical and computer systems. The program emphasizes the application of electrical/electronic and computer hardware and software principles and devices. Students study and learn valuable skills from various areas such as: computer hardware and interfacing, computer-based instrumentation and process control, digital communication and networking, and microcontroller systems and applications. Graduates from the ECET program have technical skills that allows them to work in a broad range of industries including transportation, green energy, networks and communications, aerospace, defense, and biomedical.

### **GENERAL EDUCATION REQUIREMENTS – 36 Credits Required**

Courses require a grade of "C" or higher to satisfy the general education requirement.

		<b>Credits</b>	<b>Requisites</b>
<b>1. Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1 (Gw)	3	Appropriate college placement
ENC 1102	English Composition 2 (Gw)	3	Pre-Req ENC 1101
<b>2. Oral Communications – 3 Credits Required</b>			
Select one course from the following offerings.			
ENC 2300	Advanced Composition & Communication (Gw)	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture (Gw)	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications (Gw)	3	
SPC 2608	Introduction to Public Speaking (Gw)	3	
<b>3. Humanities – 6 Credits Required</b>			
Select one course from Group A-State Core <u>AND</u> one course from Group B-MDC Core. At least one Gordon Rule Writing (Gw) course must be selected from Group A or Group B.			
<b>Group A: State Core (3 credits)</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
<b>---AND---</b>			
<b>Group B: MDC Core (3 credits)</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2 (Gw)	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	
ARH 2051	Art History 2 (Gw)	3	Pre-Req ARH 2050
ARH 2740	Cinema Appreciation (Gw)	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1 (Gw)	3	
HUM 1020	Introduction to Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2 (Gw)	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
LIT 2120	A Survey of World Literature 2 (Gw)	3	Pre-Req ENC 1101, 1102
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2 (Gw)	3	Pre-Req MUH 2111
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz & Popular Music in America (Gw)	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
PHI 2604	Critical Thinking/Ethics (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
<b>4. Behavioral and Social Science – 6 Credits Required</b>			
Choose two courses from Option A <u>OR</u> Option B. Within selected option, one course must be State Core and one MDC Core. Selecting <u>AMH2020 or POS2041</u> (♦) is recommended as these courses also fulfill the civic literacy graduation requirement.			

**Option A (6 credits):** Choose one course from State Core A-Behavioral Sciences and one course from MDC Core A-Social Sciences.

**State Core A: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**AND**

**MDC Core A: Social Sciences (3 credits)**

AMH 2010	History of the US to 1877	3
AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro)	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government (♦)	3
WOH 2012	History of World Civilization to 1789	3
WOH 2022	History of World Civilization from 1789	3

**--- OR ---**

**Option B (6 credits):** Choose one course from State Core B-Social Sciences and one course from MDC Core B-Behavioral Sciences.

**State Core B: Social Sciences (3 credits)**

AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro)	3
POS 2041	American Federal Government (♦)	3

**AND**

**State Core B: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**5. Natural Science – 6 Credits Required**

Laboratory courses do not fulfill this area's requirements.

PHY 2048	Physics with Calculus 1	4	Pre/Co-Req PHY1025 or PHY2053, <u>and</u> MAC 2311, MAC2312, MAC2313, MAD2104, MAS 2103, or MAP 2302/PHY2048L
PHY 2049	Physics with Calculus 2	4	Pre/Co-Req PHY2048 <u>and</u> MAC2312, MAC2313, MAD2104, MAS 2103, or MAP 2302/PHY2049L

**6. Mathematics – 6 Credits Required**

Courses below may be replaced by a higher-level mathematics with prefix MAC\* and MAP\*.

MAC 1105	College Algebra	3	Pre-Req MAT 1033
MAC 1140	Pre-Calculus Algebra	3	Pre-Req MAC 1105

**7. General Education Elective – 3 Credits Required**

PHY 2049L	Physics with Calculus 2 Lab	1	Pre/Co-Req PHY2048 <u>and</u> MAC2312, MAC2313, MAD2104, MAS 2103, or MAP 2302/PHY2049L
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Any other general education elective approved course. Please see advisor for assistance.

**Computer Competency Requirement**

Students must satisfy the requirement by successfully completing a course (CGS1060C or CTS0050, an equivalent college credit course), or passing MDC's Computer Skills Placement examination, or a test exemption.

**Foreign Language Competency Requirement**

Students must fulfill this requirement via three options:

**Option A:** Successful completion of two (2) credits (i.e., the equivalent of two years) in one (1) foreign language at the secondary (high school) level.

**---OR---**

**Option B:** Successful completion of the following courses at the elementary 2 level: ASL1150C, CHI1121, FRE1121, GER1121, ITA1121, JPN1121, POR1121, RUS1121, SPN1121. These credits count towards the Lower Division Requirements area.

**---OR---**

**Option C:** Students may demonstrate completion of the elementary 2 level through standardized examination that document the required foreign language competency.

**PROGRAM COMMON PREREQUISITES – 10 Credits Required**

MAC 2311	Calculus and Analytical Geometry 1	5	Pre-Req MAC1106 and MAC1114, or MAC1114 and MAC1140, or MAC1147
MAC 2312	Calculus and Analytical Geometry 2	4	Pre-Req MAC2311
PHY 2048	Physics with Calculus 1 (GER)	4	Pre/Co-Req PHY1025 or PHY2053, <u>and</u> MAC 2311, MAC2312, MAC2313, MAD2104, MAS 2103, or MAP 2302/PHY2048L
PHY 2048L	Physics with Calculus 1 Lab	1	Pre/Co-Req PHY1025 or PHY2053, <u>and</u> MAC 2311 MAC2312, MAC2313, MAD2104, MAS 2103, or MAP 2302/PHY2048

(GER) General Education Requirement

**LOWER DIVISION REQUIREMENTS – 53 Credits Required**

CET 1110C	Digital Circuits	4	Pre-Req EET1015C and MAC1105. Pre/Co-Req: COP2270
CET 2113C	Advanced Digital Circuits	4	Pre-Req CET1110C and COP2270
CET 2123C	Microprocessors	4	Pre-Req CET1110C and COP2270
COP 2270	C for Engineers	4	Pre/Co-Req MAC1105
EET 1015C	Direct Current Circuits	4	Pre/Co-Req MAC1105
EET 1025C	Alternating Current Circuits	4	Pre-Req EET1015C; Pre/Co-Req MAC1114 or MAC1147
EET 1141C	Electronics 1	4	Pre-Req EET1025C; MAC1114 or MAC1147
EET 2101C	Electronics 2	4	Pre-Req EET1041C
EET 2323C	Analog Communications	4	Pre-Req EET1141C
EET 2351C	Digital and Data Communications	4	Pre-Req CET2123C
ETI 2670	Engineering Economic Analysis	3	Pre-Req MAC1105
ETS 2673C	Programmable Logic Controls	4	Pre-Req CET1110C
MAC1114	Trigonometry	3	Pre-Req MAC1105
MAP 2302	Introduction to Differential Equations	3	Pre-Req MAC2312

**UPPER DIVISION REQUIREMENTS – 29 Credits Required**

CET 3126C	Computer Architecture	4	
EET 3716C	Advanced System Analysis	4	Pre-Req EET1025C and MAC2312
EET 4158C	Linear Integrated Circuits	4	Pre-Req EET3716C
EET 4165C	Senior Design 1	3	Department Approval Required
EET 4166C	Senior Design 2	2	Pre-Req EET4165C; Dept. Approval Req.
EET 4730C	Feedback Control Systems	4	Pre-Req EET3716C
EET 4732C	Signals and Systems	4	Pre-Req EET3716C
ETI 4480C	Applied Robotics	4	Pre-Req EET3126C

**PROGRAM ELECTIVES – 6 Credits Required**

**Group A:** Select one course from the following offerings.

ETP 3240	Power Systems	3	Pre-Req EET1025C
ETP 3320	Introduction to Renewable Energy Technology	3	Pre-Req EET2101C

**Group B:** Select one course from the following offerings.

CET 4190C	Applied Digital Signal Processing	4	Pre-Req COP2270, EET4732C, and EET2323C or EET2351C
CET 4663C	Electronic Security	3	Pre-Req CET2123C and COP2270

**TOTAL CREDITS**

General Education Requirements	36 credits
Program Common Prerequisites	10 credits
Lower Division Requirements	53 credits
Upper Division Requirements	29 credits
Upper Division Electives	6 credits
<b>Total</b>	<b>134 credits</b>

**IMPORTANT INFORMATION**

**Civic Literacy Competency:** First time in college students for the 2018-2019 school year and thereafter must demonstrate competency in civic literacy to earn a baccalaureate. This requirement may be satisfied by passing AMH2020 or POS2041 (listed under the Social Sciences area), or an equivalent AP or CLEP exam.

**Foreign Language:** Students admitted to the baccalaureate degree program without meeting the foreign language admission requirement of at least 2 courses (8-10 credit hours) of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation.

**Computer Competency:** By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass  
**Or**

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060C, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test.**

**Required Credit Hours and GPA:** The baccalaureate requires student to earn a minimum of 120 unduplicated credit hours with a minimum cumulative grade point average of 2.0. All general education and all upper division requirements must be passed with the grade of "C" or better.

**Pursuing or Have Earned an Associate's Degree:** Students entering with an AS or AAS degree may have more than 24 elective credits and may need additional General Education credits to meet the 36 General Education credits required for the baccalaureate degree. Students entering with an AA degree may need additional electives to provide appropriate background for the baccalaureate program.

**Graduation Requirements:** Students should review their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade College. Students are highly encouraged to meet with their academic advisor on a regular basis and review the College Catalog to learn about all graduation requirements. The final responsibility for meeting graduation requirements rests with the student.

**PROGRAM OF STUDY: EXCEPTIONAL STUDENT EDUCATION (K-12) (S4300)**  
**EFFECTIVE TERM: Fall 2020 (2207)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMMUNICATIONS** (6.00 credits)

Gordon rule assigned

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

**2. ORAL COMMUNICATION** (3.00 credits)

Gordon rule assigned

☐ ENC 2300 - Advanced Composition and Communication (3 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

☐ LIT 2480 - Issues in Literature & Culture (3 credits)

**3. HUMANITIES** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ARC 2701 - History of Architecture 1 (3 credits)

☐ ARH 1000 - Art Appreciation (3 credits)

☐ ARH 2050 - Art History 1 (3 credits)

☐ DAN 2100 - Dance Appreciation (3 credits)

☐ HUM 1020 - Humanities (3 credits)

☐ IND 1100 - History of Interiors 1 (3 credits)

☐ MUH 2111 - Survey of Music History 1 (3 credits)

☐ MUL 1010 - Music Appreciation (3 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ ARC 2702 - History of Architecture 2 (3 credits)

☐ ARH 2051 - Art History 2 (3 credits)

☐ ARH 2740 - Cinema Appreciation (3 credits)

☐ DAN 2130 - Dance History 1 (3 credits)

☐ IND 1130 - History of Interiors 2 (3 credits)

☐ LIT 2120 - A Survey of World Literature 2 (3 credits)

☐ MUH 2112 - Survey of Music History 2 (3 credits)

☐ MUL 2380 - Jazz and Popular Music in America (3 credits)

☐ PHI 2010 - Introduction to Philosophy (3 credits)

☐ THE 2000 - Theatre Appreciation (3 credits)

**4. SOCIAL SCIENCE** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)

☐ DEP 2000 - Human Growth and Development (3 credits)

☐ ISS 1161 - The Individual in Society (3 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

☐ PSY 2012 - Introduction to Psychology (3 credits)

☐ SYG 2000 - Introduction to Sociology (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ AMH 2010 - History of the US to 1877 (3 credits)

☐ AMH 2020 - History of the US since 1877 (3 credits)

☐ ECO 2013 - Principles of Economics (Macro) (3 credits)

☐ ISS 1120 - The Social Environment (3 credits)

☐ POS 2041 - American Federal Government (3 credits)

☐ WOH 2012 - History of World Civilization to 1789 (3 credits)

☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

**5. NATURAL SCIENCE** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ BOT 1010 - Botany (3 credits)

☐ BSC 1005 - General Education Biology (3 credits)

☐ BSC 1007

☐ BSC 1030 - Social Issues in Biology (3 credits)

☐ BSC 1050 - Biology & Environment (3 credits)

☐ BSC 2020 - Human Biology: Fundamentals of Anatomy/Physiology (3 credits)

☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)

☐ BSC 2250 - Natural History of South Florida (3 credits)

☐ HUN 1201 - Essentials of Human Nutrition (3 credits)

☐ OCB 1010 - Introduction to Marine Biology (3 credits)

- ☐ BSC 1084 - Functional Human Anatomy (3 credits)
- ☐ BSC 2010 - Principles of Biology (3 credits)

- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ ZOO 1010 - Zoology (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ AST 1002 - Descriptive Astronomy (3 credits)
- ☐ CHM\*
- ☐ ESC\*
- ☐ GLY\*
- ☐ MET\*

- ☐ OCE\*
- ☐ PHY\*
- ☐ PSC 1121 - General Education Physical Science (3 credits)
- ☐ PSC 1515 - Energy in the Natural Environment (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 6. MATHEMATICS (6.00 credits)

Gordon rule assigned

- ☐ MAC\*
- ☐ MAD 2104 - Discrete Mathematics (3 credits)
- ☐ MAP\*
- ☐ MAS\*

- ☐ MGF\*
- ☐ MTG 2204 - Geometry for Educators (3 credits)
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 7. GENERAL EDUCATION ELECTIVES (3.00 credits)

- ☐ EEX 2000 - Introduction to Special Education (3 credits)

## 8. COMPUTER COMPETENCY

Gordon rule assigned

Test type(s) needed:

- ☐ CGS 1060

## 9. EDUCATION COMMON PREREQUISITES (9.00 credits)

- ☐ EDF 1005 - Introduction to the Teaching Profession (3 credits)
- ☐ EDF 2085 - Introduction to Diversity (3 credits)

- ☐ EME 2040 - Introduction to Technology for Educators (3 credits)

## 10. ELECTIVES (15.00 credits)

- ☐ AST\*
- ☐ BOT\*
- ☐ BSC\*
- ☐ CHM\*
- ☐ GLY\*
- ☐ MET\*
- ☐ OCE\*
- ☐ PHY\*
- ☐ PSC\*
- ☐ ZOO\*
- ☐ HUN 1201 - Essentials of Human Nutrition (3 credits)
- ☐ PCB 2033 - Introduction to Ecology (3 credits)
- ☐ MAC\*
- ☐ MAD 2104 - Discrete Mathematics (3 credits)
- ☐ MAP\*
- ☐ MAS\*
- ☐ MGF\*
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)
- ☐ CHI2\*
- ☐ FRE2\*

- ☐ CGS 1110
- ☐ COP 2270 - "C" for Engineers (4 credits)
- ☐ CIS 1000 - Introduction to Data Processing (4 credits)
- ☐ COP 1332 - Introduction to Visual Basic Programming (4 credits)
- ☐ COP 1200
- ☐ COP 1210
- ☐ COP 1334 - Introduction to C++ Programming (4 credits)
- ☐ COP 2334
- ☐ DAN 2130 - Dance History 1 (3 credits)
- ☐ DEP 2000 - Human Growth and Development (3 credits)
- ☐ ECO 2013 - Principles of Economics (Macro) (3 credits)
- ☐ ENC 2300 - Advanced Composition and Communication (3 credits)
- ☐ GEO 2420 - Introduction to Cultural Geography (3 credits)
- ☐ HLP 1080 - Wellness (2 credits)
- ☐ HLP 1081 - Fitness & Wellness for Life (3 credits)
- ☐ HSC 1180
- ☐ HSC 2400 - Basic Emergency Care (3 credits)
- ☐ HUM 1020 - Humanities (3 credits)
- ☐ IND 1100 - History of Interiors 1 (3 credits)
- ☐ IND 1130 - History of Interiors 2 (3 credits)

- ☐ FRW2\*
- ☐ HBR2\*
- ☐ GER2\*
- ☐ ITA2\*
- ☐ JPN2\*
- ☐ POR2\*
- ☐ RUS2\*
- ☐ SPN2\*
- ☐ ASL 2160C - American Sign Language 3 (4 credits)
- ☐ ASL 2200C - American Sign Language 4 (4 credits)
- ☐ FRW 2930
- ☐ SPN 2440
- ☐ ACG 2021 - Financial Accounting (3 credits)
- ☐ AMH 2010 - History of the US to 1877 (3 credits)
- ☐ AMH 2020 - History of the US since 1877 (3 credits)
- ☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)
- ☐ ARC 2701 - History of Architecture 1 (3 credits)
- ☐ ARC 2702 - History of Architecture 2 (3 credits)
- ☐ ARH 1000 - Art Appreciation (3 credits)
- ☐ ARH 2050 - Art History 1 (3 credits)
- ☐ ARH 2051 - Art History 2 (3 credits)
- ☐ ARH 2740 - Cinema Appreciation (3 credits)
- ☐ CGS 1060

- ☐ INR 2002 - International Relations (3 credits)
- ☐ ISS 1120 - The Social Environment (3 credits)
- ☐ ISS 1161 - The Individual in Society (3 credits)
- ☐ ISS 2270 - Multicultural Communications and Relations (3 credits)
- ☐ LIT 2120 - A Survey of World Literature 2 (3 credits)
- ☐ LIT 2480 - Issues in Literature & Culture (3 credits)
- ☐ MUH 2111 - Survey of Music History 1 (3 credits)
- ☐ MUH 2112 - Survey of Music History 2 (3 credits)
- ☐ MUL 1010 - Music Appreciation (3 credits)
- ☐ MUL 2380 - Jazz and Popular Music in America (3 credits)
- ☐ PHI 2010 - Introduction to Philosophy (3 credits)
- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)
- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)
- ☐ POS 2041 - American Federal Government (3 credits)
- ☐ POS 2112 - State and Local Government in America (3 credits)
- ☐ PSY 2012 - Introduction to Psychology (3 credits)
- ☐ REL 2300 - Survey of World Religions (3 credits)
- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)
- ☐ SYG 2000 - Introduction to Sociology (3 credits)
- ☐ SYG 2230 - Multi-Ethnic America (3 credits)
- ☐ THE 2000 - Theatre Appreciation (3 credits)
- ☐ WOH 2012 - History of World Civilization to 1789 (3 credits)
- ☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

The following course(s) are not allowed for credit in this area.  
FRW 2930 SPN 2440

#### **11. PROFESSIONAL EDUCATION CORE (15.00 credits)**

- ☐ EDF 4430 - Measurement and Assessment in Education (3 credits)
- ☐ EDG 3321 - General Teaching Skills (3 credits)
- ☐ EDG 3443 - Classroom and Behavior Management (3 credits)

- ☐ EEX 3071 - Teaching Exceptional and Diverse Populations in Inclusive Settings (3 credits)
- ☐ RED 3013 - Foundations of Reading Instruction (3 credits)

#### **12. DISCIPLINE CONTENT (33.00 credits)**

- ☐ EDG 4376 - Integrated Language Arts and Social Sciences (3 credits)
- ☐ EEX 3120 - Language Development and Communication Disorders (3 credits)
- ☐ EEX 4221 - Assessment in Special Education (3 credits)
- ☐ EEX 4833 - Practicum in Special Education (3 credits)
- ☐ EEX 4932 - Advanced Topics in Exceptional Student Education (3 credits)
- ☐ MAE 4360 - Methods of Teaching Mathematics (3 credits)

- ☐ RED 3393 - Differentiated Instruction in Content Reading (3 credits)
- ☐ RED 4519 - Diagnosis and Instructional Intervention in Reading (3 credits)
- ☐ SCE 4362 - Methods of Teaching Science (3 credits)
- ☐ TSL 3243 - ESOL I: Second Language Acquisition, Communication, and Culture (3 credits)
- ☐ TSL 4311 - ESOL II: Teaching and Assessing ESOL Students (3 credits)

#### **13. STUDENT TEACHING/INTERNSHIP (12.00 credits)**

- ☐ EEX 4930 - Seminar in Special Education (3 credits)

- ☐ EEX 4940 - Internship in Special Education (9 credits)

\* End of Program Sheet \*





## Information Systems Technology – Cybersecurity Concentration

CIP (1101101034)

Bachelor of Science | Code: S9502 | 120 credits

Effective Term: Spring 2021 (2213)

### Program Description:

The Bachelor of Science (BS) in Information Systems Technology (IST) degree program prepares students with essential skills and knowledge to effectively support the design, planning and management of information infrastructures and information resources within diverse organizational settings. The Cybersecurity concentration focuses on vulnerabilities and threats faced by information systems. Students learn how to analyze risks of an organization's digital assets, as well as how to use tools and methods to mitigate cyber threats. Upon completion of the program, the student will have learned to collect and analyze evidence from Windows and Linux computer systems and to footprint, scan, and enumerate networks.

### GENERAL EDUCATION REQUIREMENTS – 36 Credits Required

Courses require a grade of "C" or higher to satisfy the general education requirement.

		Credits	Requisites
<b>1. Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1 (Gw)	3	Appropriate college placement
ENC 1102	English Composition 2 (Gw)	3	Pre-Req ENC 1101
<b>2. Oral Communications – 3 Credits Required</b>			
Select one course from the following offerings. These courses also fulfill program prerequisites.			
SPC 1017	Fundamentals of Speech Communications (Gw)	3	
SPC 2608	Introduction to Public Speaking (Gw)	3	
<b>3. Humanities – 6 Credits Required</b>			
Select one course from Group A-State Core <u>AND</u> one course from Group B-MDC Core. At least one Gordon Rule Writing (Gw) course must be selected from Group A or Group B.			
<b>Group A: State Core (3 credits)</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
---AND---			
<b>Group B: MDC Core (3 credits)</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2 (Gw)	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	
ARH 2051	Art History 2 (Gw)	3	Pre-Req ARH 2050
ARH 2740	Cinema Appreciation (Gw)	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1 (Gw)	3	
HUM 1020	Introduction to Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2 (Gw)	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
LIT 2120	A Survey of World Literature 2 (Gw)	3	Pre-Req ENC 1101, 1102
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2 (Gw)	3	Pre-Req MUH 2111
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz & Popular Music in America (Gw)	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
PHI 2604	Critical Thinking/Ethics (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
<b>4. Behavioral and Social Science – 6 Credits Required</b>			

Choose two courses from Option A OR Option B. Within selected option, one course must be State Core and one MDC Core. Selecting AMH2020 or POS2041 (♦) is recommended as these courses also fulfill the civic literacy graduation requirement.

**Option A (6 credits):** Choose one course from State Core A-Behavioral Sciences and one course from MDC Core A-Social Sciences.

**State Core A: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**AND**

**MDC Core A: Social Sciences (3 credits)**

AMH 2010	History of the US to 1877	3
AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government (♦)	3
WOH 2012	History of World Civilization to 1789	3
WOH 2022	History of World Civilization from 1789	3

--- OR ---

**Option B (6 credits):** Choose one course from State Core B-Social Sciences and one course from MDC Core B-Behavioral Sciences.

**State Core B: Social Sciences (3 credits)**

AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
POS 2041	American Federal Government (♦)	3

**AND**

**MDC Core B: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**5. Natural Science – 6 Credits Required**

Choose two courses from Option A OR Option B. Within selected option, one course must be State Core and one MDC Core. Laboratory courses do not fulfill this area's requirements.

**Option A (6 credits):** Choose one course from State Core A-Life Sciences and one course from MDC Core A-Physical Sciences

**State Core A: Life Sciences (3 credits)**

BSC 1005	General Education Biology	3
BSC 2010	Principles of Biology	3
BSC 2085	Human Anatomy and Physiology 1	3
EVR 1001	Introduction to Environmental Science	3

Pre/Co-Req CHM 1045/BSC 2010L  
Co-Req BSC2085L

**AND**

**MDC Core A: Physical Sciences (3 credits)**

AST 1002	Descriptive Astronomy	3
ESC 1000	General Education Earth Science	3
PSC 1121	General Education Physical Science	3
PSC 1515	Energy in the Natural Environment	3
Any course with prefix CHM*, GLY*, MET*, OCE*, PHY*		3

Pre-Req MAT 1033

--- OR ---

**Option B (6 credits):** Choose one course from State Core B-Physical Sciences and one course from MDC Core B-Life Sciences

**State Core B: Physical Sciences (3 credits)**

AST 1002	Descriptive Astronomy	3
CHM 1020	General Education Chemistry	3
CHM 1045	General Chemistry and Qualitative Analysis	3
ESC 1000	General Education Earth Science	3
PHY 1020	General Education Physics	3
PHY 2048	Physics with Calculus 1	4
PHY 2053	Physics (without Calculus) 1	3

Pre/Co-Req CHM1025 & MAC1105/CHM1045L

Pre/Co-Req HS physics, or PHY1025 or 2053, or dept. approval, and MAC2311/PHY2048L

Pre/Co-Req MAC1147, 1114, 1140/PHY2053L

**AND**

**MDC Core B: Life Sciences (3 credits)**

BOT 1010	Botany	3	Co-Req BOT 1010L
BSC 1005	General Education Biology	3	
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology	3	Pre/Co-Req CHM 1045/BSC 2010L
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	
BSC 2085	Human Anatomy and Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
EVR 1001	Introduction to Environmental Sciences	3	
HUN 1201	Essentials of Human Nutrition	3	
OCB 1010	Introduction to Marine Biology	3	
PCB 2033	Introduction to Ecology	3	Pre-Req PSC1515 or BSC2011
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**6. Mathematics – 6 Credits Required**

MAC 1105 may be replaced by a higher-level mathematics with prefix MAC\*, MAD\*, MAS\*, or MAP\*. These courses also fulfill program prerequisites.

MAC 1105	College Algebra	3	Pre-Req MAT 1033
STA 2023	Statistical Methods	3	Pre-Req MAT 1033 or MGF 1106

**7. General Education Elective – 3 Credits Required**

Choose one course from the following options. These courses also fulfill program prerequisites.

ECO 2013	Principles of Economics (Macro) (Gw)	3	
ECO 2023	Principles of Economics (Micro)	3	Pre-Req MAT 1033

**Computer Competency Requirement**

The following course fulfills MDC's computer competency requirement and a program prerequisite:

CGS 1060C	Introduction to Computer Technology & Applications	4	
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**Foreign Language Competency Requirement**

Students must fulfill this requirement via three options:

**Option A:** Successful completion of two (2) credits (i.e., the equivalent of two years) in one (1) foreign language at the secondary (high school) level.

---OR---

**Option B:** Successful completion of the following courses at the elementary 2 level: ASL1150C, CHI1121, FRE1121, GER1121, ITA1121, JPN1121, POR1121, RUS1121, SPN1121. These credits count towards the Lower Division Requirements area.

---OR---

**Option C:** Students may demonstrate completion of the elementary 2 level through standardized examination that document the required foreign language competency.

**LOWER DIVISION REQUIREMENTS – 24 Credits Required**

**Group A: 12 credits**

CGS 1060C	Introduction to Computer Technology & Applications	4	
CGS 1540C	Database Concepts and Design	4	
COP 1334	Introduction to C++ Programming	4	Pre/Co CGS 1060C

**Group B: 4 credits**

Select one course from the following offerings:

CTS 1134	Networking Technologies	4	
CTS 1650	CCNA: Cisco Fundamentals	4	

**Group C: 8 credits**

Any transferrable type-1 or type-2 courses. Please see academic advisor for support with course selection, including program prerequisites.

**UPPER DIVISION REQUIREMENTS – 36 Credits Required**

**Professional Core – 12 Credits Required**

CGS 3763	Operating System Principles	4	Pre COP 1334
CIS 3360	Principles of Information Security	4	Pre CTS 1134 or CTS 1650
CIS 3510	IT Project Management	4	
<b>Discipline Content Core – 24 Credits Required</b>			
CIS 3361	Information Security Management	4	Pre CIS 3360
CIS 4204	Ethical Hacking I	4	Pre CIS 3360
CIS 4359	Ethical Hacking II	4	Pre CIS 4204
CIS 4366	Computer Forensics	4	Pre CIS 3360
CIS 4891	Cyber Security Capstone	4	Department Permission Required
CNT 3409	Network Security	4	Pre CIS 3360

#### **PROGRAM ELECTIVES – 24 Credits Required**

##### ***Group A: 8 credits***

CAP \*, CEN \*, CET \*, CGS \*, CIS \*, CNT \*, COP \*, CTS \*

##### ***Group B: 16 credits***

CAP 2\*, CAP 3\*, CAP 4\*, CEN 2\*, CEN 3\*, CEN 4\*, CGS 2\*, CGS 3\*, CGS 4\*, CIS 2\*, CIS 3\*, CIS 4\*, CNT 2\*, CNT 3\*, CNT 4\*, COP 2\*, COP 3\*, COP 4\*, CTS 2\*, CTS 3\*, CTS 4\*, CET 2\*, CET 3\*, CET 4\*, MAC 2333

#### **TOTAL CREDITS**

General Education Requirements _____	36 credits
Lower Division/Common Prerequisite Requirements _____	24 credits
Upper Division Requirements _____	36 credits
Electives _____	24 credits
<b>Total _____</b>	<b>120 credits</b>

#### **IMPORTANT INFORMATION**

**Civic Literacy Competency:** First time in college students for the 2018-2019 school year and thereafter must demonstrate competency in civic literacy to earn a baccalaureate. This requirement may be satisfied by passing AMH2020 or POS2041 (listed under the Social Sciences area), or an equivalent AP or CLEP exam.

**Foreign Language:** Students admitted to the baccalaureate degree program without meeting the foreign language admission requirement of at least 2 courses (8-10 credit hours) of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation.

**Computer Competency:** By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass  
**Or**

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060C, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test.**

**Required Credit Hours and GPA:** The baccalaureate requires student to earn a minimum of 120 unduplicated credit hours with a minimum cumulative grade point average of 2.0. All general education and all upper division requirements must be passed with the grade of "C" or better.

**Pursuing or Have Earned an Associate's Degree:** Students entering with an AS or AAS degree may have more than 24 elective credits and may need additional General Education credits to meet the 36 General Education credits required for the baccalaureate degree. Students entering with an AA degree may need additional electives to provide appropriate background for the baccalaureate program.

**Graduation Requirements:** Students should review their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade College. Students are highly encouraged to meet with their academic advisor on a regular basis and review the College Catalog to learn about all graduation requirements. The final responsibility for meeting graduation requirements rests with the student.

## Information Systems Technology – Networking Concentration

Bachelor of Science | Code: S9500 | 120 credits

CIP (1101101034)

### Program Description:

The Bachelor of Science (BS) in Information Systems Technology (IST) degree program prepares students with essential skills and knowledge to effectively support the design, planning and management of information infrastructures and information resources within diverse organizational settings. The Networking Concentration focuses on how to plan, design, implement and maintain network infrastructures to keep organizations running smoothly. Students learn how to select technologies that best suit the client's needs. Students also acquire the technical skills needed to install, maintain, and extend multi-user computer systems and how to develop administrative policies and procedures.

### GENERAL EDUCATION REQUIREMENTS – 36 Credits Required

Courses require a grade of "C" or higher to satisfy the general education requirement.

		Credits	Requisites
<b>1. Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1 (Gw)	3	Appropriate college placement
ENC 1102	English Composition 2 (Gw)	3	Pre-Req ENC 1101
<b>2. Oral Communications – 3 Credits Required</b>			
Select one course from the following offerings. These courses also fulfill program requirements.			
SPC 1017	Fundamentals of Speech Communications (Gw)	3	
SPC 2608	Introduction to Public Speaking (Gw)	3	
<b>3. Humanities – 6 Credits Required</b>			
Select one course from Group A-State Core <u>AND</u> one course from Group B-MDC Core. At least one Gordon Rule Writing (Gw) course must be selected from Group A or Group B.			
<b>Group A: State Core (3 credits)</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
---AND---			
<b>Group B: MDC Core (3 credits)</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2 (Gw)	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	
ARH 2051	Art History 2 (Gw)	3	Pre-Req ARH 2050
ARH 2740	Cinema Appreciation (Gw)	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1 (Gw)	3	
HUM 1020	Introduction to Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2 (Gw)	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
LIT 2120	A Survey of World Literature 2 (Gw)	3	Pre-Req ENC 1101, 1102
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2 (Gw)	3	Pre-Req MUH 2111
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz & Popular Music in America (Gw)	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
PHI 2604	Critical Thinking/Ethics (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
<b>4. Behavioral and Social Science – 6 Credits Required</b>			

Choose two courses from Option A OR Option B. Within selected option, one course must be State Core and one MDC Core. Selecting AMH2020 or POS2041 (♦) is recommended as these courses also fulfill the civic literacy graduation requirement.

**Option A (6 credits):** Choose one course from State Core A-Behavioral Sciences and one course from MDC Core A-Social Sciences.

**State Core A: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**AND**

**MDC Core A: Social Sciences (3 credits)**

AMH 2010	History of the US to 1877	3
AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government (♦)	3
WOH 2012	History of World Civilization to 1789	3
WOH 2022	History of World Civilization from 1789	3

**--- OR ---**

**Option B (6 credits):** Choose one course from State Core B-Social Sciences and one course from MDC Core B-Behavioral Sciences.

**State Core B: Social Sciences (3 credits)**

AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
POS 2041	American Federal Government (♦)	3

**AND**

**MDC Core B: Behavioral Sciences (3 credits)**

ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

**5. Natural Science – 6 Credits Required**

Choose two courses from Option A OR Option B. Within selected option, one course must be State Core and one MDC Core. Laboratory courses do not fulfill this area's requirements.

**Option A (6 credits):** Choose one course from State Core A-Life Sciences and one course from MDC Core A-Physical Sciences

**State Core A: Life Sciences (3 credits)**

BSC 1005	General Education Biology	3
BSC 2010	Principles of Biology	3
BSC 2085	Human Anatomy and Physiology 1	3
EVR 1001	Introduction to Environmental Science	3

Pre/Co-Req CHM 1045/BSC 2010L  
Co-Req BSC2085L

**AND**

**MDC Core A: Physical Sciences (3 credits)**

AST 1002	Descriptive Astronomy	3
ESC 1000	General Education Earth Science	3
PSC 1121	General Education Physical Science	3
PSC 1515	Energy in the Natural Environment	3
Any course with prefix CHM*, GLY*, MET*, OCE*, PHY*		3

Pre-Req MAT 1033

**--- OR ---**

**Option B (6 credits):** Choose one course from State Core B-Physical Sciences and one course from MDC Core B-Life Sciences

**State Core B: Physical Sciences (3 credits)**

AST 1002	Descriptive Astronomy	3
CHM 1020	General Education Chemistry	3
CHM 1045	General Chemistry and Qualitative Analysis	3
ESC 1000	General Education Earth Science	3
PHY 1020	General Education Physics	3
PHY 2048	Physics with Calculus 1	4
PHY 2053	Physics (without Calculus) 1	3

Pre/Co-Req CHM1025 & MAC1105/CHM1045L

Pre/Co-Req HS physics, or PHY1025 or 2053,  
or dept. approval, and MAC2311/PHY2048L  
Pre/Co-Req MAC1147, 1114, 1140/PHY2053L

**AND****MDC Core B: Life Sciences (3 credits)**

BOT 1010	Botany	3	Co-Req BOT 1010L
BSC 1005	General Education Biology	3	
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology	3	Pre/Co-Req CHM 1045/BSC 2010L
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	
BSC 2085	Human Anatomy and Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
EVR 1001	Introduction to Environmental Sciences	3	
HUN 1201	Essentials of Human Nutrition	3	
OCB 1010	Introduction to Marine Biology	3	
PCB 2033	Introduction to Ecology	3	Pre-Req PSC1515 or BSC2011
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

**6. Mathematics – 6 Credits Required**

MAC 1105 may be replaced by a higher-level mathematics with prefix MAC\*, MAD\*, MAS\*, or MAP\*. These courses also fulfill program prerequisites.

MAC 1105	College Algebra	3	Pre-Req MAT 1033
STA 2023	Statistical Methods	3	Pre-Req MAT 1033 or MGF 1106

**7. General Education Elective – 3 Credits Required**

Choose one course from the following options. These courses also fulfill program prerequisites.

ECO 2013	Principles of Economics (Macro) (Gw)	3	
ECO 2023	Principles of Economics (Micro)	3	Pre-Req MAT 1033

**Computer Competency Requirement**

The following course fulfills MDC's computer competency requirement and a program prerequisite:

CGS 1060C	Introduction to Computer Technology & Applications	4	
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**Foreign Language Competency Requirement**

Students must fulfill this requirement via three options:

**Option A:** Successful completion of two (2) credits (i.e., the equivalent of two years) in one (1) foreign language at the secondary (high school) level.

---OR---

**Option B:** Successful completion of the following courses at the elementary 2 level: ASL1150C, CHI1121, FRE1121, GER1121, ITA1121, JPN1121, POR1121, RUS1121, SPN1121. These credits count towards the Lower Division Requirements area.

---OR---

**Option C:** Students may demonstrate completion of the elementary 2 level through standardized examination that document the required foreign language competency.

**LOWER DIVISION REQUIREMENTS – 24 Credits Required****Group A: 12 credits**

CGS 1060C	Introduction to Computer Technology & Applications	4	
CGS 1540C	Database Concepts and Design	4	
COP 1334	Introduction to C++ Programming	4	Pre/Co CGS 1060C

**Group B: 4 credits**

CTS 1134	Networking Technologies	4	
CTS 1650	CCNA: Cisco Fundamentals	4	

**Group C: 8 credits**

Any transferrable type-1 or type-2 courses. Please see academic advisor for support with course selection, including program prerequisites.

**UPPER DIVISION REQUIREMENTS – 36 Credits Required****Professional Core – 12 Credits Required**

CGS 3763	Operating System Principles	4	Pre COP 1334
CIS 3360	Principles of Information Security	4	Pre CTS 1134 or CTS 1650

CIS 3510	IT Project Management	4
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### Discipline Content Core – 24 Credits Required

CIS 4347	Information Storage Management	4	Pre CGS 1540C
CNT 3409C	Network Security	4	Pre CIS 3360
CNT 3526C	Wireless and Mobile Networking	4	Pre CTS 1134 or CTS 1650
CNT 4603	System Administration and Maintenance	4	Pre CTS 1134 or CTS 1650
CNT 4702	Network Design and Planning	4	Pre CIS 3360
CTS 4955	Networking Capstone	4	Department Permission Required

### PROGRAM ELECTIVES – 24 Credits Required

#### Group A: 8 credits

CAP \*, CEN \*, CET \*, CGS \*, CIS \*, CNT \*, COP \*, CTS \*

#### Group B: 16 credits

CAP 2\*, CAP 3\*, CAP 4\*, CEN 2\*, CEN 3\*, CEN 4\*, CGS 2\*, CGS 3\*, CGS 4\*, CIS 2\*, CIS 3\*, CIS 4\*, CNT 2\*, CNT 3\*, CNT 4\*, COP 2\*, COP 3\*, COP 4\*, CTS 2\*, CTS 3\*, CTS 4\*, CET 2\*, CET 3\*, CET 4\*, MAC 2333

### TOTAL CREDITS

General Education Requirements	36 credits
Lower Division/Common Prerequisite Requirements	24 credits
Upper Division Requirements	36 credits
Electives	24 credits
<b>Total</b>	<b>120 credits</b>

### IMPORTANT INFORMATION

**Civic Literacy Competency:** First time in college students for the 2018-2019 school year and thereafter must demonstrate competency in civic literacy to earn a baccalaureate. This requirement may be satisfied by passing AMH2020 or POS2041 (listed under the Social Sciences area), or an equivalent AP or CLEP exam.

**Foreign Language:** Students admitted to the baccalaureate degree program without meeting the foreign language admission requirement of at least 2 courses (8-10 credit hours) of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation.

**Computer Competency:** By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass

**Or**

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060C, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test.**

**Required Credit Hours and GPA:** The baccalaureate requires student to earn a minimum of 120 unduplicated credit hours with a minimum cumulative grade point average of 2.0. All general education and all upper division requirements must be passed with the grade of "C" or better.

**Pursuing or Have Earned an Associate's Degree:** Students entering with an AS or AAS degree may have more than 24 elective credits and may need additional General Education credits to meet the 36 General Education credits required for the baccalaureate degree. Students entering with an AA degree may need additional electives to provide appropriate background for the baccalaureate program.

**Graduation Requirements:** Students should review their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade College. Students are highly encouraged to meet with their academic advisor on a regular basis and review the College Catalog to learn about all graduation requirements. The final responsibility for meeting graduation requirements rests with the student.



## Information Systems Technology – Software Engineering Concentration

Bachelor of Science | Code: S9501 | 120 credits

CIP (1101101034)

The Bachelor of Science (BS) in Information Systems Technology (IST) degree program prepares students with essential skills and knowledge to effectively support the design, planning and management of information infrastructures and information resources within diverse organizational settings. The Software Engineering concentration focuses on designing and creating software. Students learn how to specify software requirements from clients and how to design, implement and validate software solutions for real-world problems.

### GENERAL EDUCATION REQUIREMENTS – 36 Credits Required

Courses require a grade of "C" or higher to satisfy the general education requirement.

		Credits	Requisites
<b>1. Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1 (Gw)	3	Appropriate college placement
ENC 1102	English Composition 2 (Gw)	3	Pre-Req ENC 1101
<b>2. Oral Communications – 3 Credits Required</b>			
Select one course from the following offerings. These courses also fulfill program prerequisites.			
SPC 1017	Fundamentals of Speech Communications (Gw)	3	
SPC 2608	Introduction to Public Speaking (Gw)	3	
<b>3. Humanities – 6 Credits Required</b>			
Select one course from Group A-State Core <u>AND</u> one course from Group B-MDC Core. At least one Gordon Rule Writing (Gw) course must be selected from Group A or Group B.			
<b>Group A: State Core (3 credits)</b>			
ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
---AND---			
<b>Group B: MDC Core (3 credits)</b>			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2 (Gw)	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	
ARH 2051	Art History 2 (Gw)	3	Pre-Req ARH 2050
ARH 2740	Cinema Appreciation (Gw)	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1 (Gw)	3	
HUM 1020	Introduction to Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2 (Gw)	3	
LIT 2000	Introduction to Literature (Gw)	3	Pre-Req ENC 1101
LIT 2120	A Survey of World Literature 2 (Gw)	3	Pre-Req ENC 1101, 1102
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2 (Gw)	3	Pre-Req MUH 2111
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz & Popular Music in America (Gw)	3	
PHI 2010	Introduction to Philosophy (Gw)	3	Pre-Req ENC 1101
PHI 2604	Critical Thinking/Ethics (Gw)	3	Pre-Req ENC 1101
THE 2000	Theatre Appreciation (Gw)	3	
<b>4. Behavioral and Social Science – 6 Credits Required</b>			
Choose two courses from Option A <u>OR</u> Option B. Within selected option, one course must be State Core and one MDC Core. Selecting AMH2020 or POS2041 (♦) is recommended as these courses also fulfill the civic literacy graduation requirement.			
<b>Option A (6 credits):</b> Choose one course from State Core A-Behavioral Sciences and one course from MDC Core A-Social Sciences.			
<b>State Core A: Behavioral Sciences (3 credits)</b>			
ANT 2000	Introduction to Anthropology	3	

PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3
<b>AND</b>		
<b>MDC Core A: Social Sciences (3 credits)</b>		
AMH 2010	History of the US to 1877	3
AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
ISS 1120	The Social Environment	3
POS 2041	American Federal Government (♦)	3
WOH 2012	History of World Civilization to 1789	3
WOH 2022	History of World Civilization from 1789	3

--- OR ---

**Option B (6 credits):** Choose one course from State Core B-Social Sciences and one course from MDC Core B-Behavioral Sciences.

<b>State Core B: Social Sciences (3 credits)</b>		
AMH 2020	History of the US Since 1877 (♦)	3
ECO 2013	Principles of Economics (Macro) (Gw)	3
POS 2041	American Federal Government (♦)	3
<b>AND</b>		
<b>MDC Core B: Behavioral Sciences (3 credits)</b>		
ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ISS 1161	The Individual in Society	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3

#### 5. Natural Science – 6 Credits Required

Choose two courses from Option A OR Option B. Within selected option, one course must be State Core and one MDC Core. Laboratory courses do not fulfill this area's requirements.

**Option A (6 credits):** Choose one course from State Core A-Life Sciences and one course from MDC Core A-Physical Sciences

<b>State Core A: Life Sciences (3 credits)</b>		
BSC 1005	General Education Biology	3
BSC 2010	Principles of Biology	3
BSC 2085	Human Anatomy and Physiology 1	3
EVR 1001	Introduction to Environmental Science	3
<b>AND</b>		
<b>MDC Core A: Physical Sciences (3 credits)</b>		
AST 1002	Descriptive Astronomy	3
ESC 1000	General Education Earth Science	3
PSC 1121	General Education Physical Science	3
PSC 1515	Energy in the Natural Environment	3
Any course with prefix CHM*, GLY*, MET*, OCE*, PHY*		3

Pre/Co-Req CHM 1045/BSC 2010L  
Co-Req BSC2085L

Pre-Req MAT 1033

--- OR ---

**Option B (6 credits):** Choose one course from State Core B-Physical Sciences and one course from MDC Core B-Life Sciences

<b>State Core B: Physical Sciences (3 credits)</b>		
AST 1002	Descriptive Astronomy	3
CHM 1020	General Education Chemistry	3
CHM 1045	General Chemistry and Qualitative Analysis	3
ESC 1000	General Education Earth Science	3
PHY 1020	General Education Physics	3
PHY 2048	Physics with Calculus 1	4
PHY 2053	Physics (without Calculus) 1	3
<b>AND</b>		
<b>MDC Core B: Life Sciences (3 credits)</b>		
BOT 1010	Botany	3
BSC 1005	General Education Biology	3
BSC 1030	Social Issues in Biology	3
BSC 1050	Biology & Environment	3

Pre/Co-Req CHM1025 & MAC1105/CHM1045L

Pre/Co-Req HS physics, or PHY1025 or 2053,  
or dept. approval, and MAC2311/PHY2048L  
Pre/Co-Req MAC1147, 1114, 1140/PHY2053L

Co-Req BOT 1010L

BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology	3	Pre/Co-Req CHM 1045/BSC 2010L
BSC 2020	Human Biology:		
	Fundamental of Anatomy & Physiology	3	
BSC 2085	Human Anatomy and Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
EVR 1001	Introduction to Environmental Sciences	3	
HUN 1201	Essentials of Human Nutrition	3	
OCB 1010	Introduction to Marine Biology	3	
PCB 2033	Introduction to Ecology	3	Pre-Req PSC1515 or BSC2011
PCB 2340C	Field Biology	3	
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

## 6. Mathematics – 6 Credits Required

MAC 1105 may be replaced by a higher-level mathematics with prefix MAC\*, MAD\*, MAS\*, or MAP\*. These courses also fulfill program prerequisites.

MAC 1105	College Algebra	3	Pre-Req MAT 1033
STA 2023	Statistical Methods	3	Pre-Req MAT 1033 or MGF 1106

## 7. General Education Elective – 3 Credits Required

Choose one course from the following options. These courses also fulfill program prerequisites.

ECO 2013	Principles of Economics (Macro) (Gw)	3	
ECO 2023	Principles of Economics (Micro)	3	Pre-Req MAT 1033

## Computer Competency Requirement

The following course fulfills MDC's computer competency requirement and a program prerequisite:

CGS 1060C	Introduction to Computer Technology & Applications	4	
-----------	--	---	--

## Foreign Language Competency Requirement

Students must fulfill this requirement via three options:

**Option A:** Successful completion of two (2) credits (i.e., the equivalent of two years) in one (1) foreign language at the secondary (high school) level.

---OR---

**Option B:** Successful completion of the following courses at the elementary 2 level: ASL1150C, CHI1121, FRE1121, GER1121, ITA1121, JPN1121, POR1121, RUS1121, SPN1121. These credits count towards the Lower Division Requirements area.

---OR---

**Option C:** Students may demonstrate completion of the elementary 2 level through standardized examination that document the required foreign language competency.

## LOWER DIVISION REQUIREMENTS – 24 Credits Required

### Group A: 16 credits

CGS 1060C	Introduction to Computer Technology & Applications	4	
CGS 1540C	Database Concepts and Design	4	
COP 1334	Introduction to C++ Programming	4	Pre/Co CGS 1060C
COP 2800	Java Programming	4	Pre-req COP 1334 or COP 2270

### Group B: 4 credits

Select one course from the following offerings:

CTS 1134	Networking Technologies	4	
CTS 1650	CCNA: Cisco Fundamentals	4	

### Group C: 4 credits

Select one course from the following offerings:

MAD 1100	Discrete Mathematics for Computer Science	3	Pre-req MAC 1105
MAD 2104	Discrete Mathematics	3	Pre-req MAC 1106, MAC1140, or MAC 1147

**AND**

Any transferrable type-1 or type-2 courses. Please see academic advisor for support with course selection, including program prerequisites.

## UPPER DIVISION REQUIREMENTS – 36 Credits Required

### Professional Core – 12 Credits Required

CGS 3763	Operating System Principles	4	Pre COP 1334
CIS 3360	Principles of Information Security	4	Pre CTS 1134 or CTS 1650
CIS 3510	IT Project Management	4	

**Discipline Content Core – 24 Credits Required**

CET 3126C	Computer Architecture	4	
CET 3383C	Software Engineering I	4	Pre COP 2800 or CET 2369C
CEN 4025C	Software Engineering II	4	Pre CET 3383C
CEN 4090C	Software Engineering Capstone	4	Department Permission Required
COP 3530	Data Structures	4	Pre COP 2800
COT 4400	Design and Analysis of Algorithms	4	Pre COP 2800 and Co COP 3530

**PROGRAM ELECTIVES – 24 Credits Required*****Group A: 8 credits***

CAP \*, CEN \*, CET \*, CGS \*, CIS \*, CNT \*, COP \*, CTS \*

***Group B: 16 credits***

CAP 2\*, CAP 3\*, CAP 4\*, CEN 2\*, CEN 3\*, CEN 4\*, CGS 2\*, CGS 3\*, CGS 4\*, CIS 2\*, CIS 3\*, CIS 4\*, CNT 2\*, CNT 3\*, CNT 4\*, COP 2\*, COP 3\*, COP 4\*, CTS 2\*, CTS 3\*, CTS 4\*, CET 2\*, CET 3\*, CET 4\*, MAC 2333

**TOTAL CREDITS**

General Education Requirements _____	36 credits
Lower Division/Common Prerequisite Requirements _____	24 credits
Upper Division Requirements _____	36 credits
Electives _____	24 credits
<b>Total _____</b>	<b>120 credits</b>

**IMPORTANT INFORMATION**

**Civic Literacy Competency:** First time in college students for the 2018-2019 school year and thereafter must demonstrate competency in civic literacy to earn a baccalaureate. This requirement may be satisfied by passing AMH2020 or POS2041 (listed under the Social Sciences area), or an equivalent AP or CLEP exam.

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***Or***

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060C, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test**.

**Required Credit Hours and GPA:** The baccalaureate requires student to earn a minimum of 120 unduplicated credit hours with a minimum cumulative grade point average of 2.0. All general education and all upper division requirements must be passed with the grade of "C" or better.

**Pursuing or Have Earned an Associate's Degree:** Students entering with an AS or AAS degree may have more than 24 elective credits and may need additional General Education credits to meet the 36 General Education credits required for the baccalaureate degree. Students entering with an AA degree may need additional electives to provide appropriate background for the baccalaureate program.

**Graduation Requirements:** Students should review their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade College. Students are highly encouraged to meet with their academic advisor on a regular basis and review the College Catalog to learn about all graduation requirements. The final responsibility for meeting graduation requirements rests with the student.

**PROGRAM OF STUDY: NURSING (RN TO BSN) (N5100)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (6.00 credits)

- |   |   |
|---|---|
| <input type="checkbox"/> ENC 1101 - English Composition 1 (3 credits) | <input type="checkbox"/> ENC 1102 - English Composition 2 (3 credits) |
|---|---|

### 2. ORAL COMMUNICATIONS (3.00 credits)

- |  |   |
|--|---|
| <input type="checkbox"/> ENC 2300 - Advanced Composition and Communication (3 credits) | <input type="checkbox"/> SPC 1017 - Fundamentals of Speech Communication (3 credit) |
| <input type="checkbox"/> LIT 2480 - Issues in Literature & Culture (3 credits)         |   |

### 3. HUMANITIES (6.00 credits)

Must take 3.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> ARC 2701 - History of Architecture 1 (3 credits) | <input type="checkbox"/> IND 1100 - History of Interiors 1 (3 credits)    |
| <input type="checkbox"/> ARH 1000 - Art Appreciation (3 credits)          | <input type="checkbox"/> MUH 2111 - Survey of Music History 1 (3 credits) |
| <input type="checkbox"/> ARH 2050 - Art History 1 (3 credits)             | <input type="checkbox"/> MUL 1010 - Music Appreciation (3 credits)        |
| <input type="checkbox"/> DAN 2100 - Dance Appreciation (3 credits)        | <input type="checkbox"/> PHI 2604 - Critical Thinking/Ethics (3 credits)  |
| <input type="checkbox"/> HUM 1020 - Humanities (3 credits)                |   |

- - And - -

Must take 3.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> ARC 2702 - History of Architecture 2 (3 credits) | <input type="checkbox"/> LIT 2120 - A Survey of World Literature 2 (3 credits)    |
| <input type="checkbox"/> ARH 2051 - Art History 2 (3 credits)             | <input type="checkbox"/> MUH 2112 - Survey of Music History 2 (3 credits)         |
| <input type="checkbox"/> ARH 2740 - Cinema Appreciation (3 credits)       | <input type="checkbox"/> MUL 2380 - Jazz and Popular Music in America (3 credits) |
| <input type="checkbox"/> DAN 2130 - Dance History 1 (3 credits)           | <input type="checkbox"/> PHI 2010 - Introduction to Philosophy (3 credits)        |
| <input type="checkbox"/> IND 1130 - History of Interiors 2 (3 credits)    | <input type="checkbox"/> THE 2000 - Theatre Appreciation (3 credits)              |

### 4. BEHAVIORAL/SOCIAL SCIENCES (6.00 credits)

Must take 3.0 credits from the following group.

- |  |
|--|
| <input type="checkbox"/> PSY 2012 - Introduction to Psychology (3 credits) |
|--|

- - And - -

Must take 3.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> AMH 2010 - History of the US to 1877 (3 credits)       | <input type="checkbox"/> POS 2041 - American Federal Government (3 credits)             |
| <input type="checkbox"/> AMH 2020 - History of the US since 1877 (3 credits)    | <input type="checkbox"/> WOH 2012 - History of World Civilization to 1789 (3 credits)   |
| <input type="checkbox"/> ECO 2013 - Principles of Economics (Macro) (3 credits) | <input type="checkbox"/> WOH 2022 - History of World Civilization from 1789 (3 credits) |
| <input type="checkbox"/> ISS 1120 - The Social Environment (3 credits)          |   |

### 5. NATURAL SCIENCE (6.00 credits)

Must take 3.0 credits from the following group.

- |   |
|---|
| <input type="checkbox"/> HUN 1201 - Essentials of Human Nutrition (3 credits) |
|---|

The following course(s) are not allowed for credit in this area.

All Labs

- - And - -

Must take 3.0 credits from the following group.

- |   |
|---|
| <input type="checkbox"/> CHM 1033 - Chemistry for Health Sciences (3 credits) |
|---|

The following course(s) are not allowed for credit in this area.

All Labs

### 6. MATHEMATICS (6.00 credits)

Must take 3.0 credits from the following group.

- |  |   |
|--|---|
| <input type="checkbox"/> MAC*  | <input type="checkbox"/> MGF*   |
| <input type="checkbox"/> MAD 2104 - Discrete Mathematics (3 credits) | <input type="checkbox"/> MTG 2204 - Geometry for Educators (3 credits)    |
| <input type="checkbox"/> MAP*  | <input type="checkbox"/> QMB 2100 - Basic Business Statistics (3 credits) |
| <input type="checkbox"/> MAS*  |   |

The following course(s) are not allowed for credit in this area.

All Labs

- - And - - -

Must take 3.0 credits from the following group.

- ☐ STA 2023 - Statistical Methods (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## 7. GENERAL EDUCATION ELECTIVE (3.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> AST*  | <input type="checkbox"/> DAN 2130 - Dance History 1 (3 credits)                            |
| <input type="checkbox"/> BOT*  | <input type="checkbox"/> DEP 2000 - Human Growth and Development (3 credits)               |
| <input type="checkbox"/> BSC*  | <input type="checkbox"/> ECO 2013 - Principles of Economics (Macro) (3 credits)            |
| <input type="checkbox"/> CHM*  | <input type="checkbox"/> EDF 1005 - Introduction to the Teaching Profession (3 credits)    |
| <input type="checkbox"/> GLY*  | <input type="checkbox"/> EDF 2085 - Introduction to Diversity (3 credits)                  |
| <input type="checkbox"/> MET*  | <input type="checkbox"/> EEX 2000 - Introduction to Special Education (3 credits)          |
| <input type="checkbox"/> OCE*  | <input type="checkbox"/> ENC 2300 - Advanced Composition and Communication (3 credits)     |
| <input type="checkbox"/> PHY*  |  |
| <input type="checkbox"/> PSC*  |  |
| <input type="checkbox"/> ZOO*  |  |
| <input type="checkbox"/> HUN 1201 - Essentials of Human Nutrition (3 credits)            | <input type="checkbox"/> GEO 2420 - Introduction to Cultural Geography (3 credits)         |
| <input type="checkbox"/> PCB 2033 - Introduction to Ecology (3 credits)                  | <input type="checkbox"/> HLP 1080 - Wellness (2 credits)                                   |
| <input type="checkbox"/> MAC*  | <input type="checkbox"/> HLP 1081 - Fitness & Wellness for Life (3 credits)                |
| <input type="checkbox"/> MAD 2104 - Discrete Mathematics (3 credits)                     | <input type="checkbox"/> HSC 2400 - Basic Emergency Care (3 credits)                       |
| <input type="checkbox"/> MAP*  | <input type="checkbox"/> HUM 1020 - Humanities (3 credits)                                 |
| <input type="checkbox"/> MAS*  | <input type="checkbox"/> IND 1100 - History of Interiors 1 (3 credits)                     |
| <input type="checkbox"/> MGF*  | <input type="checkbox"/> IND 1130 - History of Interiors 2 (3 credits)                     |
| <input type="checkbox"/> QMB 2100 - Basic Business Statistics (3 credits)                | <input type="checkbox"/> INR 2002 - International Relations (3 credits)                    |
| <input type="checkbox"/> STA 2023 - Statistical Methods (3 credits)                      | <input type="checkbox"/> ISS 1120 - The Social Environment (3 credits)                     |
| <input type="checkbox"/> CHI2*   | <input type="checkbox"/> ISS 1161 - The Individual in Society (3 credits)                  |
| <input type="checkbox"/> FRE2*   | <input type="checkbox"/> ISS 2270 - Multicultural Communications and Relations (3 credits) |
| <input type="checkbox"/> FRW2*   |  |
| <input type="checkbox"/> HBR2*   |  |
| <input type="checkbox"/> GER2*   |  |
| <input type="checkbox"/> ITA2*   |  |
| <input type="checkbox"/> JPN2*   |  |
| <input type="checkbox"/> POR2*   |  |
| <input type="checkbox"/> RUS2*   |  |
| <input type="checkbox"/> SPN2*   |  |
| <input type="checkbox"/> ASL 2160C - American Sign Language 3 (4 credits)                | <input type="checkbox"/> LIT 2120 - A Survey of World Literature 2 (3 credits)             |
| <input type="checkbox"/> ASL 2200C - American Sign Language 4 (4 credits)                | <input type="checkbox"/> LIT 2480 - Issues in Literature & Culture (3 credits)             |
| <input type="checkbox"/> ACG 2021 - Financial Accounting (3 credits)                     | <input type="checkbox"/> MUH 2111 - Survey of Music History 1 (3 credits)                  |
| <input type="checkbox"/> AMH 2010 - History of the US to 1877 (3 credits)                | <input type="checkbox"/> MUH 2112 - Survey of Music History 2 (3 credits)                  |
| <input type="checkbox"/> AMH 2020 - History of the US since 1877 (3 credits)             | <input type="checkbox"/> MUL 1010 - Music Appreciation (3 credits)                         |
| <input type="checkbox"/> ANT 2410 - Introduction to Cultural Anthropology (3 credits)    | <input type="checkbox"/> MUL 2380 - Jazz and Popular Music in America (3 credits)          |
| <input type="checkbox"/> ARC 2701 - History of Architecture 1 (3 credits)                | <input type="checkbox"/> PHI 2010 - Introduction to Philosophy (3 credits)                 |
| <input type="checkbox"/> ARC 2702 - History of Architecture 2 (3 credits)                | <input type="checkbox"/> PHI 2604 - Critical Thinking/Ethics (3 credits)                   |
| <input type="checkbox"/> ARH 1000 - Art Appreciation (3 credits)                         | <input type="checkbox"/> CLP 1006 - Psychology of Personal Effectiveness (3 credits)       |
| <input type="checkbox"/> ARH 2050 - Art History 1 (3 credits)                            | <input type="checkbox"/> POS 2041 - American Federal Government (3 credits)                |
| <input type="checkbox"/> ARH 2051 - Art History 2 (3 credits)                            | <input type="checkbox"/> POS 2112 - State and Local Government in America (3 credits)      |
| <input type="checkbox"/> ARH 2740 - Cinema Appreciation (3 credits)                      | <input type="checkbox"/> PSY 2012 - Introduction to Psychology (3 credits)                 |
| <input type="checkbox"/> CGS 1060  | <input type="checkbox"/> REL 2300 - Survey of World Religions (3 credits)                  |
| <input type="checkbox"/> COP 2270 - "C" for Engineers (4 credits)                        | <input type="checkbox"/> SPC 1017 - Fundamentals of Speech Communication (3 credit         |
| <input type="checkbox"/> CIS 1000 - Introduction to Data Processing (4 credits)          | <input type="checkbox"/> SYG 2000 - Introduction to Sociology (3 credits)                  |
| <input type="checkbox"/> COP 1332 - Introduction to Visual Basic Programming (4 credits) | <input type="checkbox"/> SYG 2230 - Multi-Ethnic America (3 credits)                       |
| <input type="checkbox"/> COP 1334 - Introduction to C++ Programming (4 credits)          | <input type="checkbox"/> THE 2000 - Theatre Appreciation (3 credits)                       |
|  | <input type="checkbox"/> WOH 2012 - History of World Civilization to 1789 (3 credits)      |
|  | <input type="checkbox"/> WOH 2022 - History of World Civilization from 1789 (3 credits)    |
|  | <input type="checkbox"/> BSC 2085 - Human Anatomy and Physiology 1 (3 credits)             |
|  | <input type="checkbox"/> BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits) |
|  | <input type="checkbox"/> BSC 2086 - Human Anatomy & Physiology 2 (3 credits)               |
|  | <input type="checkbox"/> BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits)   |
|  | <input type="checkbox"/> CHM 1033 - Chemistry for Health Sciences (3 credits)              |
|  | <input type="checkbox"/> CHM 1033L - Chemistry for Health Sciences lab (1 credits)         |

- ☐ MCB 2010 - Microbiology (3 credits)
- ☐ MCB 2010L - Microbiology Laboratory (2 credits)

The following course(s) are not allowed for credit in this area.

HUN1201 DEP2000 PSY2012 SYG2000 BSC2085 BSC2085L BSC2086  
BSC2086L CHM1033 CHM1033L MCB2010 MCB2010L

## 8. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

## 9. COMMON PRE-REQUISITES (19.00 credits)

Must take 1.0 credits from the following group.

- ☐ MCB 2010L - Microbiology Laboratory (2 credits)

- - And - -

Must take 18.0 credits from the following group.

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2085 - Human Anatomy and Physiology 1 (3 credits)             | <input type="checkbox"/> CHM 1033L - Chemistry for Health Sciences lab (1 credits) |
| <input type="checkbox"/> BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits) | <input type="checkbox"/> DEP 2000 - Human Growth and Development (3 credits)       |
| <input type="checkbox"/> BSC 2086 - Human Anatomy & Physiology 2 (3 credits)               | <input type="checkbox"/> MCB 2010 - Microbiology (3 credits)                       |
| <input type="checkbox"/> BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits)   | <input type="checkbox"/> SYG 2000 - Introduction to Sociology (3 credits)          |

## 10. NURSING CORE COURSES

- |   |   |
|---|---|
| <input type="checkbox"/> NUR 1025 - Fundamentals of Nursing (3 credits)                     | <input type="checkbox"/> NUR 2212L - Advanced Medical-Surgical Nursing Clinical (3 credits) |
| <input type="checkbox"/> NUR 1025C - Fundamentals of Nursing Skills Lab (2 credits)         | <input type="checkbox"/> NUR 2310 - Pediatric Nursing (2 credits)                           |
| <input type="checkbox"/> NUR 1025L - Fundamentals of Nursing Clinical Lab (2 credits)       | <input type="checkbox"/> NUR 2310L - Pediatric Nursing Clinical Lab (1 credits)             |
| <input type="checkbox"/> NUR 1060C - Adult Health Assessment (2 credits)                    | <input type="checkbox"/> NUR 2420 - Obstetrical Nursing (2 credits)                         |
| <input type="checkbox"/> NUR 1141 - Nursing Math & Pharmacology (2 credits)                 | <input type="checkbox"/> NUR 2420L - Obstetrical Nursing Clinical Lab (1 credits)           |
| <input type="checkbox"/> NUR 1142 - Introduction to Nursing Math & Pharmacology (1 credits) | <input type="checkbox"/> NUR 2520 - Psychiatric Nursing (2 credits)                         |
| <input type="checkbox"/> NUR 1211 - Medical-Surgical Nursing (4 credits)                    | <input type="checkbox"/> NUR 2520L - Psychiatric Nursing Clinical Lab (2 credits)           |
| <input type="checkbox"/> NUR 1211L - Medical Surgical Nursing Clinical Lab (4 credits)      | <input type="checkbox"/> NUR 2680L - Community Health Nursing Lab (1 credits)               |
| <input type="checkbox"/> NUR 1214C - Medical Surgical Nursing Skills Lab (1 credits)        | <input type="checkbox"/> NUR 2811C - Professional Nursing Leadership (4 credits)            |
| <input type="checkbox"/> NUR 2212 - Advanced Medical-Surgical Nursing (3 credits)           | <input type="checkbox"/> NUR 9995 - Nursing (10 credits)                                    |

## 11. VALIDATED NURSING CORE COURSES (30.00 credits)

- ☐ NUR 3997 - Validated Nursing Course (30 credits)

## 12. DISCIPLINE CONTENT (30.00 credits)

- |   |   |
|---|---|
| <input type="checkbox"/> NUR 3045 - Culture in Nursing Practice (3 credits)         | <input type="checkbox"/> NUR 4636 - Community Health Nursing (3 credits)            |
| <input type="checkbox"/> NUR 3069 - Advanced Health Assessment (3 credits)          | <input type="checkbox"/> NUR 4636L - Community Health Nursing Practicum (3 credits) |
| <input type="checkbox"/> NUR 3165 - Nursing Research (3 credits)                    | <input type="checkbox"/> NUR 4667 - Globalization of Nursing Practice (3 credits)   |
| <input type="checkbox"/> NUR 3805 - Transition to Professional Nursing (3 credits)  | <input type="checkbox"/> NUR 4827 - Leadership and Management Theory (3 credits)    |
| <input type="checkbox"/> NUR 3846 - Foundations of Professional Nursing (3 credits) | <input type="checkbox"/> NUR 4945C - Advanced Concepts Practicum (3 credits)        |

## 13. REQUIRED ELECTIVES (10.00 credits)

Must take 7.0 credits from the following group.

- |                                   |  |
|-----------------------------------|--|
| <input type="checkbox"/> BSC1*    | <input type="checkbox"/> ITA1*   |
| <input type="checkbox"/> BSC2*    | <input type="checkbox"/> ITA2*   |
| <input type="checkbox"/> CGS 1060 | <input type="checkbox"/> JPN1*   |
| <input type="checkbox"/> CHI1*    | <input type="checkbox"/> JPN2*   |
| <input type="checkbox"/> CHM1*    | <input type="checkbox"/> NUR 1002 - Transition to Professional Nursing (6 credits)             |
| <input type="checkbox"/> CHM2*    | <input type="checkbox"/> NUR 1002L - Transition to Professional Nursing Laboratory (4 credits) |
| <input type="checkbox"/> FRE1*    | <input type="checkbox"/> PHY1*   |
| <input type="checkbox"/> FRE2*    | <input type="checkbox"/> PHY2*   |
| <input type="checkbox"/> FRW2*    | <input type="checkbox"/> SPN1*   |
| <input type="checkbox"/> GER1*    |  |

- ☐ GER2\*
- ☐ HBR1\*

- ☐ SPN2\*
- ☐ MCB 2010L - Microbiology Laboratory (2 credits)

- - And - -

Must take 3.0 credits from the following group.

- |   |  |
|---|--|
| <input type="checkbox"/> BCH3*  | <input type="checkbox"/> BSC 2086 - Human Anatomy & Physiology 2 (3 credits)             |
| <input type="checkbox"/> BSC4*  | <input type="checkbox"/> BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits) |
| <input type="checkbox"/> CHM3*  | <input type="checkbox"/> MCB 2010 - Microbiology (3 credits)                             |
| <input type="checkbox"/> CHM4*  | <input type="checkbox"/> PSY 2012 - Introduction to Psychology (3 credits)               |
| <input type="checkbox"/> NUR 3178 - Complementary and Alternative Health Care (3 credits)         | <input type="checkbox"/> SYG 2000 - Introduction to Sociology (3 credits)                |
| <input type="checkbox"/> NUR 3826 - Ethical Issues in Health Care and the Environment (3 credits) | <input type="checkbox"/> HUN 1201 - Essentials of Human Nutrition (3 credits)            |
| <input type="checkbox"/> PHY3*  | <input type="checkbox"/> DEP 2000 - Human Growth and Development (3 credits)             |
| <input type="checkbox"/> PHY4*  | <input type="checkbox"/> STA 2023 - Statistical Methods (3 credits)                      |
| <input type="checkbox"/> CHM 1033 - Chemistry for Health Sciences (3 credits)                     | <input type="checkbox"/> NUR 3674 - Faith Based Community Nursing (3 credits)            |
| <input type="checkbox"/> CHM 1033L - Chemistry for Health Sciences lab (1 credits)                | <input type="checkbox"/> NUR 3289 - Foundations of Gerontology (3 credits)               |
| <input type="checkbox"/> BSC 2085 - Human Anatomy and Physiology 1 (3 credits)                    | <input type="checkbox"/> NSP 3685 - End-of-Life Nursing Care (3 credits)                 |
| <input type="checkbox"/> BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits)        | <input type="checkbox"/> NUR 3930 - Selected Studies (3 credits)                         |

The following course(s) are not allowed for credit in this area.

CHM1033 CHM1033L BSC2085 BSC2085L BSC2086 BSC2086L MCB2010  
PSY2012 SYG2000 HUN1201 DEP2000 STA2023

\* End of Program Sheet \*



**PROGRAM OF STUDY: SECONDARY MATHEMATICS EDUCATION (S4200)**  
**EFFECTIVE TERM: Fall 2020 (2207)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMMUNICATIONS** (6.00 credits)

Gordon rule assigned

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

**2. ORAL COMMUNICATION** (3.00 credits)

Gordon rule assigned

☐ ENC 2300 - Advanced Composition and Communication (3 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

☐ LIT 2480 - Issues in Literature & Culture (3 credits)

**3. HUMANITIES** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

☐ HUM 1020 - Humanities (3 credits)

☐ ARH 1000 - Art Appreciation (3 credits)

☐ MUL 1010 - Music Appreciation (3 credits)

☐ DAN 2100 - Dance Appreciation (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ PHI 2010 - Introduction to Philosophy (3 credits)

☐ MUL 2380 - Jazz and Popular Music in America (3 credits)

☐ ARH 2740 - Cinema Appreciation (3 credits)

☐ THE 2000 - Theatre Appreciation (3 credits)

☐ LIT 2120 - A Survey of World Literature 2 (3 credits)

**4. SOCIAL SCIENCE** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ DEP 2000 - Human Growth and Development (3 credits)

☐ ISS 1161 - The Individual in Society (3 credits)

☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)

☐ PSY 2012 - Introduction to Psychology (3 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

☐ SYG 2000 - Introduction to Sociology (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

☐ AMH 2010 - History of the US to 1877 (3 credits)

☐ POS 2041 - American Federal Government (3 credits)

☐ AMH 2020 - History of the US since 1877 (3 credits)

☐ WOH 2012 - History of World Civilization to 1789 (3 credits)

☐ ECO 2013 - Principles of Economics (Macro) (3 credits)

☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

☐ ISS 1120 - The Social Environment (3 credits)

credits)

**5. NATURAL SCIENCE** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ BOT\*

☐ PCB\*

☐ BSC\*

☐ ZOO\*

☐ OCB\*

The following course(s) are not allowed for credit in this area.

All Labs

- - - And - - -

Must take 3.0 credits from the following group.

☐ AST 1002 - Descriptive Astronomy (3 credits)

☐ OCE\*

- ☐ CHM\*
- ☐ ESC\*
- ☐ GLY\*
- ☐ MET\*

- ☐ PHY\*
- ☐ PSC 1121 - General Education Physical Science (3 credits)
- ☐ PSC 1515 - Energy in the Natural Environment (3 credits)

The following course(s) are not allowed for credit in this area.  
All Labs

#### 6. MATHEMATICS (6.00 credits)

Gordon rule assigned

- ☐ MAC 1147 - Pre-Calculus Algebra and Trigonometry (5 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

#### 7. GENERAL EDUCATION ELECTIVES (3.00 credits)

Gordon rule assigned

- ☐ EEX 2000 - Introduction to Special Education (3 credits)

#### 8. COMPUTER COMPETENCY

Gordon rule assigned

- ☐ CGS 1060

#### 9. EDUCATION COMMON PREREQUISITES (9.00 credits)

Gordon rule assigned

- ☐ EDF 1005 - Introduction to the Teaching Profession (3 credits)
- ☐ EDF 2085 - Introduction to Diversity (3 credits)
- ☐ EME 2040 - Introduction to Technology for Educators (3 credits)

#### 10. LOWER DIVISION REQUIREMENTS (15.00 credits)

Gordon rule assigned

- ☐ MAC 1147 - Pre-Calculus Algebra and Trigonometry (5 credits)
- ☐ MAC 2311 - Calculus and Analytical Geometry 1 (5 credits)
- ☐ MAC 2312 - Calculus and Analytical Geometry 2 (4 credits)
- ☐ MAC 2313 - Calculus and Analytic Geometry 3 (4 credits)

#### 11. PROFESSIONAL EDUCATION CORE (18.00 credits)

Gordon rule assigned

- ☐ EDF 4430 - Measurement and Assessment in Education (3 credits)
- ☐ EDG 3321 - General Teaching Skills (3 credits)
- ☐ EDG 3443 - Classroom and Behavior Management (3 credits)
- ☐ EEX 3071 - Teaching Exceptional and Diverse Populations in Inclusive Settings (3 credits)
- ☐ RED 3393 - Differentiated Instruction in Content Reading (3 credits)
- ☐ TSL 4324C - ESOL Strategies for Content Area Teachers (3 credits)

#### 12. DISCIPLINE CONTENT (30.00 credits)

Gordon rule assigned

- ☐ MAD 3107 - Discrete Structures (3 credits)
- ☐ MAE 3951 - Project-Based Learning in Mathematics Education (2 credits)
- ☐ MAE 4360 - Methods of Teaching Mathematics (3 credits)
- ☐ MAE 4940 - Advanced Topics in Mathematics Education Practicum (3 credits)
- ☐ MAP 2302 - Introduction to Differential Equations (3 credits)
- ☐ MAS 3105 - Linear Algebra (3 credits)
- ☐ MAS 3301 - Algebraic Structures (3 credits)
- ☐ MAS 4203 - Number Theory (3 credits)
- ☐ MHF 4404 - History of Mathematics (3 credits)
- ☐ MTG 3214 - Euclidean Geometry (4 credits)

#### 13. STUDENT TEACHING/INTERNSHIP (12.00 credits)

Gordon rule assigned

- ☐ MAE 4942 - Seminar in Mathematics Education (3 credits)
- ☐ MAE 4945 - Internship in Mathematics Education (9 credits)

\* End of Program Sheet \*

**PROGRAM OF STUDY: SECONDARY SCIENCE EDUCATION - BIOLOGY (S9210)**  
**EFFECTIVE TERM: Fall 2020 (2207)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMMUNICATIONS** (6.00 credits)

Gordon rule assigned

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

**2. ORAL COMMUNICATION** (3.00 credits)

Gordon rule assigned

☐ ENC 2300 - Advanced Composition and Communication (3 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

☐ LIT 2480 - Issues in Literature & Culture (3 credits)

**3. HUMANITIES** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ARC 2701 - History of Architecture 1 (3 credits)

☐ IND 1100 - History of Interiors 1 (3 credits)

☐ ARH 1000 - Art Appreciation (3 credits)

☐ MUH 2111 - Survey of Music History 1 (3 credits)

☐ ARH 2050 - Art History 1 (3 credits)

☐ MUL 1010 - Music Appreciation (3 credits)

☐ DAN 2100 - Dance Appreciation (3 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credit)

☐ HUM 1020 - Humanities (3 credits)

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- - - And - - -

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Must take 3.0 credits from the following group.

☐ ARC 2702 - History of Architecture 2 (3 credits)

☐ LIT 2120 - A Survey of World Literature 2 (3 credits)

☐ ARH 2051 - Art History 2 (3 credits)

☐ MUH 2112 - Survey of Music History 2 (3 credits)

☐ ARH 2740 - Cinema Appreciation (3 credits)

☐ MUL 2380 - Jazz and Popular Music in America (3 credits)

☐ DAN 2130 - Dance History 1 (3 credits)

☐ PHI 2010 - Introduction to Philosophy (3 credits)

☐ IND 1130 - History of Interiors 2 (3 credits)

☐ THE 2000 - Theatre Appreciation (3 credits)

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- - - And - - -

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**4. SOCIAL SCIENCE** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ ANT 2410 - Introduction to Cultural Anthropology (3 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

☐ DEP 2000 - Human Growth and Development (3 credits)

☐ PSY 2012 - Introduction to Psychology (3 credits)

☐ ISS 1161 - The Individual in Society (3 credits)

☐ SYG 2000 - Introduction to Sociology (3 credits)

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- - - And - - -

---

Must take 3.0 credits from the following group.

☐ AMH 2010 - History of the US to 1877 (3 credits)

☐ POS 2041 - American Federal Government (3 credits)

☐ AMH 2020 - History of the US since 1877 (3 credits)

☐ WOH 2012 - History of World Civilization to 1789 (3 credits)

☐ ECO 2013 - Principles of Economics (Macro) (3 credits)

☐ WOH 2022 - History of World Civilization from 1789 (3 credits)

☐ ISS 1120 - The Social Environment (3 credits)

credits)

**5. NATURAL SCIENCE** (6.00 credits)

Gordon rule assigned

Must take 3.0 credits from the following group.

☐ BSC 2010 - Principles of Biology (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

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- - - And - - -

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Must take 3.0 credits from the following group.

- ☐ CHM 1045 - General Chemistry and Qualitative Analysis (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## **6. MATHEMATICS** (6.00 credits)

Gordon rule assigned

- ☐ MAC\*
- ☐ MAD 2104 - Discrete Mathematics (3 credits)
- ☐ MAP\*
- ☐ MAS\*
- ☐ MGF\*
- ☐ MTG 2204 - Geometry for Educators (3 credits)
- ☐ QMB 2100 - Basic Business Statistics (3 credits)
- ☐ STA 2023 - Statistical Methods (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

## **7. GENERAL EDUCATION ELECTIVES** (3.00 credits)

- ☐ EDF 1005 - Introduction to the Teaching Profession (3 credits)

## **8. COMPUTER COMPETENCY**

Gordon rule assigned

Test type(s) needed:

- ☐ CGS 1060

## **9. EDUCATION COMMON PREREQUISITES** (9.00 credits)

- ☐ EDF 2085 - Introduction to Diversity (3 credits)
- ☐ EEX 2000 - Introduction to Special Education (3 credits)
- ☐ EME 2040 - Introduction to Technology for Educators (3 credits)

## **10. LOWER DIVISION REQUIREMENTS** (14.00 credits)

- ☐ BSC 2010L - Principles of Biology 1 Laboratory (2 credits)
- ☐ BSC 2011 - Principles of Biology 2 (3 credits)
- ☐ BSC 2011L - Principles of Biology Lab 2 (2 credits)
- ☐ CHM 1045L - General Chemistry and Qualitative Analysis Lab (2 credits)
- ☐ CHM 1046 - General Chemistry and Qualitative Analysis (3 credits)
- ☐ CHM 1046L - General Chemistry & Qualitative Analysis Lab (2 credits)

## **11. PROFESSIONAL EDUCATION CORE** (18.00 credits)

- ☐ EDF 4430 - Measurement and Assessment in Education (3 credits)
- ☐ EDG 3321 - General Teaching Skills (3 credits)
- ☐ EDG 3443 - Classroom and Behavior Management (3 credits)
- ☐ EEX 3071 - Teaching Exceptional and Diverse Populations in Inclusive Settings (3 credits)
- ☐ RED 3393 - Differentiated Instruction in Content Reading (3 credits)
- ☐ TSL 4324C - ESOL Strategies for Content Area Teachers (3 credits)

## **12. DISCIPLINE CONTENT** (30.00 credits)

- ☐ BCH 3023 - Introductory Biochemistry (3 credits)
- ☐ BCH 3023L - Introductory Biochemistry Laboratory (2 credits)
- ☐ BSC 2020 - Human Biology (3 credits)
- ☐ BSC 3930 - Biological Sciences Seminar (1 credit)
- ☐ CHM 2200 - Survey of Organic Chemistry (3 credits)
- ☐ CHM 2200L - Survey of Organic Chemistry Laboratory (1 credits)
- ☐ MCB 2010 - Microbiology (3 credits)
- ☐ MCB 2010L - Microbiology Laboratory (2 credits)
- ☐ PCB 3043 - Fundamentals of Ecology (3 credits)
- ☐ PCB 3060 - Principles of Genetics (3 credits)
- ☐ SCE 4362 - Methods of Teaching Science (3 credits)
- ☐ SCE 4363 - Advanced Topics in Science Education Practicum (3 credits)

## **13. STUDENT TEACHING/INTERNSHIP** (12.00 credits)

- ☐ SCE 4943 - Seminar in Science Education (3 credits)
- ☐ SCE 4945 - Internship in Science Education (9 credits)



## Cyber Defense

Certificate of Professional Preparation | Code: CPP04 | 24 Credits

**CIP (5554304030)**

**Effective Term: Fall 2022 (2227)**

Cyber Defense is a cybersecurity specialty for professionals who protect and defend an organization's information system from various threats. They use data collected from a variety of cyber defense tools (e.g., IDS alerts, firewalls, network traffic logs) to analyze cybersecurity events and mitigate potential cyberattacks and data breaches. The Certificate of Professional Preparation (CPP) in Cyber Defense is designed for current and pre-professionals interested in working in the field of cybersecurity operations. *Note: Program Admissions Requirements: Baccalaureate degree in any field of study from a regionally accredited institution.*

### **Program Course Requirements**

Course ID	Course Title	Credits	Requisites
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***Networking Foundation Core: 4 Credit Hours***

Select one course from the following offerings.

CTS 1134	Networking Technologies	4	
<b>Or</b>			
CTS 1650	CCNA 1: Cisco Fundamentals	4	

***Program Core: 20 Credit Hours***

CIS 3360	Principles of Information Security	4	Prerequisite: CTS 1134 or CTS 1650
CIS 3361	Information Security Management	4	Prerequisite: CIS 3360
CIS 4364	Intrusion Detection and Incident Response	4	Prerequisite: CIS 3360
CIS 4366	Computer Forensics	4	Prerequisite: CIS 3360
CIS 4388	Advanced Computer Forensics	4	Prerequisite: CIS 4366



## **Instructional Design and Technology**

*Certificate of Professional Preparation (CPP) | Code: CPP03 | 15 credits*

**CIP (1101303011)**

***Effective Term: Spring 2020 (2203)***

This program is designed to provide baccalaureate-prepared students with the knowledge and skills necessary to work as instructional designers and technologists. Instructional designers and technologists may plan and conduct training for teachers related to teaching methods or the use of technology. Instructional designers and technologists oversee school curriculums and teaching standards. They develop instructional material, coordinate its implementation with teachers and principals, and assess its effectiveness.

<b>Course</b>	<b>Course Title</b>	<b>Credits</b>	<b>Pre-/Co-Requisites</b>
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### **MAJOR CORE REQUIREMENTS – 15 Credits Required**

EME 4610	Introduction to Instructional Design	3	
EME 4671	Instructional Design Analysis	3	Pre/Co-Req.: EME 4610
EME 4683	Instructional Design Application	3	Pre/Co-Req.: EME 4671
EME 4611	Instructional Design Development 1	3	Pre/Co-Req.: EME 4683
EME 4612	Instructional Design Development II	3	Pre/Co-Req.: EME 4611



## Networking

Certificate of Professional Preparation | Code: CPP05 | 28 Credits

**CIP (5551110010)**

**Effective Term: Fall 2022 (2227)**

Modern computer networks are increasingly pervasive and complex. They help improve the speed and efficiency of daily business operations, allowing for easy information discovery, storage, sharing, and protection. As technology evolves, it is indispensable for organizations to maintain the efficiency, speed and security of computer networks, thus facilitating seamless collaboration among people and applications. The Certificate of Professional Preparation (CPP) in Networking is designed for current and pre-professionals interested in working in the field of networking. They will learn how to plan, design, implement and maintain network infrastructures. *Note: Program Admissions Requirements: Baccalaureate degree in any field of study from a regionally accredited institution.*

### Program Course Requirements

Course ID	Course Title	Credits	Requisites
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**Foundation Core:** 4 Credit Hours

*Select one course from the following offerings.*

CTS 1134	Networking Technologies	4	
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**Or**

CTS 1650	CCNA 1: Cisco Fundamentals	4	
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**Program Core:** 24 Credit Hours

CIS 3360	Principles of Information Security	4	Prerequisite: CTS 1134 or CTS 1650
CIS 4347	Information Storage Management	4	Prerequisite: CTS 1134 or CTS 1650
CNT 3526	Wireless and Mobile Networking	4	Prerequisite: CTS 1134 or CTS 1650
CNT 3409	Network Security	4	Prerequisite: CIS 3360
CNT 4603	System Administration and Maintenance	4	Prerequisite: CTS 1134 or CTS 1650
CNT 4702	Network Design and Planning	4	Prerequisite: CIS 3360



## **Reading Endorsement**

*Certificate of Professional Preparation | Code: CPP02 | 15 credits*

**CIP (1101313151)**

***Effective Term: Spring 2020 (2203)***

### **Program Description:**

The Reading Endorsement is a Certificate of Professional Preparation that adds licensure to professionally certified teachers so that they can teach reading. This program meets the specifications in State Board Rule 6A-4.0292 for the Reading Endorsement.

### **MAJOR COURSE REQUIREMENTS (15.00 Credits)**

RED 4033	Teaching Foundations of Reading Instruction	3 credits
RED 4342	Applications of Research-Based Instructional Practice	3 credits
RED 4541	Foundations of Assessment	3 credits
RED 4654	Foundations and Applications of Differentiated Instruction	3 credits
RED 4854	Reading Practicum	3 credits





## Software Engineering

Certificate of Professional Preparation | Code: CPP06 | 28 Credits

**CIP (5551102010)**

**Effective Term: Fall 2022 (2227)**

Software engineers contribute to the development and maintenance of computer systems software and applications software. Computer systems software consists of programs that include computing utilities and operating systems. Applications software includes a variety of user-focused programs from web-browsers to multimedia applications. The *Certificate of Professional Preparation* in Software Engineering will provide students with the knowledge of software development, computer architecture, algorithm design, and data structures to apply software engineering principles to software creation. By applying these engineering principles to every stage of the development process, students learn how to specify software requirements from clients and how to design, implement and validate software solutions. *Note: Program Admissions Requirements: Baccalaureate degree in any field of study from a regionally accredited institution.*

### **Program Course Requirements**

Course ID	Course Title	Credits	Requisites
<b><i>Programming Foundation Core: 8 Credit Hours</i></b>			
COP 1334	Introduction to C++ Programming	4	
COP 2800	Java Programming	4	Prerequisite: COP1334
<b><i>Program Core: 20 Credit Hours</i></b>			
CET 3126C	Computer Architecture	4	
CET 3383C	Software Engineering I	4	Prerequisite: COP 2800
CEN 4025C	Software Engineering II	4	Prerequisite: CET 3383C
COP 3530	Data Structures	4	Prerequisite: COP 2800
COT 4400	Design and Analysis of Algorithms	4	Prerequisite: COP 2800 and Pre/Corequisite: COP 3530



## **Vulnerability Assessment**

Certificate of Professional Preparation | Code: CPP07 | 24 Credits

**CIP (5551110030)**

**Effective Term: Fall 2022 (2227)**

Vulnerability Assessment is a cybersecurity specialty for professionals who protect and defend an organization's information system from various threats. They perform assessments of systems and networks against known vulnerabilities and recommend appropriate mitigation countermeasures against potential cyberattacks and data breaches. The Certificate of Professional Preparation (CPP) in Vulnerability Assessment is designed for current and pre-professionals interested in working in the field of cybersecurity operations. *Note: Program Admissions Requirements: Baccalaureate degree in any field of study from a regionally accredited institution.*

### **Program Course Requirements**

<b>Course ID</b>	<b>Course Title</b>	<b>Credits</b>	<b>Requisites</b>
<b>Networking Foundation Core:</b> 4 Credit Hours			
<i>Select one course from the following offerings.</i>			
CTS 1134	Networking Technologies	4	
<b>Or</b>			
CTS 1650	CCNA 1: Cisco Fundamentals	4	
<b>Program Core:</b> 20 Credit Hours			
CIS 3215	Ethics in Cybersecurity	4	
CIS 3360	Principles of Information Security	4	Prerequisite: CTS 1134 or CTS 1650
CIS 4204	Ethical Hacking I	4	Prerequisite: CIS 3360
CIS 4378	Ethical Hacking II	4	Prerequisite: CIS 4204
CIS 4364	Intrusion Detection and Incident Response	4	Prerequisite: CIS 3360

## ASSOCIATE IN ARTS DEGREE

### **COMMUNICATIONS 6 Units\*\***

**State Core: Group A: ENC 1101** - English Composition 1 (Gw)  
**MDC Core: Group B: ENC 1102** - English Composition 2 (Gw)

### **MATHEMATICS 6 Units\*\***

Select one State Core course and one MDC Core course. Lab units are not allowed in this area.

**State Core: Group A Courses: 3 units**

**MAC 1105** - College Algebra (Gc)  
**MAC 2311** - Calculus and Analytical Geometry 1 (Gc)  
**MGF 1106** - Mathematics for Liberal Arts 1 (Gc)  
**MGF 1107** - Mathematics for Liberal Arts 2 (Gc)  
**STA 2023** - Statistical Methods (Gc)

**MDC Core: Group B Courses: 3 units**

<b>MAC*</b> (Gc)	<b>MAS*</b> (Gc)	<b>STA 2023</b> (Gc)
<b>MAD*</b> (Gc)	<b>MGF*</b> (Gc)	<b>MTG 2204</b>
<b>MAP*</b> (Gc)	<b>QMB 2100</b>	

### **ORAL COMMUNICATIONS 3 Units\*\***

Select one of the following.

**ENC 2300** - Advanced Composition and Communications (Gw)  
**LIT 2480** - Issues in Literature and Culture (Gw)  
**SPC 1017** - Introduction to Communication (Gw)  
**SPC 2608** - Introduction to Public Speaking (Gw)

### **HUMANITIES 6 Units\*\***

Select 1 course from State Core and 1 course from MDC Core.

**State Core: Group A Courses: 3 units**

**ARH 1000** - Art Appreciation  
**HUM 1020** - Humanities  
**LIT 2000** - Introduction to Literature (Gw)  
**MUL 1010** - Music Appreciation  
**PHI 2010** - Introduction to Philosophy (Gw)  
**THE 2000** - Theater Appreciation (Gw)

**MDC Core: Group B Courses: 3 units**

**ARC 2701** - History of Architecture 1  
**ARC 2702** - History of Architecture 2 (Gw)  
**ARH 1000** - Art Appreciation  
**ARH 2050** - Art History 1  
**ARH 2051** - Art History 2 (Gw)  
**ARH 2740** - Cinema Appreciation (Gw)  
**DAN 2100** - Dance Appreciation  
**DAN 2130** - Dance History 1 (Gw)  
**HUM 1020** - Humanities  
**IND 1100** - History of Interiors 1  
**IND 1130** - History of Interiors 2 (Gw)  
**LIT 2000** - Introduction to Literature (Gw)  
**LIT 2120** - A Survey of World Literature 2 (Gw)  
**MUH 2111** - Survey of Music History 1  
**MUH 2112** - Survey of Music History 2 (Gw)  
**MUL 1010** - Music Appreciation  
**MUL 2380** - Jazz and Popular Music in America (Gw)  
**PHI 2010** - Introduction to Philosophy (Gw)  
**PHI 2604** - Critical Thinking and Ethics (Gw)  
**THE 2000** - Theater Appreciation (Gw)

### **SOCIAL SCIENCES 6 Units\*\***

Select 1 course from State Core and 1 course from MDC Core.  
To meet the Civic Literacy Competency Requirement for graduation one course selection should be **AMH 2020** or **POS 2041**.

**State Core: Group A Courses: 3 units**

**AMH 2020** - History of the US Since 1877  
**ANT 2000** - Introduction to Anthropology  
**ECO 2013** - Principles of Economics (Macro) (Gw)  
**POS 2041** - American Federal Government  
**PSY 2012** - Introduction to Psychology  
**SYG 2000** - Introduction to Sociology

**MDC Core: Group B Courses: 3 units**

**AMH 2010** - History of the United States to 1877  
**AMH 2020** - History of the US Since 1877  
**ANT 2000** - Introduction to Anthropology  
**ANT 2410** - Introduction to Cultural Anthropology  
**CLP 1006** - Psychology of Personal Effectiveness  
**DEP 2000** - Human Growth and Development  
**ECO 2013** - Principles of Economics (Macro) (Gw)  
**ISS 1120** - The Social Environment  
**ISS 1161** - The Individual in Society  
**POS 2041** - American Federal Government  
**PSY 2012** - Introduction to Psychology  
**SYG 2000** - Introduction to Sociology  
**WOH 2012** - History of World Civilization to 1789  
**WOH 2022** - History of World Civilization From 1789

### **Notes:**

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\*Includes any and all courses within associated prefix

\*\*General education courses require grade of C or higher to satisfy requirement

**Gw = Gordon Rule writing**

**Gc = Gordon Rule computation**

## ASSOCIATE IN ARTS DEGREE

### **Natural Sciences 6 Units\*\***

Select 1 course from State Core and 1 course from MDC Core.

#### **State Core: Group A Courses: 3 units**

**AST 1002** - Descriptive Astronomy  
**BSC 1005** - General Education Biology  
**BSC 2010** - Principles of Biology  
**BSC 2085** - Human Anatomy and Physiology 1  
**CHM 1020** - General Education Chemistry  
**CHM 1045** - General Chemistry & Qualitative Analysis  
**ESC 1000** - General Education Earth Science  
**EVR 1001** - Introduction to Environmental Science  
**PHY 1020** - General Education Physics  
**PHY 2048** - Physics with Calculus 1  
**PHY 2053** - Physics without Calculus 1

#### **MDC Core: Group B Courses: 3 units**

**AST 1002** - Descriptive Astronomy  
**BOT 1010** - Botany  
**BSC 1005** - General Education Biology  
**BSC 1030** - Social Issues in Biology  
**BSC 1050** - Biology & Environment  
**BSC 1084** - Functional Human Anatomy  
**BSC 2010** - Principles of Biology  
**BSC 2020** - Human Biology: Fundamentals of Anatomy/Physiology  
**BSC 2085** - Human Anatomy and Physiology 1  
**BSC 2250** - Natural History of South Florida  
**ESC 1000** - General Education Earth Science  
**EVR 1001** - Introduction to Environmental Science  
**HUN 1201** - Essentials of Human Nutrition  
**OCB 1010** - Introduction to Marine Biology  
**PCB 2033** - Introduction to Ecology  
**PSC 1121** - General Education Physical Science  
**PSC 1515** - Energy in the Natural Environment  
**ZOO 1010** - Zoology  
**CHM\* GLY\* MET\* OCE\* PHY\***

### **ELECTIVES 24 Units**

Elective courses should be selected by program and/or specialization. Refer to the [Common Prerequisites Manual](#) or consult with an advisor or mentor. Also refer to information available at your Transfer Institution of choice. General education courses that are not used to meet general education requirements may be used for electives in this block.

### **60 UNITS REQUIRED FOR GRADUATION**

General Education: 36 Units		Electives: 24 Units
15 units from State Core	21 units from MDC Core	

### **GENERAL EDUCATION ELECTIVE 3 Units**

Select one course from any of the following options.

ACG 2021	AMH 2010	AMH 2020	ANT 2000
ANT 2410	ARC 2701	ARC 2702	ARH 1000
ARH 2050	ARH 2051	ARH 2740	ASL 2160C
ASL 2200C	ASL*	AST*	BOT*
BSC*	CGS 1060C	CHI*	CLP 1006
CHM*	CIS 1000	COP 1332	COP 2270
COP 1334	DAN 2130	DEP 2000	ECO 2013
ESC 1000	EDF 1005	EDF 2085	EEX 2000
ENC 2300	FRE*	FRW*	GEO 2420
GER*	GLY*	HBR*	HLP 1080
HLP 1081	HSC 2400	HUM 1020	HUN 1201
IND 1100	IND 1130	INR 2002	ISS 1120
ISS 1161	ISS 2270	ITA*	JPN*
LIT 2000	LIT 2120	LIT 2480	MAC*
MAD 2104	MAP*	MAS*	MET*
MGF*	MUH 2111	MUH 2112	MUL 1010
MUL 2380	OCE*	PCB 2033	PHI 2010
PHI 2604	PHY*	POR*	POS 2041
POS 2112	PSC*	PSY 2012	QMB 2100
REL 2300	RUS*	SPC 1017	SPN*
STA 2023	SYG 2000	SYG 2230	THE 2000
WOH 2012	WOH 2022	ZOO*	

### **COMPUTER COMPETENCY**

By the 16th earned college-level unit, students must attempt the computer competency requirement **OR** by the 31st earned college-level unit, students must satisfy the requirement (CGS1060C, CTS 0050, an equivalent college unit course or the ComputerSkills Placement examination). For more information, see <http://bitly.com/UQJDHM>.

### **FOREIGN LANGUAGE COMPETENCY**

May be satisfied by Foreign Language Competency (FLC) standardized examinations

**OR**

**ASL 1150C CHI 1121 FRE 1121 GER 1121 HAI 1121**  
**HBR 1121 ITA 1121 JPN 1121 POR 1121 RUS 1121**  
**SPN 1121**

For more information, refer to [Foreign Language Competence](#).

### **FIRST YEAR EXPERIENCE**

**SLS 1106** – First Year Experience Seminar (required course) or one of the courses below based on advisor's recommendation:  
**SLS 1125** – Student Support Seminar  
**SLS 1502** – College Study Skills  
**SLS 1505** – College Survival Skills  
**SLS 1510** – Preparing for Student Success

### **CIVIC LITERACY COMPETENCY**

Prior to the award of an associate in arts or baccalaureate degree, first-time-in-college students entering a Florida College System institution in the 2021-2022 school year, and thereafter must demonstrate competency in civic literacy. This requires both a passing grade (A, B, C, D, or S) in AMH 2020 or POS 2041 AND a passing score on the Florida Civic Literacy Examination (FCLE) (or an equivalent AP or CLEP exam). General education courses require grade of C or higher to satisfy requirement.

For more information regarding the Florida Civic Literacy Requirement, go to <https://www.mdc.edu/main/testing/criteria/civic-literacy-competence.aspx>.

### **MDC Advisement & Career Services Offices**

Hialeah Room 2101 305-237-8794	Homestead Room A233 305-237-5046	Padron Room 1117 305-237-6133	Kendall Room R243 305-237-2125	Medical Room 1113 305-237-4141	North Room 1104 305-237-1425	Wolfson Room 3117 305-237-3077	West Room 2114 305-237-8947	Carrie Meek Ctr. Room 1101 305-237-1900
Call Center • 305-237-8888 • <a href="mailto:mdcinfo@mdc.edu">mdcinfo@mdc.edu</a>								



## Accounting Technology

Associate in Science | Code: 25022 | 60 credits

CIP (1552030201)

Effective Term: Fall 2022 (2227)

The Accounting Technology Associate in Science (A.S.) program offers opportunities to earn multiple credentials that help students find jobs quickly while advancing both their academic and professional careers. The A.S. in Accounting Technology allows students to gain valuable experience in this in-demand field. Graduates of the Accounting program develop a strong, competitive accounting foundation. Accounting and bookkeeping are essential functions of any business. Experienced accounting professionals have a high degree of job stability and are often top-tier salary earners. This A.S. allows for a seamless transition into the [Bachelor of Applied Science in Supervision and Management with a Concentration in Accounting](#).

### **GENERAL EDUCATION REQUIREMENTS (15 credits)**

#### **1. COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **2. HUMANITIES (3.00 credits)**

PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
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#### **3. MATHEMATICS (3.00 credits)**

MGF 1107	Math for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.
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#### **4. NATURAL SCIENCE (3.00 credits)**

AST 1002	Descriptive Astronomy	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
PHY 1020	General Education Physics	(3 credits)

#### **5. SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---Or---

CGS 1060C – Introduction to Computer Technology & Applications

### **MAJOR COURSE REQUIREMENTS (4.00 credits)**

*Must take 4.0 credits from the following group.*

ACG 2011	Principles of Accounting 2	(3 credits)	Corequisite: ACG 2011L
ACG 2011L	Principles of Accounting 2 Lab	(1 credits)	Corequisite: ACG 2011

--- Or ---

*Must take 4.0 credits from the following group.*

ACG 2021	Financial Accounting	(3 credits)	Corequisite: ACG 2021L
ACG 2021L	Financial Accounting Lab	(1 credits)	Corequisite: ACG 2021

**PROGRAM COURSE REQUIREMENTS (25.00 credits)**

*Must take 3.0 credits from the following group.*

BUL 2131	Legal Environment	(3 credits)
BUL 2241	Business Law 1	(3 credits)

**--- And ---**

*Must take 22.0 credits from the following group.*

ACG 2071	Managerial Accounting	(3 credits)	Prerequisite: ACG 2011 and ACG 2001 or ACG 2021; Corequisite: ACG 2071L
ACG 2071L	Managerial Accounting Lab	(1 credits)	Prerequisite: ACG2001, ACG 2011, ACG2021, ACG2021L; Corequisite: ACG207
ACG 2450	Microcomputers in Accounting	(3 credits)	Pre/Co-requisite: ACG 2001 or ACG 2021
FIN 2000	Principles of Finance	(3 credits)	
GEB 1011	Principles of Business	(3 credits)	
MAN 2021	Principles of Management	(3 credits)	
OST 2335	Business Writing	(3 credits)	
TAX 2000	Income Tax	(3 credits)	

**MAJOR COURSE ELECTIVE (15.00 credits)**

ACG*	FIN*	MAR*	PUR*	TAX*
BUL*	GEB*	MKA*	QMB*	
ECO*	MAN*	MNA*	REE*	
CGS 1060C	Introduction to Computer Technology & Applications		(4 credits)	
MTB 1103	Business Mathematics		(3 credits)	



## Animation & Game Art

Associate in Science | Code: 25074 | 60 credits

CIP (1610030400)

The Animation & Game Art is an intensive hands-on program in which students learn narrative structure along with technical skills required in the animation industry. Students learn character design and animation, 3D modeling, storyboarding and environment design. Graduates are prepared for entry level jobs as 3D artist and animators.

### GENERAL EDUCATION – 15 Credits Required

#### **Communications – 3 Credits Required**

ENC 1101	English Composition 1	3	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **Humanities – 3 Credits Required**

ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature	3	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	3	

#### **Mathematics – 3 Credits Required**

MAC 1105	College Algebra	3	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **Natural Science – 3 credits Required**

AST 1002	Descriptive Astronomy	3
BSC 1005	General Education Biology	3
CHM 1020	General Education Chemistry	3
ESC 1000	General Education Earth Science	3
EVR 1001	Introduction to Environmental Science	3
PHY 1020	General Education Physics	3

#### **Social Science – 3 Credits Required**

AMH 2020	History of the US since 1877	3
POS 2041	American Federal Government	3

### COMPUTER COMPETENCY

Computer Competency Test (CCT)

--OR--

CGS 1060 C Introduction to Computer Technology & Applications

### MAJOR CORE REQUIREMENTS – 45 Credits Required

DIG 1111	Digital Character Design	3	
DIG 1132	Digital art and Design	3	
DIG 1302	3D Modeling	4	
DIG 1430	Storyboarding	3	
DIG 1437	Narrative Storytelling	3	Pre-Req DIG 1430
DIG 2113	Post Production & Editing	4	Pre-Req DIG 1430
DIG 2304	Character Animation	3	Pre-Req DIG 2790
DIG 2318	Animation Studio 1	3	Pre-Req DIG 1302, 1430 and 1437
--Or--			
CAP 2048	Game Development Project I	3	Pre-Req CAP 2047 or DIG 1302, COP 1334 or DIG 1111, COP 2335 or DIG 1437, DIG 1430, DIG 1710 or DIG 1132; Pre/Co-Req DIG 1712 or DIG 2113

DIG 2319	Animation Studio 2	3	Pre-Req CAP 2048 or DIG 2318
<b>--Or--</b>			
CAP 2920C	Game Development Project II	3	Pre-Req CAP 2048, DIG 1712 or DIG 2113
DIG 2370	Character Modeling & Rigging	4	Pre-Req DIG 1302
DIG 2391C	Animation Studio 3	4	Pre-Req CAP 2920C or DIG 2319
DIG 2396C	Motion Capture	4	Pre-Req DIG 1302
DIG 2790	Texturing & Environment Design	4	Pre-Req DIG 1302





## Architectural Design and Construction Technology

Associate in Science | Code: 26034 | 66 credits

CIP: 1604090100

Effective Term: Fall 2022 (2227)

The Architectural Design and Construction Technology program offers courses that enable the student to translate the design and systems of the architect into graphic and written form and assists the professional in rendering architectural services. The attainment of these skills qualifies the student for several specialties, such as, architectural drafting, cost estimating, material selecting, specification writing and preparing presentations, drawings & models.

### GENERAL EDUCATION REQUIREMENTS – 15 Credit Hours

#### **Communications – 3 Credits**

ENC 1101	English Composition 1	3	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **Humanities – 3 Credits**

ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature	3	Pre-req: ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	Pre-req: ENC 1101
THE 2000	Theatre Appreciation	3	

#### **Mathematics – 3 Credits**

MAC 1105	College Algebra	3	Pre-req: MAT 1033•
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **Natural Science – 3 Credits**

AST 1002	Descriptive Astronomy	3	
BSC 1005	General Education Biology	3	
CHM 1020	General Education Chemistry	3	
ESC 1000	General Education Earth Science	3	
EVR 1001	Introduction to Environmental Science	3	
PHY 1020	General Education Physics	3	
PHY 2053	Physics (without Calculus) 1	3	Prerequisite: MAC 1114 or MAC 1147; Corequisite: PHY2053L

#### **Social Science – 3 Credits**

AMH 2020	History of the US Since 1877	3	
POS 2041	American Federal Government	3	

### COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications	
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### MAJOR COURSE REQUIREMENTS - 43 Credit Hours

ARC 1115	Architectural Communications 1	2	
ARC 1126C	Architectural Drawing 1	4	
ARC 1128	Architectural Drawing 2	4	Prerequisite: ARC 1126C
ARC 1301	Architectural Design 1	4	Pre/Corequisite: ARC 1115
ARC 2053	Architectural Computer Applications	4	
ARC 2056	Computer Aided Architectural Presentation	4	
ARC 2171	Computer Aided Drafting 1	4	Prerequisite: ARC 1126C or ARC 2461

ARC 2172	Computer Aided Drafting 2	4	Prerequisite: ARC 2171
ARC 2461	Architectural Materials and Construction 1	4	Prerequisite: ARC 1126C or BCN 1251
ARC 2681	Environmental Technology	3	Prerequisite: ARC 1126C
ARC 2701	History of Architecture 1	3	
BCT 2760	Building Code Regulations	3	

**PROGRAM COURSE ELECTIVE - 8 Credit Hours**

ARC\*

BCN\*

BCT\*

CGS 1060C	Introduction to Computer Technology and Applications	4	
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## Aviation Administration

Associate in Science | Code: 26028 | 60 credits

CIP (1649010403)

Effective Term: Fall 2022 (2227)

The Aviation Administration program is designed to prepare students to succeed in the dynamic aviation industry. The program focuses on the necessary entry-level skills for most aviation employment fields. The Air Traffic Control option provides students with the opportunity to be hired with the Federal Aviation Administration (FAA). Accordingly, graduates find opportunities in airline sales and reservations, air cargo, airport operations and many data-entry positions required by the airline management.

### GENERAL EDUCATION REQUIREMENTS (15 credits)

#### **COMMUNICATIONS**

ENC 1101	English Composition	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES**

HUM 1020	Humanities	(3 credits)
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#### **MATHEMATICS**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **NATURAL SCIENCE**

AST 1002	Descriptive Astronomy	(3 credits)
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#### **SOCIAL SCIENCE**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

#### **COMPUTER COMPETENCY**

Computer Competency Test (CCT)

--- **Or** ---

CGS 1060C Introduction to Computer Technology & Applications

### MAJOR COURSE REQUIREMENTS (37.00 credits)

ASC 1210	Aviation Meteorology	(3 credits)	Prerequisite: ATT 1100 or equivalent; Corequisite: ATT 2110 or equivalent
ASC 2320	Aviation Laws and Regulations	(3 credits)	
ATF 1601L	Flight Orientation/Simulator Lab	(1 credit)	
ATT 1100	Private Pilot Theory	(3 credits)	Corequisite: ASC 1210
ATT 2820	Air Traffic Control	(3 credits)	Prerequisite: sophomore standing in major program.
AVM 1010	Aviation Industry Operations	(3 credits)	
AVM 1022	Flight Operations	(3 credits)	
AVM 1440	Aviation/Airport Security	(3 credits)	
AVM 2410	Principles of Airport Management	(3 credits)	
AVM 2431	Customer Service Agent	(3 credits)	
AVM 2441	Aviation Safety & Human Factors	(3 credits)	
AVM 2510	Airline Management	(3 credits)	
AVM 2515	Airline Marketing	(3 credits)	

**ELECTIVE (8.00 credits)**

ASC\*, ATF\*, ATT\*, AVM\*

(3 credits)

Note: Check with advisor for requisite information.

CGS 1060C Introduction to Computer Technology &amp; Applications

(4 credits)

MAT 1033 Intermediate Algebra

(3 credits)

Prerequisites: MAT0022C, or MAT0028, or MAT0057 or by placement score, or eligible exemption.

TRA 2010 Introduction to Transportation and Logistics

(3 credits)



## Aviation Maintenance Management

Associate in Science | Code: 26027 | 83 credits

CIP (1649010401)

Effective Term: Fall 2022 (2227)

The Aviation Maintenance Management program provides the aviation professional with an extensive academic background to complement their aviation technical background whether it is in Air Traffic Control, Aviation Maintenance, Flight Operations, Dispatch Operations through verified FAA Certifications. Only those students holding an FAA A&P certificate may enroll in this degree program. The program provides a solid general education combined with the flexibility for coursework covering a wide range of specific aviation courses.

### **GENERAL EDUCATION REQUIREMENTS (15 credits)**

#### ***COMMUNICATIONS (3 credits)***

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### ***HUMANITIES (3 credits)***

PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
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#### ***MATHEMATICS (3 credits)***

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### ***NATURAL SCIENCE (3credits)***

PHY 1020	General Education Physics	(3 credits)
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#### ***SOCIAL SCIENCE (3credits)***

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### **COMPUTER COMPETENCY**

Computer Competency Test (CCT)

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CGS 1060C Introduction to Computer Technology & Applications

### **MAJOR COURSE REQUIREMENTS (66.00 credits)**

ASC 2320	Aviation Laws and Regulations	(3 credits)
AVM 1160	Aviation Maintenance Programs and Inspections	(3 credits)
AVM 1162	Maintenance Repair and Overhaul (MRO) Interactions with Commercial Airline Operations	(3 credits)
AVM 1163	Policies and Procedures for Airlines Maintenance Programs	(3 credits)
AVM 2510	Airline Management	(3 credits)
AVM 2515	Airline Marketing	(3 Credits)
MAN 2021	Principals of Management	(3 credits)
AVM 9996	FAA Certification	(45 credits)

### **ELECTIVES (2.00 credits)**

ASC*	AVM*	IDS*	LIS*	MAN*	MAT*	SLS*
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## Biomedical Engineering Technology

Associate in Science | Code: 26053 | 60 credits

CIP (1615040102)

The Biomedical Engineering Technology program prepares students for employment as Biomedical Engineering Technicians and Technologists and in related occupations in health-related fields. The program also provides supplemental training for persons currently or previously employed in these occupations. The program focuses on the understanding and applying of concepts in electronics, in addition to troubleshooting techniques, to digital, microprocessor, or computer-based systems as they relate to medical devices. Assembly, installation, operations maintenance, calibration, trouble-shooting, repairing and elementary design on medical systems are taught using an integrated, applied and theoretical approach.

### **GENERAL EDUCATION REQUIREMENTS (15.00 credits)**

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **NATURAL SCIENCE (3.00 credits)**

BSC 1005	General Education Biology	(3 credits)	
BSC 2085	Human Anatomy and Physiology 1	(3 credits)	Corequisite: BSC2085L

#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

#### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications		
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### **MAJOR COURSE REQUIREMENTS (37.00 credits)**

CET 1110C	Digital Circuits	(4 credits)	Prerequisite: EET 1015C, MAC 1105; Pre/Corequisite: COP 2270
CET 1487C	Network+	(3 credits)	
COP 2270	"C" for Engineers	(4 credits)	Pre/Corequisite: MAC 1105
EET 1015C	Direct Current Circuits	(4 credits)	Prerequisite: MAC 1105
EET 1025C	Alternating Current Circuits	(4 credits)	Prerequisite: EET 1015C; Pre/Corequisite: MAC 1114 or 1147
EET 1141C	Electronics 1	(4 credits)	Prerequisite: EET1025C, and MAC 1114 or

EET 2101C	Electronics 2
ETS 2673C	Programmable Logic Controllers
HIM 2472	Medical Terminology
MAC 1114	Trigonometry

(4 credits)
(4 credits)
(3 credits)
(3 credits)

MAC 1147

Prerequisite: EET 1141C

Prerequisite: CET 1110C

Prerequisite: MAC 1105 or MAC 1106

**PROGRAM ELECTIVE (8.00 credits)**

Electives are restricted to courses listed below:

BSC\*, CET\*, EET\*, ETI\*, ETS\*, MAC\*

ETM 1315C	Applied Pneumatics and Hydraulics
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(3 credits)
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Pre/Corequisite: MAC 1105



## Biotechnology

Associate in Science | Code: 22027 | 61 credits

CIP (1341010100)

The Biotechnology Program will expose students to a breadth of topics and emphasizes hands-on learning in a variety of techniques and procedures necessary for employment in the bioscience industry. The Program includes modules designed to enhance critical thinking and technical communication skills. It focuses on developing broad transferable skills and stresses understanding and demonstration of laboratory/industry protocols and regulations, bio-safety and safe operating procedures, ethical and environmental issues, product generation/formulation, quality control, validation, instrumentation, and computing.

### **GENERAL EDUCATION REQUIREMENTS (15 Credits)**

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A- 10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

HUM 1020	Humanities	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101

#### **MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033*
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **NATURAL SCIENCE (3.00 credits)**

BSC 2010	Principles of Biology	(3 credits)	Pre/Corequisite: CHM 1045; Corequisite: BSC 2010L
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#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications		
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### **MAJOR COURSE REQUIREMENTS (23.00 credits)**

BSC 2010L	Principles of Biology 1 Laboratory	(2 credits)	Corequisite: BSC 2010
BSC 2426	Biotechnology Methods and Applications 1	(3 credits)	Corequisite: BSC 2426L
BSC 2426L	Biotechnology Methods & Applications 1 Laboratory	(2 credits)	Corequisite: BSC 2426
BSC 2427	Biotechnology Methods and Applications 2	(3 credits)	Prerequisites: BSC 2426, 2426L; Corequisite: BSC 2427L
BSC 2427L	Biotechnology Methods & Applications 2 Laboratory	(2 credits)	Prerequisites: BSC 2426, 2426L; Corequisite: BSC 2427
BSC 2943L	Bioscience Internship	(3 credits)	
CHM 1045	General Chemistry and Qualitative Analysis	(3 credits)	Prerequisite: CHM1025 or a passing score on the CART exam, MAC 1105; Corequisite: CHM 1045L
CHM 1045L	General Chemistry and Qualitative Analysis Lab	(2 credits)	Prerequisite: MAC1105, CHM1025 or a passing score on the CART exam; Corequisite: CHM 1045



STA 2023	Statistical Methods	(3 credits)
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**MAJOR COURSE ELECTIVE (20.00 credits)**

BSC 2423C	Methods & Applications of Cell Culture & Protein Biotechnology	(4 credits)	Prerequisites: BSC 2427, 2427L
CHM 1025	Introductory Chemistry	(3 credits)	Prerequisite: MAT 1033♦
CHM 1046	General Chemistry and Qualitative Analysis	(3 credits)	Prerequisite: CHM1045; Corequisite: CHM1046L
CHM 1046L	General Chemistry & Qualitative Analysis Laboratory	(2 credits)	Prerequisite: CHM1045L; Corequisite: CHM1046
CHM 2200	Survey of Organic Chemistry	(3 credits)	Prerequisite: CHM1046; Corequisite: CHM 2200L
CHM 2200L	Survey of Organic Chemistry Laboratory	(1 credits)	Prerequisite: CHM1046L; Corequisite: CHM 2200
CHM 2210	Organic Chemistry 1	(3 credits)	Prerequisite: CHM1046; Corequisite: CHM2210L
CHM 2210L	Organic Chemistry 1 Laboratory	(2 credits)	Prerequisite: CHM1046L; Corequisite: CHM2210
CHM 2211	Organic Chemistry 2	(3 credits)	Prerequisite: CHM2210; Corequisite: CHM2211L
CHM 2211L	Organic Chemistry 2 Laboratory	(2 credits)	Prerequisite: CHM2210L; Corequisite: CHM2211
ETI 1040	Introduction to Bioscience Manufacturing	(3 credits)	
ETI 1040L	Introduction to Bioscience Manufacturing Lab	(2 credits)	Corequisite: ETI 1040
ETI 1172	Introduction to Quality Assurance	(3 credits)	
CGS 1021	Scientific Computing	(4 credits)	Corequisite: STA 2023
MAT 1033	Intermediate Algebra	(3 credits)	Prerequisites: MAT0022C, or MAT0028, or MAT0057 or by placement score, or eligible exemption.
MCB 2010	Microbiology	(3 credits)	Prerequisites: BSC 2010/2010L or BSC 2085/2085L, CHM 1033/1033L or CHM 1045/1045L
MCB 2010L	Microbiology Laboratory	(2 credits)	Prerequisites: BSC 2010/2010L or BSC 2085/2085L, CHM 1033/1033L or CHM 1045/1045L; Corequisite: MCB 2010
PCB 2061	Genetics	(3 credits)	Prerequisite: BSC 2010, 2010L

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.



Biotechnology – Bioinformatics  
 Associate in Science | Code: 22028 | 61 credits  
 CIP (1341010100)

The Biotechnology Program will expose students to a breadth of topics and emphasizes hands-on learning in a variety of techniques and procedures necessary for employment in the bioscience industry. The Program includes modules designed to enhance critical thinking and technical communication skills. It focuses on developing broad transferable skills and stresses understanding and demonstration of laboratory/industry protocols and regulations, bio-safety and safe operating procedures, ethical and environmental issues, product generation/formulation, quality control, validation, instrumentation, and computing.

#### **GENERAL EDUCATION REQUIREMENTS (15 Credits)**

##### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A- 10.0315 (by course, placement score, or eligible exemption).
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##### **HUMANITIES (3.00 credits)**

HUM 1020	Humanities	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101

##### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

##### **MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033*
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\*Note: Students must seek advisement for proper mathematics course from discipline chairperson.

##### **NATURAL SCIENCE (3.00 credits)**

BSC 2010	Principles of Biology	(3 credits)	Pre/Corequisite: CHM 1045; Corequisite: BSC 2010L
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##### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications
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#### **MAJOR COURSE REQUIREMENTS (23.00 credits)**

BSC 2010L	Principles of Biology 1 Laboratory	(2 credits)	Corequisite: BSC 2010
BSC 2426	Biotechnology Methods and Applications 1	(3 credits)	Corequisite: BSC 2426L
BSC 2426L	Biotechnology Methods & Applications 1 Laboratory	(2 credits)	Corequisite: BSC 2426
BSC 2427	Biotechnology Methods and Applications 2	(3 credits)	Prerequisites: BSC 2426, 2426L; Corequisite: BSC 2427L
BSC 2427L	Biotechnology Methods & Applications 2 Laboratory	(2 credits)	Prerequisites: BSC 2426, 2426L; Corequisite: BSC 2427
BSC 2943L	Bioscience Internship	(3 - 6 credits)	
CHM 1045	General Chemistry and Qualitative Analysis	(3 credits)	Prerequisite: CHM1025 or a passing score on the CART exam, MAC 1105; Corequisite: CHM 1045L
CHM 1045L	General Chemistry and Qualitative Analysis Lab	(2 credits)	Prerequisite: MAC1105, CHM1025 or a passing score on the CART exam; Corequisite: CHM 1045

STA 2023	Statistical Methods	(3 credits)
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**MAJOR COURSE ELECTIVE (20.00 credits)**

CGS 1021	Scientific Computing	(4 credits)
CGS 1060C	Introduction to Computer Technology & Applications	(4 credits)
CGS 1145	Introduction to Bioinformatics	(4 credits)
CIS 1321	Introduction to Systems Analysis and Design	(4 credits)
COP 1334	Introduction to C++ Programming	(4 credits)
COP 2700	Database Application Programming	(4 credits)

Corequisite: STA 2023

Prerequisite: CGS 1060C

Prerequisites: Completion of all basic skills or acceptable scores on the Placement Test, CGS 1060C, and proficiency in any programming language.

MAT 1033	Intermediate Algebra	(3 credits)
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Prerequisites: MAT0022C, or MAT0028, or MAT0057 or by placement score, or eligible exemption.



## Business Intelligence Specialist

Associate in Science | Code: 25073 | 60 credits

CIP (1552130101)

Effective Term: Summer 2020 (2205)

The Associate in Science in Business Intelligence Specialist prepares students for employment as business intelligence analysts and related occupations and/or for upper division studies in data analytics. Business intelligence is a broad category of application programs and technologies for gathering, storing, analyzing, and providing access to data to help enterprise users make improved business decisions. Students will learn how to build business intelligence applications and how to manipulate massive amounts of data, turning it into useful information and reports.

### **GENERAL EDUCATION REQUIREMENTS – 15 Credit Hours**

#### ***Communications (3 Credits)***

ENC 1101	English Composition	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### ***Humanities (3 Credits)***

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### ***Mathematics (3 Credits)***

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033*
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### ***Natural Science (3.00 Credits)***

AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
PHY 1020	General Education Physics	(3 credits)

#### ***Social Science (3 Credits)***

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications
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### **MAJOR COURSE REQUIREMENTS – 35 Credit Hours**

CAP 1788	Introduction to Data Analytics	(4 credits)
CGS 1060C	Introduction to Computer Technology & Applications	(4 credits)
CGS 1540C	Database Concepts and Design	(4 credits)
COP 1047C	Introduction to Python Programming	(4 credits)



## Biotechnology – Chemical Technology

Associate in Science | Code: 22029 | 61 credits

CIP (1341010100)

The Biotechnology Program will expose students to a breadth of topics and emphasizes hands-on learning in a variety of techniques and procedures necessary for employment in the bioscience industry. The Program includes modules designed to enhance critical thinking and technical communication skills. It focuses on developing broad transferable skills and stresses understanding and demonstration of laboratory/industry protocols and regulations, bio-safety and safe operating procedures, ethical and environmental issues, product generation/formulation, quality control, validation, instrumentation, and computing.

### **GENERAL EDUCATION REQUIREMENTS (15 Credits)**

#### ***COMMUNICATIONS (3.00 credits)***

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A- 10.0315 (by course, placement score, or eligible exemption).
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#### ***HUMANITIES (3.00 credits)***

HUM 1020	Humanities	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101

#### ***SOCIAL SCIENCE (3.00 credits)***

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

#### ***MATHEMATICS (3.00 credits)***

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033*
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\*Note: Students must seek advisement for proper mathematics course from discipline chairperson.

#### ***NATURAL SCIENCE (3.00 credits)***

BSC 2010	Principles of Biology	(3 credits)	Pre/Corequisite: CHM 1045; Corequisite: BSC 2010L
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### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications		
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### **MAJOR COURSE REQUIREMENTS (23.00 credits)**

BSC 2010L	Principles of Biology 1 Laboratory	(2 credits)	Corequisite: BSC 2010
BSC 2426	Biotechnology Methods and Applications 1	(3 credits)	Corequisite: BSC 2426L
BSC 2426L	Biotechnology Methods & Applications 1 Laboratory	(2 credits)	Corequisite: BSC 2426
BSC 2427	Biotechnology Methods and Applications 2	(3 credits)	Prerequisites: BSC 2426, 2426L; Corequisite: BSC 2427L
BSC 2427L	Biotechnology Methods & Applications 2 Laboratory	(2 credits)	Prerequisites: BSC 2426, 2426L; Corequisite: BSC 2427
BSC 2943L	Bioscience Internship	(3 credits)	
CHM 1045	General Chemistry and Qualitative Analysis	(3 credits)	Prerequisite: CHM1025 or a passing score on the CART exam, MAC 1105; Corequisite: CHM 1045L
CHM 1045L	General Chemistry and Qualitative Analysis Lab	(2 credits)	Prerequisite: MAC1105, CHM1025 or a passing score on the CART exam; Corequisite: CHM 1045

STA 2023	Statistical Methods	(3 credits)
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**MAJOR COURSE ELECTIVE (20.00 credits)**

CHM 1046	General Chemistry and Qualitative Analysis	(3 credits)	Prerequisite: CHM1045; Corequisite: CHM1046L
CHM 1046L	General Chemistry & Qualitative Analysis Laboratory	(2 credits)	Prerequisite: CHM1045L; Corequisite: CHM1046
CHM 2200	Survey of Organic Chemistry	(3 credits)	Prerequisite: CHM1046; Corequisite: CHM 2200L
CHM 2200L	Survey of Organic Chemistry Laboratory	(1 credits)	Prerequisite: CHM1046L; Corequisite: CHM 2200
CHM 2124C	Survey of Quantitative Analysis	(4 credits)	Prerequisites: CHM 1046, 1046L
CHS 2311C	Analytical Chemical Instrumentation	(4 credits)	Pre/corequisites: CHM 2200, 2200L, 2124C or CHM 2210, 2210L, 2211, 2211L
ETI 1172	Introduction to Quality Assurance	(3 credits)	
MAT 1033	Intermediate Algebra	(3 credits)	Prerequisites: MAT0022C, or MAT0028, or MAT0057 or by placement score, or eligible exemption.



### **Building Construction Technology**

*Associate in Science | Code: 26033 | 60 credits*

**CIP (1615100102)**

The Building Construction Technology program is designed to furnish technically trained personnel for the building construction industry. The graduate may work with a contractor as part of the administrative team in such entry-level job positions as those leading to estimators, job coordinators, or project managers. Technical jobs may also be available in the following areas: land and project developers; technical sales for building materials, systems, and equipment; with local, state, and federal government agencies; as well as various financial institutions.

### **GENERAL EDUCATION REQUIREMENTS (15.00 credits)**

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **NATURAL SCIENCE (3.00 credits)**

AST 1002	Descriptive Astronomy	(3 credits)	
BSC 1005	General Education Biology	(3 credits)	
CHM 1020	General Education Chemistry	(3 credits)	
ESC 1000	General Education Earth Science	(3 credits)	
EVR 1001	Introduction to Environmental Science	(3 credits)	
PHY 1020	General Education Physics	(3 credits)	
PHY 2053	Physics (without Calculus) 1	(3 credits)	Prerequisite: MAC 1114 or MAC 1147; Corequisite: PHY 2053L

#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

#### **COMPUTER COMPETENCY**

*Test type(s) needed:*

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications	
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### **MAJOR COURSE REQUIREMENTS (42.00 credits)**

ARC 1126C	Architectural Drawing 1	(4 credits)	
ARC 2171	Computer Aided Drafting 1	(4 credits)	Prerequisite: ARC 1126C or 2461
ARC 2461	Architectural Materials and Construction 1	(4 credits)	Prerequisite: ARC 1126C or BCN 1251



## Clinical Laboratory Sciences

Associate in Science | Code: 23023 | 76 credits

CIP (1351100405)

Effective Term: Fall 2022 (2227)

The Clinical Laboratory Sciences program prepares the graduate to work as part of the health care delivery team in a non-profit clinical laboratory or research laboratory. Clinical practice is conducted in local health care facilities under the supervision of qualified registered professional personnel. Graduates are eligible for Florida State Licensure and Registry with the American Society of Clinical Pathologists and equivalent licensure.

### GENERAL EDUCATION REQUIREMENTS (15 Credits Required)

#### ***Communications (3.00 Credits)***

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### ***Humanities (3.00 Credits)***

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### ***Mathematics (3.00 Credits)***

MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.
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#### ***Natural Science (3.00 Credits)***

BSC 2085	Human Anatomy and Physiology 1	(3 credits)	Corequisite: BSC2085L
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#### ***Social Science (3.00 Credits)***

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C - Introduction to Computer Technology & Applications

### SCIENCE REQUIREMENTS (14.00 credits)

BSC 2085L	Human Anatomy and Physiology 1 Laboratory	(1 credits)	Corequisite: BSC2085
BSC 2086	Human Anatomy & Physiology 2	(3 credits)	Prerequisite: BSC2085; Corequisite: BSC2086L
BSC 2086L	Human Anatomy & Physiology 2 Laboratory	(1 credits)	Prerequisite: BSC2085, 2085L; Corequisite: BSC2086
CHM 1033	Chemistry for Health Sciences	(3 credits)	Prerequisite: MAT 1033; Corequisite: CHM 1033L
CHM 1033L	Chemistry for Health Sciences Lab	(1 credits)	Prerequisite: MAT 1033; Corequisite: CHM 1033
MCB 2010	Microbiology	(3 credits)	Pre-requisites: BSC 2010/2010L; or BSC 2085/2085L; CHM1045/1045L CHM 1033/1033L; Corequisite: MCB 2010L



ARC 2681	Environmental Technology	(3 credits)	Prerequisite: ARC 1126C
BCN 1272	Building Construction Plans Interpretation 1	(3 credits)	
BCN 1275	Building Construction Plans Interpretation 2	(3 credits)	Prerequisite: BCN 1272
BCT 1743	Building Construction Law	(3 credits)	
BCT 1750	Building Construction Financing	(3 credits)	
BCT 1770	Building Construction Estimating Fundamentals	(3 credits)	Prerequisite: BCN 1272
BCT 1771	Building Construction Advanced Estimating	(3 credits)	Prerequisite: BCN 1275, BCT 1770
BCT 2760	Building Code Regulations	(3 credits)	
MAC 1114	Trigonometry	(3 credits)	Prerequisite: MAC 1105 or MAC 1106
SUR 1001C	Construction Survey	(3 credits)	Prerequisite: MAC 1114 or MAC 1147

**MAJOR COURSE ELECTIVE (3.00 credits)**

ARC\*, BCN\*, BCT\*

CGS 1060C	Introduction to Computer Technology & Applications	(4 credits)
ETM 1700	Air Conditioning Fundamentals	(3 credits)



## Business Administration

Associate in Science | Code: 25051 | 60 credits

CIP (1552020102)

Effective Term: Fall 2022 (2227)

This program transfers to four-year institutions. See department for information. The Business Administration program trains individuals to assume management or supervisory positions in business, industry, and government. It provides basic skills in a broad range of business functions including accounting, computer usage, management and marketing. Successful completion of this program earns the student entry into any university in the State University System as part of the A.S. to B.S. program.

### GENERAL EDUCATION REQUIREMENTS (15 Credits)

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **NATURAL SCIENCE (3.00 credits)**

AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)

#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

#### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---OR---

CGS 1060C	Introduction to Computer Technology & Applications
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### **MAJOR COURSE REQUIREMENTS (14.00 Credits)**

ACG 2011	Principles of Accounting 2	(3 credits)	Corequisite: ACG 2011L
ACG 2011L	Principles of Accounting 2 Lab	(1 credits)	Corequisite: ACG 2011
--- OR ---			
ACG 2021	Financial Accounting	(3 credits)	Corequisite: ACG 2021L

ACG 2021L	Financial Accounting Lab	(1 credits)	Corequisite: ACG 2021
<b>---AND---</b>			
ACG 2071	Managerial Accounting	(3 credits)	Prerequisite: ACG 2011 and ACG 2001 or ACG 2021; Corequisite: ACG 2071L
ACG 2071L	Managerial Accounting Lab	(1 credits)	Prerequisite: ACG2001, ACG 2011, ACG2021, ACG2021L; Corequisite: ACG207
ECO 2023	Principles of Economics (Micro)	(3 credits)	
GEB 1011	Principles of Business	(3 credits)	

#### **PROGRAM CORE REQUIREMENTS (12-18 Credits)**

**(Students must select one track)**

##### **Track 1 – Business Management (15 Credits)**

MAN 2021	Principles of Management	(3 credits)
MAN 2604	Managing in a Multi-Cultural Environment	(3 credits)
MAR 1011	Principles of Marketing	(3 credits)
MNA 1345	Effective Supervision	(3 credits)
SBM 1000	Small Business Management	(3 credits)

**---Or---**

##### **Track 2 – Marketing (18 credits)**

MAR 1011	Principles of Marketing	(3 credits)
MAR 1720	Marketing in a Digital World	(3 credits)
MAR 2101	Social Media Marketing	(3 credits)
MAR 2150	International Marketing	(3 credits)
MAR 2520	Hispanic Marketing	(3 credits)
MKA 1511	Principles of Advertising and Copywriting	(3 credits)

**---Or---**

##### **Track 3 – Human Resources (15 credits)**

MAN 2021	Principles of Management	(3 credits)
MAN 2300	Human Resource Management	(3 credits)
MAR 2101	Social Media Marketing	(3 credits)
MNA 1345	Effective Supervision	(3 credits)
MNA 2120	Human Relations in Business	(3 credits)

**---Or---**

##### **Track 4 – International Business (12 credits)**

FIN 2051	International Financial Management	(3 credits)
GEB 2350	Introduction to International Business	(3 credits)
MAN 2604	Managing in a Multi-Cultural Environment	(3 credits)
MAR 2150	International Marketing	(3 credits)

**---Or---**

##### **Track 5 – Small Business (12 credits)**

GEB 2112	Introduction to Entrepreneurship	(3 credits)
MAN 2021	Principles of Management	(3 credits)
MAR 1011	Principles of Marketing	(3 credits)
SBM 1000	Small Business Management	(3 credits)

#### **ELECTIVES (13 - 19 Credits)**

ACG*	ECO*	HFT*	MKA*	PUR*	TAX*
BAN*	FIN*	MAN*	MNA*	QMB*	TRA*
BUL*	GEB*	MAR*	OST*	SBM*	

CGS 1060C	Introduction to Computer Technology & Applications	(4 credits)	
ENC 1102	English Composition 2	(3 credits)	Prerequisite: ENC 1101
LIS 2004	Strategies for Online Research	(1 credit)	
MAC 2233	Business Calculus	(3 credits)	Prerequisite: MAC 1105 or MAC1106
MTB 1103	Business Mathematics	(3 credits)	
SPC 1017	Introduction to Communication	(3 credits)	

CTS 1437	Microsoft SQL Administration	(4 credits)	
CTS 2433	Microsoft SQL Implementation	(4 credits)	Prerequisite: CTS 1437
CTS 2450	Business Intelligence: Analysis Services and Data Mining	(4 credits)	Prerequisite: CTS 1437 or CTS 2433 or CTS 2451
CTS 2451	Business Intelligence: Reporting Services	(4 credits)	Prerequisite: CTS 1437 or CTS 2433
STA 2023	Statistical Methods	(3 credits)	Prerequisite: MAT 1033* or MGF 1106

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

**PROGRAM ELECTIVES – 10 Credit Hours**

Electives are restricted to courses listed below:

ACG\*, CAP\*, CGS\*, CIS\*, CNT\*, COP\*, CTS\*, FIN\*, GEB\*, MAD\*, MAN\*, QMB\*



## Civil Engineering Technology

Associate in Science | Code: 26035 | 63 credits

CIP (1715020101)

The Civil Engineering Technology program is designed for those students who wish immediate job placement prior to or after graduation. This program also satisfies many of the civil engineering freshman and sophomore requirements for the Bachelor of Engineering Technology degree offered by certain universities. Consult your Civil Engineering advisor prior to registration.

### **GENERAL EDUCATION REQUIREMENTS (15.00 credits)**

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **NATURAL SCIENCE (3.00 credits)**

AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
PHY 1020	General Education Physics	(3 credits)

#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications
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### **MAJOR COURSE REQUIREMENTS (41.00 credits)**

ETC 2450	Concrete Construction	(3 credits)	Prerequisite: ETG 2502
ETD 1110	Technical Drawing 1	(4 credits)	
ETD 1542	Structural Drafting	(4 credits)	Prerequisite: ETD 1110
ETG 2502	Statics	(3 credits)	Prerequisite: MAC 1105
ETG 2530C	Strength of Materials	(3 credits)	Prerequisite: ETG 2502 or Equivalent
MAC 1114	Trigonometry	(3 credits)	Prerequisite: MAC 1105 or MAC 1106
SUR 1101C	Surveying 1	(4 credits)	Prerequisites MAC1114 or MAC1147

SUR 1202C	Surveying 2	(4 credits)	Prerequisite: SUR 1101C
SUR 2301C	Topography & Mapping	(4 credits)	Departmental Permission
SUR 2400C	Land Surveying 1	(3 credits)	Prerequisite: SUR 1101C
SUR 2404C	Land Surveying 2	(3 credits)	
SUR 2462C	Subdivisions	(3 credits)	Prerequisite: EGS 1111C

**MAJOR COURSE ELECTIVE (7.00 credits)**

EGN 2200	Computer Applications in Engineering	(3 credits)	Pre/Co-requisite MAC1114 or MAC1147
EGS 1111C	Engineering Graphics	(5 credits)	
EGS 1220C	Basic Computer Language	(2 credits)	
ETC 1250	Construction Materials	(3 credits)	
ETC 1930	Construction and Engineering Seminar 1	(1-3 credits)	
ETC 2201	Design and Inspection Engineer Seminar 1	(3 credits)	
ETC 2207	Computing and Estimating	(3 credits)	
ETC 2210C	Geotechnics and Soils	(4 credits)	
ETI 2121	Materials Testing	(3 credits)	Prerequisite: MAC 1105
ETM 1313C	Hydraulics and Pneumatics	(3 credits)	Prerequisite: MAC 1105
SUR 1001C	Construction Survey	(3 credits)	Prerequisite: MAC1114 or MAC 1147
SUR 1640C	Land Surveying Computations	(3 credits)	Prerequisite: MAC 1105 or 1140; Corequisite: MAC 1114
SUR 2330C	Photogrammetry 1	(3 credits)	

**FIRST TERM IN PROGRAM (9.00 credits)**

MLT 1040L	Introduction to Medical Laboratory Technology	(1credits)	
MLT1210C	Clinical Urinalysis with Lab	(2 credits)	
MLT 1300	Clinical Hematology	(2 credits)	Corequisite: MLT 1300L
MLT 1300L	Clinical Hematology Laboratory	(2 credits)	Corequisite: MLT 1300
MLT 1752	Quality Control Laboratory Mathematics	(2 credits)	

**SECOND TERM IN PROGRAM (9.00 credits)**

MLT 1500	Clinical Immunology/Serology	(2 credits)	Prerequisite: BSC 2085, BSC2086 Corequisite: MLT 1500L
MLT 1500L	Clinical Immunology/Serology Laboratory	(1 credits)	Prerequisite: BSC 2085L, BSC2086L Corequisite: MLT 1500
MLT 1610	Clinical Chemistry 1	(2 credits)	Prerequisite: CHM 1025 Corequisite: MLT 1610L
MLT 1610L	Clinical Chemistry 1 Laboratory	(2 credits)	Prerequisite: CHM 1025L Corequisite: MLT 1610
MLT 2440	Clinical Microbiology 1	(1 credits)	Corequisite: MLT 2440L
MLT 2440L	Clinical Microbiology Lab 1	(1 credits)	Corequisite: MLT 2440

**THIRD TERM IN PROGRAM (6.00 credits)**

MLT 1330	Clinical Coagulation	(1 credits)	Prerequisite: MLT 1300 Corequisite: MLT 1330L
MLT 1330L	Clinical Coagulation Laboratory	(1 credits)	Prerequisite: MLT 1300L Corequisite: MLT 1330
MLT 2525	Immunohematology	(2 credits)	Prerequisite: MLT 1500 Corequisite: MLT 2025L
MLT 2525L	Immunohematology Laboratory	(2 credits)	Prerequisite: MLT 1500L Corequisite: MLT 2525

**FOURTH TERM IN PROGRAM (9.00 credits)**

MLT 2403	Clinical Microbiology 2	(2 credits)	Prerequisite: MLT 2440 Corequisite: MLT 2403L
MLT 2403L	Clinical Microbiology Lab 2	(2 credits)	Prerequisite: MLT 2440L Corequisite: MLT 2403
MLT 2620	Clinical Chemistry 2	(2 credits)	Prerequisite: MLT 1610 Corequisite: MLT 2620L
MLT 2620L	Clinical Chemistry 2 Laboratory	(1 credits)	Prerequisite: MLT 1610L Corequisite: MLT 2620
MLT 2624L	Special Techniques in Clinical Chemistry	(2 credits)	Prerequisite: MLT 1610, 1610L Corequisite: MLT 2620, 2620L

**FIFTH TERM IN PROGRAM (14.00 credits)**

MLT 2807L	Hospital Practicum: Immunohematology	(3 credits)	Prerequisite: MLT 2525, MLT 2525L Corequisite: MLT 2930
MLT 2809L	Hospital Practicum: Hematology	(3 credits)	Prerequisite: MLT 1300, 1300L, 1330, 1330L Corequisite: MLT 2930
MLT 2810L	Hospital Practicum: Chemistry	(3 credits)	Prerequisite: MLT 2620, 2620L, 2624L Corequisite: MLT 2930
MLT 2811L	Hospital Practicum: Microbiology	(3 credits)	Prerequisite: MLT 2403, 2403L

			Corequisite: MLT 2930
MLT 2930	Medical Laboratory Technology Seminar	(2 credits)	Corequisite: MLT 2807L, 2809L, 2810L, 2811L





## Computer Crime Investigation

Associate in Science | Code: 27028 | 60 credits

CIP (1743040300)

The Associate in Science (AS) in Computer Crime Investigation will prepare graduates with the education and skills needed to fulfill roles and positions in the Information Security industry. The coursework will include education and applied technical skills in the criminal justice and information security fields.

### GENERAL EDUCATION REQUIREMENTS (15 Credits)

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **NATURAL SCIENCE (3.00 credits)**

BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
PHY 1020	General Education Physics	(3 credits)

#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### COMPUTER COMPETENCY REQUIREMENT

Test type(s) needed:

Computer Skills Placement (CSP)

---OR---

CGS 1060C	Introduction to Computer Technology & Application
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### MAJOR COURSE REQUIREMENTS (30 credits)

CCJ 1010	Introduction to Criminology	(3 credits)	
CET 2880C	Digital Forensics	(4 credits)	
CGS 1700	Introduction to Operating Systems	(4 credits)	
CJL 2062	Constitutional Law & Legal Procedure	(3 credits)	
CTS 1120	Fundamentals of Networking Security	(4 credits)	
CTS 1134	Networking Technologies	(4 credits)	
DSC 1590	Introduction to Intelligence Studies	(3 credits)	
DSC 2501	Writing & Reporting for the IC	(3 credits)	Prerequisite: ENC1101
--AND--			
CIS 1949	Co-Op Work Experience	(2 credits)	
--OR--			

CIS 2900	Directed Information Technology Study	(2 credits)	Department Approval Required
<b><u>MAJOR COURSE ELECTIVES (15 credits)</u></b>			
CET 2369C	Embedded Hardware Programming	(4 credits)	Pre/Corequisite: MAC1105
CGS 1060C	Introduction to Computer Technology & Application	(4 credits)	
CGS 1540C	Database design	(4 credits)	
CJE 1680	Introduction to Computer Crimes	(3 credits)	Prerequisites: MAT0022C, or MAT0028, or MAT0057 or by placement score, or eligible exemption.
COP 1334	Introduction to C++	(4 credits)	
COP 2270	"C" for Engineers	(4 credits)	
DSC 1006	Introduction to Homeland Security	(3 credits)	
DSC 2590	Intelligence Analysis & Security Management	(3 Credits)	
MAT 1033	Intermediate Algebra	(3 credits)	



### **Computer Engineering Technology**

*Associate in Science | Code: 26052 | 68 credits*

**CIP (1615120100)**

The Computer Engineering Technology program prepares students for employment as computer engineering technicians or technologists and in related occupations in electronics. It also provides supplemental training for persons currently or previously employed in these occupations. The program focuses on the understanding and applying of hardware and software concepts, in addition to troubleshooting techniques to digital, microprocessor or computer-based systems. Assembly, installation, operation, maintenance, calibration, troubleshooting, repairing and elementary designs of medical systems are taught using an integrated and theoretical approach.

#### **GENERAL EDUCATION REQUIREMENTS**

##### ***COMMUNICATIONS (3.00 credits)***

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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##### ***HUMANITIES (3.00 credits)***

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

##### ***MATHEMATICS (3.00 credits)***

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

##### ***NATURAL SCIENCE (3.00 credits)***

AST 1002	Descriptive Astronomy	(3 credits)	
BSC 1005	General Education Biology	(3 credits)	
CHM 1020	General Education Chemistry	(3 credits)	
ESC 1000	General Education Earth Science	(3 credits)	
EVR 1001	Introduction to Environmental Science	(3 credits)	
PHY 1020	General Education Physics	(3 credits)	
PHY 2053	Physics (without Calculus) 1	(3 credits)	Prerequisite: MAC 1114 or MAC 1147; Corequisite: PHY 2053L

##### ***SOCIAL SCIENCE (3.00 credits)***

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

#### **COMPUTER COMPETENCY**

*Test type(s) needed:*

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications
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**MAJOR COURSE REQUIREMENTS (46.00 credits)**

CET 1110C	Digital Circuits	(4 credits)	Prerequisite: EET1015C, MAC1105; Pre/Corequisite: COP2270
CET 1171	Introduction to Computer Service and Maintenance	(3 credits)	
CET 1178C	A+ Computer Hardware Service	(3 credits)	Prerequisite: CET1171
CET 1487C	Network+	(3 credits)	
CET 2113C	Advanced Digital Circuits	(4 credits)	Prerequisite: CET1110C, COP2270; Pre/Corequisite: EET1141C
CET 2123C	Microprocessors	(4 credits)	Prerequisite: CET 1110C and COP 2270
CET 2588C	Server + Service and Maintenance	(3 credits)	
COP 2270	"C" for Engineers	(4 credits)	Pre/Corequisite: MAC 1105
EET 1015C	Direct Current Circuits	(4 credits)	Prerequisite: MAC 1105
EET 1025C	Alternating Current Circuits	(4 credits)	Prerequisite: EET 1015C; Pre/Corequisite: MAC 1114 or 1147
EET 1082	Introduction to Electronics	(3 credits)	
EET 2351C	Digital and Data Communications	(4 credits)	Prerequisite: CET 2123C.
MAC 1114	Trigonometry	(3 credits)	Prerequisite: MAC 1105 or MAC 1106

**MAJOR COURSE ELECTIVE (7.00 credits)**

EET 1141C	Electronics 1	(4 credits)	Prerequisite: EET1025C, and MAC 1114 or MAC 1147
EET 2101C	Electronics 2	(4 credits)	Prerequisite: EET 1141C
EET 2323C	Analog Communications	(4 credits)	Prerequisite: EET 1141C
MAC*			
PHY*			



## Computer Information Technology

Associate in Science | Code: 25055 | 60 credits

CIP (1511010307)

The Computer Information Technology program is to provide an opportunity to establish a basic foundation in computer applications. Graduates are prepared for positions as microcomputer support specialists, user support specialists, applications system specialists and computer information managers to meet the demands of today's automated offices. In addition, program objectives are designed to assist students in their development of interpersonal and communication skills required by office professionals.

### **GENERAL EDUCATION REQUIREMENTS**

#### ***COMMUNICATIONS (3.00 credits)***

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### ***HUMANITIES (3.00 credits)***

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### ***MATHEMATICS (3.00 credits)***

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
STA 2023	Statistical Methods	(3 credits)	Prerequisite: MAT 1033♦ or MGF 1106

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### ***NATURAL SCIENCE (3.00 credits)***

AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
PHY 1020	General Education Physics	(3 credits)

#### ***SOCIAL SCIENCE (3.00 credits)***

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C Introduction to Computer Technology & Applications

**MAJOR COURSE REQUIREMENTS (45.00 credits)*****Program Core – 32 Credit Hours******Group A: Must take 4 credit hours from the following options.***

CTS 1134	Networking Technologies	(4 credits)
CTS 1650	CCNA 1: Cisco Fundamentals	(4 credits)

***---AND---***

***Group B: Must take 28 credit hours from the following options.***

CGS 1060C	Introduction to Computer Technology and Applications	(4 credits)	
CGS 1560	A+ Computer Operating Systems	(4 credits)	Prerequisite: CGS1060C or Previous Computer Experience
CGS 2108	Advanced Desktop Applications	(4 credits)	Prerequisite: CGS1060C
CTS 1131	A+ Computer Essentials & Support	(4 credits)	Prerequisite: CGS 1560
CTS 1328	Supporting Microsoft Clients	(4 credits)	Prerequisite: CGS1060C or Previous Computer Experience
CTS 2148C	IT Project Management	(4 credits)	
CTS 2153	Supporting Windows Users & Applications	(4 credits)	Prerequisite: CTS 1328

**PROGRAM ELECTIVES (13.00 credits)**

CAP\*, CEN\*, CGS\*, CIS\*, COP\*, CTS\*, GIS\*



## Computer Programming and Analysis – Business Application Programming

Associate in Science | Code: 25065 | 60 credits

CIP (1511020101)

Effective Fall 2022 (2227)

The Computer Programming and Analysis program with a Business Application Programming concentration provides an opportunity to establish a foundation in computer programming in scientific, commercial, industrial and government data processing applications. Graduates are prepared for positions as entry-level application programmers, programmer specialists, computer programmers and programmer analysts.

### GENERAL EDUCATION REQUIREMENTS – 15 Credit Hours

#### **Communications – 3 Credits**

ENC 1101	English Composition 1	3	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **Humanities – 3 Credits**

ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature	3	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	3	

#### **Mathematics – 3 Credits**

MAC 1105	College Algebra	3	Prerequisite: MAT 1033♦
STA 2023	Statistical Methods	3	Prerequisite: MAT 1033 or MGF 1106

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **Natural Science – 3 Credits**

AST 1002	Descriptive Astronomy	3
BSC 1005	General Education Biology	3
CHM 1020	General Education Chemistry	3
ESC 1000	General Education Earth Science	3
EVR 1001	Introduction to Environmental Science	3
PHY 1020	General Education Physics	3

#### **Social Science – 3 Credits**

AMH 2020	History of the US Since 1877	3
POS 2041	American Federal Government	3

### COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications
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### MAJOR COURSE REQUIREMENTS – 21 Credit Hours

CGS 1060C	Intro to Computer Technology and Applications	4	
CGS 1540C	Database Concepts and Design	4	
CIS 2331	Systems Analysis, Design and Implementation	5	
COP 1334	Introduction to C++ Programming	4	
COP 2800	Java Programming	4	Prerequisite: COP 1334

### PROGRAM CONCENTRATION CORE – 8 Credit Hours

ACG 2021	Financial Accounting	3	Corequisite: ACG 2021L
ACG 2021L	Financial Accounting Lab	1	Corequisite: ACG 2021

COP 1047C	Introduction to Python Programming	4
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**PROGRAM ELECTIVES – 16 Credit Hours**

*Must take 4 credits from the following group:*

COP 2335	Object Oriented Programming Using C++	4	
COP 2805C	Advanced Java Programming	4	Prerequisite: COP 2800

**--- And ---**

*Must take 12 credits from the following group:*

COP2*		4	
CEN 2211	C/C++ Programming for Embedded Devices	4	Prerequisite: COP 1334; Corequisite: EET 1033
CEN 2212C	Introduction to Programing the IoT	4	Prerequisite: CEN 2211 and EET 1033C
CGS 2091	Professional Ethics and Social Issues in CS	4	
COP 1332	Introduction to Visual Basic Programming	4	Pre/Corequisite: CGS 1060C
CTS 1800	Introduction to Web Development	4	
CTS 2148C	IT Project Management	4	
CTS 2440	Introduction to Oracle: SQL and PL/SQL	4	
CTS 2466C	Internet of Things (IoT) Development with C#	4	Prerequisite: CEN 2211
EET 1033C	Electrical Fundamentals	4	





## Computer Programming and Analysis – Internet of Things (IoT) Applications

Associate in Science | Code: 25076 | 60 credits

CIP (1511020101)

Effective Fall 2022 (2227)

Students in the AS in Computer Programming and Analysis with an IoT Applications concentration are trained to help individuals and organizations by increasing convenience and productivity through the connection of “smart” devices. This is done with the development of applications that can run on microcontroller boards, designing and simulating the function of the devices, and building physical prototypes. Students learn how to develop applications in the dominant programming languages used in IoT, configure different single board computers, and complete projects that can be included in a portfolio. Graduates are prepared for positions as entry-level application programmers, rapid prototyping assistants, programmer specialists, embedded software developers, IoT consultants, and connected device support specialists.

### GENERAL EDUCATION REQUIREMENTS – 15 Credit Hours

#### **Communications – 3 Credits**

ENC 1101	English Composition 1	3	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **Humanities – 3 Credits**

ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature	3	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	3	

#### **Mathematics – 3 Credits**

MAC 1105	College Algebra	3	Prerequisite: MAT 1033♦
STA 2023	Statistical Methods	3	Prerequisite: MAT 1033 or MGF 1106

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **Natural Science – 3 Credits**

AST 1002	Descriptive Astronomy	3
BSC 1005	General Education Biology	3
CHM 1020	General Education Chemistry	3
ESC 1000	General Education Earth Science	3
EVR 1001	Introduction to Environmental Science	3
PHY 1020	General Education Physics	3

#### **Social Science – 3 Credits**

AMH 2020	History of the US Since 1877	3
POS 2041	American Federal Government	3

### COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications
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**MAJOR COURSE REQUIREMENTS – 21 Credit Hours**

CGS 1060C	Intro to Computer Technology and Applications	4	
CGS 1540C	Database Concepts and Design	4	
CIS 2331	Systems Analysis, Design and Implementation	5	
COP 1334	Introduction to C++ Programming	4	
COP 2800	Java Programming	4	Prerequisite: COP 1334

**PROGRAM CONCENTRATION CORE – 16 Credit Hours**

CEN 2211	C/C++ Programming for Embedded Devices	4	Prerequisite: COP 1334; Co-req: EET 1033
CEN 2212C	Introduction to Programing the IoT	4	Prerequisite: CEN 2211 and EET 1033C
CTS 2466C	Internet of Things (IoT) Development with C#	4	Prerequisite: CEN 2211
EET 1033C	Electrical Fundamentals	4	

**PROGRAM ELECTIVES – 8 Credit Hours**

COP2*		4	
CGS 2091	Professional Ethics and Social Issues in CS	4	
COP 1047C	Introduction to Python Programming	4	
COP 1332	Introduction to Visual Basic Programming	4	Pre/Corequisite: CGS 1060C
CTS 1120	Cybersecurity Fundamentals	4	
CTS 1134	Networking Technologies	4	
CTS 1800	Introduction to Web Development	4	
CTS 2148C	IT Project Management	4	
CTS 2440	Introduction to Oracle: SQL and PL/SQL	4	



## Computer Programming and Analysis – Mobile Applications Development

Associate in Science | Code: 25070 | 60 credits

CIP (1511020101)

Effective Term: Fall 2022 (2227)

The Computer Programming and Analysis program provides an opportunity to establish a foundation in computer programming in scientific, commercial, industrial and government data processing applications. The Mobile Applications Development concentration additionally offers hands-on instruction with current technology for Apple and Android mobile device platforms. Graduates are prepared for positions as app developers.

### GENERAL EDUCATION REQUIREMENTS – 15 Credit Hours

#### **Communications – 3 Credits**

ENC 1101	English Composition 1	3	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **Humanities – 3 Credits**

ARH 1000	Art Appreciation	3	
HUM 1020	Introduction to Humanities	3	
LIT 2000	Introduction to Literature	3	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	3	

#### **Mathematics – 3 Credits**

MAC 1105	College Algebra	3	Prerequisite: MAT 1033♦
STA 2023	Statistical Methods	3	Prerequisite: MAT 1033 or MGF 1106

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **Natural Science – 3 Credits**

AST 1002	Descriptive Astronomy	3
BSC 1005	General Education Biology	3
CHM 1020	General Education Chemistry	3
ESC 1000	General Education Earth Science	3
EVR 1001	Introduction to Environmental Science	3
PHY 1020	General Education Physics	3

#### **Social Science – 3 Credits**

AMH 2020	History of the US Since 1877	3
POS 2041	American Federal Government	3

### COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications
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### MAJOR COURSE REQUIREMENTS – 21 Credit Hours

CGS 1060C	Intro to Computer Technology and Applications	4	
CGS 1540C	Database Concepts and Design	4	
CIS 2331	Systems Analysis, Design and Implementation	5	
COP 1334	Introduction to C++ Programming	4	
COP 2800	Java Programming	4	Prerequisite: COP 1334

**PROGRAM CONCENTRATION CORE – 16 Credit Hours**

COP 2654	iPhone Application Development 1	4	Prerequisite: COP 1332 or COP 1334
COP 2658	iPhone Application Development 2	4	Prerequisite: COP 2654
COP 2660	Android Application Development 1	4	Prerequisite: COP 2800
COP 2662	Android Application Development 2	4	Prerequisite: COP 2660 and COP 2800

**PROGRAM ELECTIVES – 8 Credit Hours**

COP2*		4	
CEN 2211	C/C++ Programming for Embedded Devices	4	Prerequisite: COP 1334; Corequisite: EET 1033
CEN 2212C	Introduction to Programing the IoT	4	Prerequisite: CEN 2211 and EET 1033C
CGS 2091	Professional Ethics and Social Issues in CS	4	
COP 1047C	Introduction to Python Programming	4	
COP 1332	Introduction to Visual Basic Programming	4	Pre/Corequisite: CGS 1060C
CTS 1800	Introduction to Web Development	4	
CTS 2148C	IT Project Management	4	
CTS 2440	Introduction to Oracle: SQL and PL/SQL	4	
CTS 2466C	Internet of Things (IoT) Development with C#	4	Prerequisite: CEN 2211
EET 1033C	Electrical Fundamentals	4	



### **Crime Scene Technology – Crime Scene Investigation**

*Associate in Science | Code: 27026 | 60 credits*

**CIP (1743040600)**

The Associate in Science Degree in Crime Scene Technology prepares students for employment in the field of criminalistics with a specialty in Crime Scene Investigation or Forensic Science. Graduates of this program may find employment as a Forensic Science Technician, Crime Scene Technician, Medical Examiner Investigator, Medical Investigator, Insurance Investigator, Legal Investigator, Forensic Paralegal, Crime Scene Investigator, and Laboratory Technician, among others. Students may also continue their formal education with the College and receive a Bachelor of Applied Science in Public Safety Management.

#### **GENERAL EDUCATION REQUIREMENTS (15 Credits)**

##### **1. COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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##### **2. HUMANITIES (3.00 credits)**

PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
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##### **3. MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033*
MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

##### **4. NATURAL SCIENCE (3 credits)**

BSC1005	General Education Biology	(3 credits)
CHM1020	General Education Chemistry	(3 credits)

##### **5. SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

#### **COMPUTER COMPETENCY REQUIREMENT**

*Test type(s) needed:*

Computer Skills Placement (CSP)

---OR---

CGS 1060C	Introduction to Computer Technology & Application
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#### **MAJOR COURSE REQUIREMENTS (19.00 credits)**

CCJ 1020	Introduction to Criminal Justice	(3 credits)
CHS 1522C	Forensic Science 1	(4 credits)
CJE 1640	Crime Scene Technology 1	(3 credits)
CJE 1673	Crime Scene Photography 1	(3 credits)
CJE 2600	Criminal Investigation	(3 credits)
CJE 2671	Basic Fingerprinting	(3 credits)

#### **MAJOR COURSE ELECTIVE (26.00 credits)**

CCJ 1191	Human Behavior in Criminal Justice	(3 credits)	
CCJ 2053	Criminal Justice Ethics and Professionalism	(3 credits)	Prerequisite: PHI 2604
CCJ 2358	Criminal Justice Reporting	(3 credits)	Prerequisite: ENC 1101

CGS 1060C	Introduction to Computer Technology & Application	(4 credits)	
CJE 1642	Crime Scene Technology 2	(3 credits)	Prerequisite: CJE 1640
CJE 1772	Crime Scene Photography 2	(3 credits)	Prerequisite: CJE 1673
CJE 2644	Crime Scene Safety	(3 credits)	
CJE 2672	Fingerprint Development	(3 credits)	Prerequisite: CJE 2671
CJL 2610	Courtroom Presentation	(3 credits)	
♦MAC*		(3 credits)	
♦MAT*		(3 credits)	
PHI 2604	Critical Thinking and Ethics	(3 credits)	Prerequisite: ENC 1101
SPC 1017	Fundamentals of Speech Communication	(3 credits)	

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.



### **Crime Scene Technology – Forensic Science**

*Associate in Science | Code: 27027 | 60 credits*

**CIP (1743040600)**

The Associate in Science Degree in Crime Scene Technology prepares students for employment in the field of criminalistics with a specialty in Crime Scene Investigation or Forensic Science. Graduates of this program may find employment as a Forensic Science Technician, Crime Scene Technician, Medical Examiner Investigator, Medical Investigator, Insurance Investigator, Legal Investigator, Forensic Paralegal, Crime Scene Investigator, and Laboratory Technician, among others. Students may also continue their formal education with the College and receive a Bachelor of Applied Science in Public Safety Management.

#### **GENERAL EDUCATION REQUIREMENTS (15 Credits)**

##### **1. COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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##### **2. HUMANITIES (3.00 credits)**

PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
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##### **3. MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033*
MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

##### **4. NATURAL SCIENCE (3 credits)**

BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)

##### **5. SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

#### **COMPUTER COMPETENCY REQUIREMENT**

*Test type(s) needed:*

Computer Skills Placement (CSP)

---OR---

CGS 1060C	Introduction to Computer Technology & Application
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#### **MAJOR COURSE REQUIREMENTS (19.00 credits)**

CCJ 1191	Human Behavior in Criminal Justice	(3 credits)
CCJ 1020	Introduction to Criminal Justice	(3 credits)
CHS 1522C	Forensic Science 1	(4 credits)
CJE 1640	Crime Scene Technology 1	(3 credits)
CJE 2600	Criminal Investigation	(3 credits)
CJE 2671	Basic Fingerprinting	(3 credits)

#### **MAJOR COURSE ELECTIVE (26.00 credits)**

BSC 2426	Biotechnology Methods and Applications 1	(3 credits)	Corequisite: BSC 2426L
BSC 2426L	Biotechnology Methods & Applications 1 Laboratory	(2 credits)	Corequisite: BSC 2426
BSC 2427	Biotechnology Methods and Applications 2	(3 credits)	Prerequisites: BSC 2426, 2426L;

BSC 2427L	Biotechnology Methods & Applications 2 Laboratory	(2 credits)	Corequisite: BSC 2427L Prerequisites: BSC 2426, 2426L;
CHM 1045	General Chemistry and Qualitative Analysis	(3 credits)	Corequisite: BSC 2427 Prerequisite: CHM1025 or a passing score on the CART exam, MAC 1105;
CHM 1045L	General Chemistry and Qualitative Analysis Lab	(2 credits)	Corequisite: CHM 1045L Prerequisite: CHM1025 or a passing score on the CART exam, MAC 1105;
CHM 1046	General Chemistry and Qualitative Analysis	(3 credits)	Corequisite: CHM 1045 Prerequisite: CHM1045L;
CHM 1046L	General Chemistry & Qualitative Analysis Lab	(2 credits)	Corequisite: CHM1046L Prerequisite: CHM1045L;
CHS 2523	Forensic Science 2	(3 credits)	Corequisite: CHM1046 Prerequisite: CHS 1522C
♦MAC*		(3 credits)	
♦MAT*		(3 credits)	
SPC 1017	Fundamentals of Speech Communication	(3 credits)	

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.



**Criminal Justice Technology**
*Associate in Science | Code: 27012 | 60 credits*
**CIP (1743010302)**

Upon completion of the Criminal Justice Technology program, the student will be eligible for the Associate in Science degree. The A.S. degree opens up entry-level non-sworn positions in local, state and federal agencies, i.e., juvenile justice, private security, law enforcement, corrections, probation and parole, detention centers and community-based intervention programs.

**GENERAL EDUCATION REQUIREMENTS (15 Credits)**
**COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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**HUMANITIES (3.00 credits)**

PHI 2010	Introduction to Philosophy	(3 credits)
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**MATHEMATICS (3.00 credits)**

MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.
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**NATURAL SCIENCE (3.00 credits)**

BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)

**SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

**COMPUTER COMPETENCY REQUIREMENT**
*Test type(s) needed:*

Computer Skills Placement (CSP)

---OR---

CGS 1060C	Introduction to Computer Technology & Application
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**MAJOR COURSE REQUIREMENTS (12.00 credits)**

CCJ 1010	Introduction to Criminology	(3 credits)
CCJ 1020	Introduction to Criminal Justice	(3 credits)
CJC 1000	Introduction to Corrections	(3 credits)
CJL 2062	Constitutional Law and Legal Procedure or Evidence	(3 credits)

**MAJOR COURSE ELECTIVE (33.00 credits)**

CCJ 1191	Human Behavior in Criminal Justice	(3 credits)	Prerequisite: PHI 2604
CCJ 2053	Criminal Justice Ethics and Professionalism	(3 credits)	
CCJ 2650	Narcotics and Dangerous Substances	(3 credits)	
CGS 1060C	Introduction to Computer Technology & Application	(4 credits)	
CJC 1162	Parole and Probation	(3 credits)	
CJE 2600	Criminal Investigation	(3 credits)	Prerequisite: ENC 1101
CJL 2002	Juvenile Delinquency	(3 credits)	
CJL 1100	Criminal Law	(3 credits)	
DSC 1006	Introduction to Homeland Security	(3 credits)	
DSC 2242	Transportation and Border Security	(3 credits)	
DSC 2590	Intelligence Analysis and Security Management	(3 credits)	
PHI 2604	Critical Thinking and Ethics	(3 credits)	
SPC 1017	Fundamentals of Speech Communication	(3 credits)	
SYG 2000	Introduction to Sociology	(3 credits)	



## Culinary Arts Management

Associate in Science | Code: 22031 | 60 credits

CIP (1612050401)

Effective Term: Fall 2022 (2227)

The Associate in Science degree will groom individuals for careers in the widely varied areas of the culinary industry, including production line and supervisory positions. This competency based culinary program will provide the student with a unique combination of comprehensive theoretical knowledge and hands on training. Students will master the fundamentals of culinary production in an environment that builds teamwork while gaining practical individualized experiences. The course content includes food preparation and service; identification, storage, selection and presentation of foods; training in communication, leadership, human relations, and employability skills; and sanitation and safe work practices. Earning a degree will enable students to pursue further education at the university level or begin working in the field immediately upon graduation.

### **GENERAL EDUCATION REQUIREMENTS – 15 Credits Required**

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
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#### **MATHEMATICS (3.00 credits)**

MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.
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#### **NATURAL SCIENCE (3.00 credits)**

BSC 1005	General Education Biology	(3 credits)	
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#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---Or---

CGS 1060C – Introduction to Computer Technology & Applications

### **MAJOR COURSE REQUIREMENTS - 45.00 Credits Required**

ACG 1403	Excel for Business	(1 credit)	
FSS 1200	Culinary Terminology and Procedures	(3 credits)	Corequisite: FSS 1202C
FSS 1202C	Food Production 1 – Fundamental Skills	(3 credits)	Corequisite: FSS 1200
FSS 1204C	Food Production 2 – American Regional Cuisine	(3 credits)	Prerequisites: FSS 1200, 1202C
FSS 1246C	Basic Baking – Foundational Skills	(3 credits)	Prerequisites: FSS 1200, 1202C
FSS 1801	Culinary Sustainability and Practices	(3 credits)	Prerequisite: FSS 2248C
FSS 2205C	Food Production 3 – Contemporary Cuisine and Modernist Methods	(3 credits)	Prerequisites: FSS 1200, 1202C, 1204C, 1246C, 2242C, 2248C
FSS 2242C	International Cuisines	(3 credits)	Prerequisites: FSS 1200, 1202C, 1204C, 1246C, 2248C
FSS 2248C	Garde Manger	(3 credits)	Prerequisites: FSS 1200, 1202C, 1246C
FSS 2381	Culinary Management Internship	(4 credits)	Prerequisites: FSS 2205L
FSS 2940	Culinary Management Externship	(4 credits)	
HFT 1212	Safety & Sanitation	(3 credits)	
HFT 1220	Supervision and Personnel Management	(3 credits)	
HFT 1454	Food and Beverage Cost Controls	(3 credits)	
HUN 1201	Essentials of Human Nutrition	(3 credits)	



## Cybersecurity

Associate in Science | Code: 25079 | 60 credits

CIP (1511100308)

Effective Term: Fall 2022 (2227)

The Cybersecurity program prepares students to fill a critical and growing need for cybersecurity personnel through hands-on experience along with simulation training and group/team-based learning to simulate a professional work environment. The program covers a wide range of topics including cybersecurity fundamentals, computer forensics and network security. Upon completion of the program, the student will have learned to evaluate security trends, recognize best practices, and understand IT security products and threats. Additionally, the curriculum is designed to aid students in preparing for many of the certification exams in the field.

### GENERAL EDUCATION REQUIREMENTS

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
STA 2023	Statistical Methods	(3 credits)	Prerequisite: MAT 1033 or MGF 1106

♦Note: Students must seek advisement for proper mathematics course from discipline chairperson.

#### **NATURAL SCIENCE (3.00 credits)**

AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
PHY 1020	General Education Physics	(3 credits)

#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C Introduction to Computer Technology & Applications

**MAJOR COURSE REQUIREMENTS (20.00 credits)**

CGS 1060C	Introduction to Computer Technology & Applications	(4 credits)
CGS 1700	Introduction to Operating Systems	(4 credits)
CIS 1531	Introduction to Secure Scripting	(4 credits)
CTS 1120	Cybersecurity Fundamentals	(4 credits)
CTS 1134	Networking Technologies	(4 credits)

**PROGRAM COURSE REQUIREMENTS (16.00 credits)**

CET 2880C	Digital Forensics	(4 credits)	
CIS 2350	Cybersecurity Analysis	(4 credits)	Prerequisites: CTS 1120, CTS 1134
CTS 1111	Linux +	(4 credits)	Prerequisite: CGS 1060C or Computer Experience
CTS 2314	Network defense and countermeasures	(4 credits)	Prerequisites: CTS 1120 and CTS 1134 or CTS 1650

**PROGRAM COURSE ELECTIVE (9.00 credits)**

CGS*, CIS*, COP*, CTS*		(4 credits)	
CIS 2619	Secure Software Development	(4 credits)	Prerequisites: COP 2800; Corequisite: COP 2805C
CIS 2900	Directed Information Technology Study	(1-4 credits)	
CJE 1680	Introduction to Computer Crimes	(3 credits)	
CJL 2062	Constitutional Law & Legal Procedure	(3 credits)	
COP 1334	Introduction to C++ Programming	(4 credits)	
COP 2800	Java Programming	(4 credits)	Prerequisite: COP 1334
COP 2805C	Java Programming 2	(4 credits)	Prerequisite: COP 2800
CTS 2303	Configuring Windows Servers	(4 credits)	
CTS 2306	Administering Windows Servers	(4 credits)	
CTS 2334	Configuring Advanced Windows Servers	(4 credits)	
CTS 2664	Cisco CCNA Security	(4 credits)	Prerequisite: CTS 1651
CTS 2670	Check Point Security Administration	(4 credits)	Prerequisites: CTS 1120, 1134
CTS 2671	Check Point Security Engineering	(4 credits)	Prerequisite: CTS 2670

*\*Any course with the listed prefixes satisfies this requirement.*



## **Database Technology - Oracle Database Administration**

*Associate in Science | Code: 25058 | 60 credits*

**CIP** (1511080200)

The Database Technology program is designed to provide an opportunity to establish a basic foundation in the field of database administration for employment in commercial, industrial and government institutions. Graduates are prepared for positions as database administrators and database developers.

### **GENERAL EDUCATION REQUIREMENTS (15 Credits)**

#### **Communications (3 Credits)**

ENC 1101	English Composition	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **Humanities (3 Credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **Mathematics (3 Credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
STA 2023	Statistical Methods	(3 credits)	Prerequisite: MAT 1033♦ or MGF 1106

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **Natural Science (3.00 Credits)**

AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
PHY 1020	General Education Physics	(3 credits)

#### **Social Science (3 Credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### **COMPUTER COMPETENCY**

*Test type(s) needed:*

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications
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### **MAJOR COURSE REQUIREMENTS (32.00 credits)**

CGS 1060C	Introduction to Computer Technology & Applications	(4 credits)	
CGS 1540C	Database Concepts and Design	(4 credits)	
COP 1334	Introduction to C++ Programming	(4 credits)	
COP 2800	Java Programming	(4 credits)	Prerequisite: COP 1334
CTS 2440	Introduction to Oracle: SQL and PL/SQL	(4 credits)	Prerequisite: CGS 1060C
CTS 2441	Introduction to Oracle Database Administration	(4 credits)	Prerequisite: CTS 2440

CTS 2442	Intermediate Oracle Database Administration	(4 credits)	Prerequisite: CTS 2441
CTS 2444	Oracle Database Performance Tuning	(4 credits)	Prerequisite: CTS2442

**MAJOR COURSE ELECTIVE (13.00 credits)**

*Electives are restricted to courses listed below:*

CAP\*, CEN\*, CGS\*, CIS\*, COP\*, CTS\*



## Dental Hygiene

Associate in Science | Code: 23021 | 88 credits

CIP (1351060200)

Effective Term: Fall 2022 (2227)

The Associate in Science degree in Dental Hygiene is designed to educate and prepare graduates with skills required for entry-level employment as a member of the healthcare team. The Dental Hygienist is a licensed member of the dental health team dedicated to helping patients maintain good oral health and prevent dental disease and disorders. The dental hygienist performs dental cleaning, teaches patients proper oral care, takes x-rays and provides nutritional counseling for optimal oral health.

### **GENERAL EDUCATION REQUIREMENTS (15.00 Credits Required)**

#### **Communications (3.00 Credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **Humanities (3.00 Credits)**

PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
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#### **Mathematics (3.00 Credits)**

MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.
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#### **Natural Science (3.00 Credits)**

BSC 2085	Human Anatomy and Physiology 1	(3 credits)	Corequisite: BSC2085L
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#### **Social Science (3.00 Credits)**

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications		
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### **SCIENCE REQUIREMENTS (13.00 credits)**

BSC 2085L	Human Anatomy and Physiology 1 Laboratory	(1 credits)	Corequisite: BSC2085
BSC 2086	Human Anatomy & Physiology 2	(3 credits)	Prerequisite: BSC2085; Corequisite: BSC2086L
BSC 2086L	Human Anatomy & Physiology 2 Laboratory	(1 credit)	Prerequisite: BSC2085, 2085L; Corequisite: BSC2086
CHM 1033	Chemistry for Health Sciences	(3 credits)	Prerequisite: MAT 1033*
MCB 2010	Microbiology	(3 credits)	Pre-requisites: BSC 2010/2010L; or BSC 2085/2085L; CHM1045/1045L CHM 1033/1033L; Corequisite: MCB 2010L
MCB 2010L	Microbiology Laboratory	(2 credits)	Pre-requisites: BSC 2010/2010L; or BSC 2085/2085L; CHM1045/1045L CHM 1033/1033L; Corequisite: MCB 2010

♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

**ELECTIVE REQUIREMENTS (3.00 Credits)**

PSY 2012 Introduction to Psychology (3 credits)

**MAJOR CORE REQUIREMENTS (57.00 credits)****First Semester (13.00 Credits)**

DEH 1002	Pre-Clinical Dental Hygiene	(2 credits)	Corequisite: DEH 1002L, 1133, 1710, 1720, DES 1200, 1200L
DEH 1002L	Pre-Clinical Dental Hygiene Lab	(2 credits)	Corequisite: DEH 1002, 1133, 1710, 1720, DES 1200, 1200L
DEH 1133	Dental Anatomy, Histology & Physiology	(2 credits)	Corequisite: DEH 1002, 1002L, 1710, 1720, DES 1200, 1200L
DEH 1710	Oral Health Literacy	(1 credit)	Corequisite: DEH 1002, 1002L, 1133, 1720, DES 1200, 1200L
DEH 1720	Preventive Dentistry	(2 credits)	Corequisite: DEH 1002, 1002L, 1133, 1710, DES 1200, 1200L
DES 1200	Dental Radiology	(2 credits)	Corequisite: DEH 1002, 1002L, 1133, 1710, 1720, DES 1200L
DES 1200L	Dental Radiology Lab	(2 credits)	Corequisite: DEH 1002, 1002L, 1133, 1710, 1720, DES 1200

**Second Semester (14.00 Credits)**

DEH 1400	General/Oral Pathology	(3 credits)	Prerequisite: DEH 1002, 1002L, 1133, 1710, 1720, DES 1200, 1200L; Corequisite: DEH 1800, 1800L, 1811, 2202, DES 1600
DEH 1800	Dental Hygiene I	(2 credits)	Prerequisite: DEH 1002, 1002L, 1133, 1710, 1720, DES 1200, 1200L; Corequisite: DEH 1400, 1800L, 1811, 2202, DES 1600
DEH 1800L	Dental Hygiene I Clinic	(3 credits)	Prerequisite: DEH 1002, 1002L, 1133, 1710, 1720, DES 1200, 1200L; Corequisite: DEH 1400, 1800, 1811, 2202, DES 1600
DEH 1811	Professional Issues	(2 credits)	Prerequisite: DEH 1002, 1002L, 1133, 1710, 1720, DES 1200, 1200L; Corequisite: DEH 1400, 1800, 1800L, 2202, DES 1600
DEH 2202	Nutrition	(2 credits)	Prerequisite: DEH 1002, 1002L, 1133, 1710, 1720, DES 1200, 1200L; Corequisite: DEH 1400, 1800, 1800L, 1811, DES 1600
DES 1600	Dental Office Emergencies	(2 credits)	Prerequisite: DEH 1002, 1002L, 1133, 1710, 1720, DES 1200, 1200L; Corequisite: DEH 1400, 1800, 1800L, 1811, 2202

**Third Semester (6.00 Credits)**

DEH 1802L	Dental Hygiene II Clinic (Summer A)	(1 credit)	Prerequisite: DEH 1400, 1800, 1800L, 1811, 2202, DES 1600; Corequisite: DEH 1804L, 1840L, 2300, 2300L, 2602
DEH 1804L	Dental Hygiene III Clinic (Summer B)	(1 credit)	Prerequisite: DEH 1400, 1800, 1800L, 1811, 2202, DES 1600; Corequisite: DEH 1802L, 1840L, 2300, 2300L, 2602



DEH 1840L	Adv. Radiographic & Clinical Assessment Techniques (Summer A & B)	(1 credit)	Prerequisite: DEH 1400, 1800, 1800L, 1811, 2202, DES 1600; Corequisite: DEH 1802L, 1804L, 2300, 2300L, 2602
DEH 2300	Pharmacology and Pain Management (Summer A & B)	(1 credit)	Prerequisite: DEH 1400, 1800, 1800L, 1811, 2202, DES 1600; Corequisite: DEH 1802L, 1804L, 1840L, 2300L, 2602
DEH 2300L	Pharmacology and Pain Management Lab	(1 credit)	Prerequisite: DEH 1400, 1800, 1800L, 1811, 2202, DES 1600; Corequisite: DEH 1802L, 1804L, 1840L, 2300, 2602
DEH 2602	Periodontology I (Summer A)	(1 credit)	Prerequisite: DEH 1400, 1800, 1800L, 1811, 2202, DES 1600; Corequisite: DEH 1802L, 1804L, 1840L, 2300, 2300L
<b><u>Fourth Semester (12.00 credits)</u></b>			
DEH 2603	Periodontology II	(2 credits)	Prerequisite: DEH 1802L, 1804L, 1840L, 2300, 2300L, 2602; Corequisite: DEH 2603L, 2701, 2806, 2806L
DEH 2603L	Periodontology Lab	(1 credit)	Prerequisite: DEH 1802L, 1804L, 1840L, 2300, 2300L, 2602; Corequisite: DEH 2603, 2701, 2806, 2806L
DEH 2701	Community Dental Health	(3 credits)	Prerequisite: DEH 1802L, 1804L, 1840L, 2300, 2300L, 2602; Corequisite: DEH 2603, 2603L, 2806, 2806L
DEH 2806	Dental Hygiene IV	(2 credits)	Prerequisite: DEH 1802L, 1804L, 1840L, 2300, 2300L, 2602; Corequisite: DEH 2603, 2603L, 2701, 2806L
DEH 2806L	Dental Hygiene IV Clinic	(4 credits)	Prerequisite: DEH 1802L, 1804L, 1840L, 2300, 2300L, 2602; Corequisite: DEH 2603, 2603L, 2701, 2806
<b><u>Fifth Semester (12.00 Credits)</u></b>			
DEH 2702L	Community Dental Health II Lab	(2 credits)	Prerequisite: DEH 2603, 2603L, 2701, 2806, 2806L; Corequisite: DEH 2808, 2808L, 2810L, DES 2100, 2100L
DEH 2808	Dental Hygiene V	(2 credits)	Prerequisite: DEH 2603, 2603L, 2701, 2806, 2806L; Corequisite: DEH 2702L, 2808L, 2810L, DES 2100, 2100L
DEH 2808L	Dental Hygiene V Clinic	(4 credits)	Prerequisite: DEH 2603, 2603L, 2701, 2806, 2806L; Corequisite: DEH 2702L, 2808, 2810L, DES 2100, 2100L
DEH 2810L	Inter-Professional Practice and Education Lab	(1 credit)	Prerequisite: DEH 2603, 2603L, 2701, 2806, 2806L; Corequisite: DEH 2702L, 2808, 2808L, DES 2100, 2100L
DES 2100	Dental Materials and Specialties	(2 credits)	Prerequisite: DEH 2603, 2603L, 2701, 2806, 2806L; Corequisite: DEH 2702L, 2808, 2808L, 2810L, DES 2100L

DES 2100L

Dental Materials and Specialties Lab

(1 credit)

Prerequisite: DEH 2603, 2603L, 2701, 2806,  
2806L;  
Corequisite: DEH 2702L, 2808, 2808L,  
2810L, DES 2100



## Diagnostic Medical Sonography Specialist

Associate in Science | Code: 23038 | 77 credits

CIP (1351091004)

Effective Term: Fall 2022 (2227)

The Diagnostic Medical Sonography Specialist program prepares the student to become a Diagnostic Medical Sonographer. The Diagnostic Medical Sonographer provides patient services, using diagnostic ultrasound under the supervision of a doctor of medicine or osteopathy who is responsible for the use and interpretation of ultrasound procedures. The sonographer assists the physician in gathering sonographic data necessary to reach diagnostic decisions.

### GENERAL EDUCATION REQUIREMENTS (15 Credits Required)

#### ***Communications (3.00 Credits)***

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### ***Humanities (3.00 Credits)***

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### ***Math (3.00 Credits)***

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033*
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\*Note: Students must seek advisement for proper mathematics course from discipline chairperson.

#### ***Natural Science (3.00 Credits)***

BSC 2085	Human Anatomy and Physiology 1	(3 credits)	Corequisite: BSC 2085L
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#### ***Social Science (3.00 Credits)***

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

### COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C - Introduction to Computer Technology & Applications

### SCIENCE REQUIREMENTS (11.00 credits)

BSC 2085L	Human Anatomy and Physiology 1 Laboratory	(1 credits)	Corequisite: BSC 2085
BSC 2086	Human Anatomy & Physiology 2	(3 credits)	Prerequisite: BSC 2085; Corequisite: BSC2 086L
BSC 2086L	Human Anatomy & Physiology 2 Laboratory	(1 credits)	Prerequisite: BSC 2085, BSC 2085L; Corequisite: BSC 2086
PHY 1020	General Education Physics	(3 credits)	
<b>OR</b>			
PHY 1025	Basic Physics	(3 credits)	Prerequisite: MAC 1105

**Electives (3.00 credits)**

MAT 1033	Intermediate Algebra	(3 credits)	Prerequisites: MAT 0022C, or MAT 0028, or MAT 0057 or by placement score, or eligible exemption.
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**MAJOR CORE REQUIREMENTS (51 credits)**

SON 1000L	Introduction to Sonography 1	(1 credits)	Corequisites: SON 1111C, 1121C
SON 1001L	Introduction to Sonography 2	(1 credits)	Prerequisite: SON 1000L
SON 1005L	Basic Sonography	(2 credits)	Prerequisite: SON 1000L
SON 1006L	Professional Aspects of Sonograph	(1 credits)	
SON 1100L	Principles of Protocols of Imaging	(2 credits)	
SON 1111C	Abdominal Sonography 1	(2 credits)	Prerequisite: SON 1000L
SON 1112C	Abdominal Sonography 2	(2 credits)	Prerequisite: SON 1111C
SON 1113L	Sonography Cross Sectional Anatomy	(2 credits)	
SON 1115L	Duplex Abdominal Sonography	(1 credits)	Prerequisite: SON 1112C
SON 1121C	Obstetrics/Gynecology Sonography 1	(2 credits)	Corequisite: SON 1000L
SON 1122C	Obstetrics/Gynecology Sonography 2	(2 credits)	Prerequisite: SON 1121C
SON 1141C	Small Parts Sonography	(2 credits)	Prerequisite: SON 1112
SON 1145L	Pediatric Sonography	(1 credits)	Prerequisite: SON 1141C
SON 1804	Clinic 1	(2 credits)	Corequisite: SON 1000L
SON 1814	Methodology 3	(2 credits)	Prerequisite: SON 1804
SON 1824	Clinic 3	(3 credits)	Prerequisite: SON 1814
SON 2139L	Cardiovascular Principles	(1 credits)	Prerequisite: SON 2400C; Corequisite: SON 2401C
SON 2161C	Neurosonography	(2 credits)	Prerequisites: SON 1113L, 1141C
SON 2400C	Clinic 2	(2 credits)	Prerequisite: SON 1000L
SON 2401C	Echocardiography 2	(2 credits)	Prerequisite: SON 2400C
SON 2614C	Acoustical Physics and Instrumentation 1	(2 credits)	Prerequisite: SON 1005L
SON 2618C	Acoustical Physics and Instrumentation 2	(2 credits)	Prerequisites: SON 2614C, CGS 1060C
SON 2619C	Doppler Principles and Instrumentation	(2 credits)	Prerequisite: SON 2618C
SON 2834	Clinic 4	(2 credits)	Prerequisite: SON 1824
SON 2844	Clinic 5	(3 credits)	Prerequisite: SON 2834
SON 2854	Clinic 6	(3 credits)	Prerequisite: SON 2844
SON 2930L	Seminar in Sonography	(1 credits)	
SON 2935L	Film Critique	(1 credits)	Prerequisite: SON 2934L



## Drafting & Design Technology

Associate in Science | Code: 26037 | 62 credits

CIP (1615130202)

Effective Term: Fall 2022 (2227)

Drafting and Design Technology is a highly technical program which will adequately equip the student with the ability and skills necessary for acquisitions and advancement in the engineering technical aid and professional drafting fields. Specialized areas within the program include such specifics as structural steel drafting, welding, piping, technical illustration and computer-aided drafting and design.

### GENERAL EDUCATION REQUIREMENTS

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **MATHEMATICS (3.00 credits)**

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033♦
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♦**Note:** Students must seek advisement for proper mathematics course from discipline chairperson.

#### **NATURAL SCIENCE (3.00 credits)**

AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
PHY 1020	General Education Physics	(3 credits)

#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Applications
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### MAJOR COURSE REQUIREMENTS (40.00 credits)

EGN 2200	Computer Applications in Engineering	(3 credits)	Pre/Corequisite MAC1114 or MAC1147
EGS 1111C	Engineering Graphics	(5 credits)	
ETD 1110	Technical Drawing 1	(4 credits)	
ETD 1340	Computer Aided Drawing & Design	(3 credits)	Pre/Corequisite: MAC1105
ETD 1542	Structural Drafting	(4 credits)	Prerequisite: ETD 1110
ETD 1801	Technical Illustration	(4 credits)	
ETD 2220	Technical Drawing 2	(5 credits)	Prerequisites: EGS 1111C, ETD 1110

ETD 2401	Tool and Machine Design Drafting	(5 credits)	Prerequisites: EGS 1111C, ETD 1110
MAC 1114	Trigonometry	(3 credits)	Prerequisite: MAC 1105 or MAC 1106
SUR 1101C	Surveying 1	(4 credits)	

**OTHER ELECTIVES (5.00 credits)**

EGS\*  
 ETC\*  
 ETD\*  
 ETI\*  
 ETM\*  
 MAC\*  
 SUR\*



## Early Childhood Education – Administrator

Associate in Science | Code: 27033 | 60 credits

CIP (1413121004)

The Early Childhood Education Associate in Science degree program provides the student with appropriate coursework in Administrator Specialization. Students may complete the Advanced Director's Credential and/or College Credit Certificates as part of their Associate in Science degree. This program is stackable towards the Bachelor of Science (BS) in Early Childhood Education.

### **GENERAL REQUIREMENTS (15 credits required)**

#### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **MATHEMATICS (3.00 credits)**

MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.
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#### **NATURAL SCIENCE (3.00 credits)**

AST 1002	Descriptive Anatomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Sciences	(3 credits)
PHY 1020	General Education Physics	(3 credits)

#### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the United States since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

### **COMPUTER COMPETENCY REQUIREMENT (3 credits required)**

#### **Test type(s) needed:**

Computer Skills Placement (CSP)

---OR---

CGS 1060C - Introduction to Computer Technology & Application

### **MAJOR CORE REQUIREMENTS (12 credits required)**

EEC 2002	Operation of an Early Childhood Facility	(3 credits)
EEC 2520	Early Childhood Organization Leadership and Management	(3 credits)
EEC 2523	Programming & Management for Early Childhood Admin.	(3 credits)
EEC 2527	Legal & Financial Issue in Child Care	(3 credits)

### **PROGRAM CORE REQUIREMENTS (12 Credits)**

EDF 1005	Introduction to the Teaching Profession	(3 credits)
EDF 2085	Introduction to Diversity	(3 credits)

EME 2040	Introduction to Technology for Educators	(3 credits)	Prerequisite: CGS 1060C
<b>--OR--</b>			
EME 2071	Educating Young Children for Digital Literacy in the 21 <sup>st</sup> Century	(3 credits)	Prerequisites: EEC1000, EEC1200, EEC1311, EEC1522, EEC2201, EEC2407
EDG 2943	Educational Service Field Work	(3 credits)	

**MAJOR COURSE ELECTIVE (12 credits required)**

EEC 1000	Introduction to Early Childhood Education	(3 credits)
EEC 1200	Early Childhood Curriculum I	(3 credits)
EEC 1311	Early Childhood Curriculum II	(3 credits)
EEC 1380	Classrooms for All Young Children	(3 credits)
EEC 1522	Infant-Toddler Environments	(3 credits)
EEC 1713	Helping All Young Children Become Independent Learners	(3 credits)
EEC 1752	Knowing and Understanding All Young Children	(3 credits)
EEC 1753	Observing and Assessing All Young Children	(3 credits)
EEC 2201	Developing Curriculum for Infants and Toddlers	(3 credits)
EEC 2407	Facilitating Social Development	(3 credits)

**ELECTIVES (21.00 credits)**

ANT 2410	Introduction to Cultural Anthropology	(3 credits)	
BSC 2020	Human Biology: Fundamentals of Anatomy/Physiology	(3 credits)	
CGS 1060C	Introduction to Computer Technology & Application	(4 credits)	
CLP 1006	Psychology of Personal Effectiveness	(3 credits)	
DAN 2100	Dance Appreciation	(3 credits)	
DEP 2000	Human Growth & Development	(3 credits)	
ENC 1102	English Composition 2	(3 credits)	Pre-Req ENC 1101
HUN 1201	Essentials of Nutrition	(3 credits)	
ISS 1120	The Social Environment	(3 credits)	
LIT 2480	Issues in Literature & Culture	(3 credits)	Prerequisite: ENC 1102
MGF 1106	Mathematics for Liberal Arts 1	(3 credits)	Pre-Req MAT 0029 or MAT 1033 or MGF 1107
PHI 2604	Critical Thinking/Ethics	(3 credits)	Prerequisite: ENC 1101
PSC 1515	Energy in the Natural Environment	(3 credits)	
PSY 2012	Introduction to Psychology	(3 credits)	
SPC 1017	Introduction to Communication	(3 credits)	
SYG 2000	Introduction to Sociology	(3 credits)	



**Early Childhood Education – Infant/Toddler**
**(CIP 1413121004)**
*Associate in Science | Code: 27032 | 60 credits*

Effective Term: Fall 2020 (2207)

The Early Childhood Education Associate in Science degree program provides the student with appropriate coursework in Infant-Toddler Specialization. Students may complete the Florida Child Care Professional Certificate (FCCPC) and/or College Credit Certificates as part of their Associate in Science degree. This program is stackable towards the Bachelor of Science (BS) in Early Childhood Education.

Course	Course Title	Credits	Pre-/Co-Requisites
<b><u>GENERAL EDUCATION – 27 CREDITS REQUIRED</u></b>			
<b>Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
<b>Oral Communication – 3 Credits Required</b>			
LIT 2480	Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
<b>Humanities – 3 Credits Required</b>			
ARH 1000	Art Appreciation	3	
DAN 2100	Dance Appreciation	3	
HUM 1020	Humanities	3	
MUL 1010	Music Appreciation	3	
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1102
<b>Behavioral and Social Science – 3 Credits Required</b>			
CLP 1006	Psychology of Personal Effectiveness	3	
PSY 2012	Introduction to Psychology	3	
<b>Natural Science – 6 Credits Required</b>			
BSC 1005	General Education Biology	3	
BSC 2020	Human Biology:		
	Fundamental of Anatomy & Physiology	3	
HUN 1201	Essentials of Nutrition	3	
PSC 1515	Energy in the Natural Environment	3	
<b>Mathematics – 6 Credits Required</b>			
MGF 1107	Mathematics for Liberal Arts 2	3	
MGF 1106	Mathematics for Liberal Arts 1	3	Pre-Req MGF 1107

**COMPUTER COMPETENCY REQUIREMENT**
*Test type(s) needed:*

Computer Skills Placement (CSP)

---OR---

CGS 1060C - Introduction to Computer Technology &amp; Application

**MAJOR COURSE REQUIREMENTS (12.00 CREDITS)**

EEC 1000 - Introduction to Early Childhood Education	3
EEC 1522 - Infant and Toddler Environments	3
EEC 2201 - Developing Curriculum for Infants and Toddlers	3
EEC 2407 - Facilitating Social Development	3

**MAJOR COURSE ELECTIVE (21.00 CREDITS)****Group A: Preschool Specialization (12 credits)**

EEC 1000	Introduction to Early Childhood Education	3
EEC 1200	Early Childhood Curriculum I	3
EEC 1311	Early Childhood Curriculum II	3
EEC 2407	Facilitating Social Development	3

--- OR ---

**Group B: Inclusion Specialization (12 credits)**

EEC 1752	Knowing and Understanding All Young Children	3
EEC 1753	Observing and Assessing All Young Children	3
EEC 1713	Helping All Young Children Become Independent Learners	3
EEC 1380	Classrooms for All Young Children	3

---OR---

**Group C: Administrator Specialization (12 credits)**

EEC 2002	Operation of an Early Childhood Facility	3
EEC 2520	Early Childhood Organization leadership and management	3
EEC 2523	Programming & Management for Early Childhood Administrators	3
EEC 2527	Legal & Financial Issue in Child Care	3

---AND---

EDF 1005	Introduction to the Teaching Profession	3
EDF 2085	Introduction to Diversity	3
EME 2040	Introduction to Technology for Educators	3

---OR---

EME 2071	Educating Young Children for Digital Literacy in the 21st Century	3
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---AND---

EEC*		3
EDG 2943	Educational Service Field Work	1-3



## Early Childhood Education – Preschool

(CIP 1413121004)

Associate in Science | Code: 27031 | 60 credits

Effective Term: Fall 2020 (2207)

The Early Childhood Education Associate in Science degree program provides the student with appropriate coursework in Preschool Specialization. Students may complete the Florida Child Care Professional Certificate (FCCPC) and/or College Credit Certificates as part of their Associate in Science degree. This program is stackable towards the Bachelor of Science (BS) in Early Childhood Education.

Course	Course Title	Credits	Pre-/Co-Requisites
<b><u>GENERAL EDUCATION – 27 CREDITS REQUIRED</u></b>			
<b>Communications – 6 Credits Required</b>			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
<b>Oral Communication – 3 Credits Required</b>			
LIT 2480	Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
<b>Humanities – 3 Credits Required</b>			
ARH 1000	Art Appreciation	3	
DAN 2100	Dance Appreciation	3	
HUM 1020	Humanities	3	
MUL 1010	Music Appreciation	3	
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1102
<b>Behavioral and Social Science – 3 Credits Required</b>			
CLP 1006	Psychology of Personal Effectiveness	3	
PSY 2012	Introduction to Psychology	3	
<b>Natural Science – 6 Credits Required</b>			
BSC 1005	General Education Biology	3	
BSC 2020	Human Biology:		
	Fundamental of Anatomy & Physiology	3	
HUN 1201	Essentials of Nutrition	3	
PSC 1515	Energy in the Natural Environment	3	
<b>Mathematics – 6 Credits Required</b>			
MGF 1107	Mathematics for Liberal Arts 2	3	
MGF 1106	Mathematics for Liberal Arts 1	3	Pre-Req MGF 1107

### **COMPUTER COMPETENCY REQUIREMENT**

Test type(s) needed:

Computer Skills Placement (CSP)

---OR---

CGS 1060C - Introduction to Computer Technology & Application

**MAJOR COURSE REQUIREMENTS (12.00 CREDITS)**

EEC 1000	Introduction to Early Childhood Education	3
EEC 1200	Early Childhood Curriculum I	3
EEC 1311	Early Childhood Curriculum II	3
EEC 2407	Facilitating Social Development	3

**MAJOR COURSE ELECTIVE (21.00 CREDITS)****Group A: Infant/Toddler Specialization (12 credits)**

EEC 1000	Introduction to Early Childhood Education	3
EEC 1522	Infant-Toddler Environments	3
EEC 2201	Developing Curriculum for Infants and Toddlers	3
EEC 2407	Facilitating Social Development	3

--- OR ---

**Group B: Inclusion Specialization (12 credits)**

EEC 1752	Knowing and Understanding All Young Children	3
EEC 1753	Observing and Assessing All Young Children	3
EEC 1713	Helping All Young Children Become Independent Learners	3
EEC 1380	Classrooms for All Young Children	3

---OR---

**Group C: Administrator Specialization (12 Credits)**

EEC 2002	Operation of an Early Childhood Facility	3
EEC 2520	Early Childhood Organization leadership and management	3
EEC 2523	Programming & Management for Early Childhood Administrators	3
EEC 2527	Legal & Financial Issue in Child Care	3

---AND---

EDF 1005	Introduction to the Teaching Profession	3
EDF 2085	Introduction to Diversity	3
EME 2040	Introduction to Technology for Educators	3

---OR---

EME 2071	Educating Young Children for Digital Literacy in the 21st Century	3
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---AND---

EEC*		3
EDG 2943	Educational Service Field Work	1-3

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: ELECTRONICS ENGINEERING TECHNOLOGY (26039)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (3.00 credits)

- ☐ ENC 1101 - English Composition 1 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. BEHAVIORAL/SOCIAL SCIENCE (6.00 credits)

Must take 3.0 credits from the following group.

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> AMH 2010 - History of the US to 1877 (3 credits)       | <input type="checkbox"/> POS 2041 - American Federal Government (3 credits)             |
| <input type="checkbox"/> AMH 2020 - History of the US since 1877 (3 credits)    | <input type="checkbox"/> WOH 2012 - History of World Civilization to 1789 (3 credits)   |
| <input type="checkbox"/> ECO 2013 - Principles of Economics (Macro) (3 credits) | <input type="checkbox"/> WOH 2022 - History of World Civilization from 1789 (3 credits) |

The following course(s) are not allowed for credit in this area.  
 All Labs

### 5. MATH/SCIENCE (7.00 credits)

- |  |   |
|--|---|
| <input type="checkbox"/> MAC 1105 - College Algebra (3 credits)              | <input type="checkbox"/> PHY 2053L - Physics (without Calculus) 1 Lab (1 credits) |
| <input type="checkbox"/> PHY 2053 - Physics (without Calculus) 1 (3 credits) |   |

### 6. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

### 7. MAJOR COURSE REQUIREMENTS (38.00 credits)

Must take 34.0 credits from the following group.

- |   |  |
|---|--|
| <input type="checkbox"/> CET 1110C - Digital Circuits (4 credits)             | <input type="checkbox"/> EET 1141C - Electronics 1 (4 credits)       |
| <input type="checkbox"/> CET 2123C - Microprocessors (4 credits)              | <input type="checkbox"/> EET 2101C - Electronics 2 (4 credits)       |
| <input type="checkbox"/> COP 2270 - "C" for Engineers (4 credits)             | <input type="checkbox"/> MAC 1114 - Trigonometry (3 credits)         |
| <input type="checkbox"/> EET 1015C - Direct Current Circuits (4 credits)      | <input type="checkbox"/> MAC 1140 - Pre-Calculus Algebra (3 credits) |
| <input type="checkbox"/> EET 1025C - Alternating Current Circuits (4 credits) |  |

- - - And - - -

Must take 4.0 credits from the following group.

- |  |  |
|--|--|
| <input type="checkbox"/> EET 2323C - Analog Communications (4 credits) | <input type="checkbox"/> CET 2113C - Advanced Digital Circuits (4 credits) |
|--|--|

The following course(s) are not allowed for credit in this area.  
 All Labs

### 8. OTHER ELECTIVES (8.00 credits)

- |  |   |
|--|---|
| <input type="checkbox"/> CET 1171 - Introduction to Computer Service and Maintenance (3) | <input type="checkbox"/> EET 1082 - Introduction to Electronics (3 credits) |
|--|---|

credits)

- ☐ CET 1178C - A+ Computer Hardware Service (3 credits)
- ☐ CET 2113C - Advanced Digital Circuits (4 credits)

- ☐ EET 2323C - Analog Communications (4 credits)
- ☐ EET 2351C - Digital and Data Communications (4 credits)

\* End of Program Sheet \*



## Emergency Medical Services

*Associate in Science - Health Sciences | Code: 23048 | 73 credits*

The Emergency Medical Services program is designed according to national and state standards. Graduates will perform as advanced practitioners and as leaders in the technical supervisory and managerial aspects of advanced emergency care. Graduates will be prepared primarily for employment in agencies of advanced emergency care. Graduates will be prepared primarily for employment in agencies providing pre-hospital emergency medical care and secondarily, for jobs in emergency and other acute care areas of the hospital.

### **GENERAL EDUCATION REQUIREMENTS (15 CREDITS)**

- 1. COMMUNICATIONS (3.00 credits)**  
ENC 1101 - English Composition 1 (3 credits)
- 2. ORAL COMMUNICATIONS (3.00 credits)**  
SPC 1017 - Fundamentals of Speech Communication (3 credits)
- 3. HUMANITIES (3.00 credits)**  
PHI 2604 - Critical Thinking/Ethics (3 credits)
- 4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**  
CLP 1006 - Psychology of Personal Effectiveness (3 credits)
- 5. MATH/SCIENCE (3.00 credits)**  
BSC 2085 - Human Anatomy and Physiology 1 (3 credits)

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test

**OR**

CGS 1060C – Introduction to Computer Technology & Applications

### **SCIENCE (5.00 CREDITS)**

- BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credit)  
 BSC 2086 - Human Anatomy & Physiology 2 (3 credits)  
 BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credit)

### **ELECTIVES (3.00 CREDITS)**

- MNA 1345 - Effective Supervision (3 credits)

### **FIRST TERM IN PROGRAM (10.00 CREDITS)**

- EMS 1119 - Emergency Medical Technician (4 credits)  
 EMS 1119L - Emergency Medical Technician Lab and Clinic (3 credits)  
 EMS 1431 - EMT Hospital/Field Experience (3 credits)  
 EMS 9995 - First Responder (2 credits)  
 EMS 9996 - Emergency Medical Technician - Basic (9 credits)

**SECOND TERM IN PROGRAM (15.00 CREDITS)**

EMS 2601 - Paramedic Lecture 1	(8 credits)
EMS 2601L - Paramedic Laboratory 1	(4 credits)
EMS 2664 - Paramedic Clinic 1	(3 credits)

**THIRD TERM IN PROGRAM (15.00 CREDITS)**

EMS 2602 - Paramedic Lecture 2	(8 credits)
EMS 2602L - Paramedic Laboratory 2	(4 credits)
EMS 2665 - Paramedic Clinic 2	(3 credits)

**FOURTH TERM IN PROGRAM (8.00 CREDITS)**

EMS 2659 - EMS-Field Internship and Conference	(8 credits)
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**FIFTH TERM IN PROGRAM (2.00 CREDITS)**

EMS 2311 - Emergency Medical Operations	(2 credits)
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## **Entrepreneurship**

*Associate in Science | Code: 20002 | 60 credits | 2 years to complete*

Effective Term: Spring 2020 (2203)

The A.S. in Entrepreneurship prepares students to start-up and operate a business or social venture with a foundation in opportunity recognition, analysis, business model development and business plan creation. Graduates will bring a critically-informed perspective to their own start-up venture, family-owned business, or social venture.

### **GENERAL EDUCATION REQUIREMENTS (21 credits)**

1. **COMMUNICATIONS (3.00 credits)**  
ENC 1101 - English Composition 1 (3 credits)
2. **Oral Communications (3 credits)**  
SPC 1017 – Fundamentals of Speech Communication (3 credits)  
SPC 2608 – Introduction to Public Speaking (3 credits)
3. **HUMANITIES (3.00 credits)**  
PHI 2604 – Critical Thinking and Ethics (3 credits)
4. **BEHAVIORAL/SOCIAL SCIENCE (6.00 credits)**  
CLP 1006 – Psychology of Personal Effectiveness (3 credits)  
ECO 2013 - Principles of Economics (Macro) (3 credits)
5. **MATHEMATICS (6.00 credits)**  
MAC 1105 - College Algebra (3 credits)  
QMB 2100 – Business Statistics (3 credits)

### **Computer Competency Requirement**

Computer Competency Test (CCT)

---Or---

CGS 1060C Introduction to Computer Technology & Applications

### **MAJOR COURSE REQUIREMENTS (11.00 credits)**

ACG 2021 - Financial Accounting (3 credits)  
ACG 2021L - Financial Accounting Lab (1 credits)  
ACG 2071 - Managerial Accounting (3 credits)  
ACG 2071L - Managerial Accounting Lab (1 credits)  
ECO 2023 - Principles of Economics (Micro) (3 credits)

### **PROGRAM CORE REQUIREMENTS (12.00 credits)**

ACG2450 – Microcomputers in Accounting (3 credits)

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TAX 2021 – Taxation of Business Organizations (3 credits)  
ENT 2201 – Introduction to Lean Start-Up (3 credits)  
GEB 2112 - Introduction to Entrepreneurship (3 credits)  
MAR 1720 – Marketing in a Digital World (3 credits)

### **ELECTIVES (16.00 credits)**

BUL 2241 – Business Law 1 (3 credits)  
CGS 1060C – Introduction to Computer Technology & Applications  
ENT 1501 – Fundamentals of Changemaking and Social Innovation (3 credits)  
ENT 2212 – Entrepreneurial Leadership (3 credits)  
ENT 2502 – Starting and Growing a Social Venture (3 credits)  
ENT 2270 – Family Business Management (3 credits)  
ENT 2421 – Funding Your Venture (3 credits)  
ENT 2511 – Evaluating Social Impact (3 credits)  
MAC 2233 – Business Calculus (3 credits)

MAR 2704 – Marketing Web Analytics (3 credits)  
MAT 1033 – Intermediate Algebra (3 credits)

**FASHION DESIGN**
*Associate in Science | Code: 22005 | 60 credits*

C.I.P. (1252021210)

The Associate in Science degree in Fashion Design prepares students to be leaders in the global fashion industry. Fashion Design courses are intensive and real-world, focusing on the theoretical and practical, from the creative process and principles of design to the use of state-of-the-industry technology and software. All CTE classes require department approval.

Course	Course Title	Cr.	Pre-/Co-Requisites
<b>FALL Semester 1</b>			
CTE 1050	Introduction to Fashion Design & Related Industries	3	
CTE 2732	Fashion Illustration Technology	3	
CTE 1743C	Patternmaking Level 1	3	Co-Req CTE 2310C
CTE 2310C	Clothing Construction Methods Level 1	3	Co-Req CTE 1743C
<b>SPRING Semester 2</b>			
CTE 1401	Introductory textile Science	3	
CTE 1721C	Fashion Design 1	3	Pre-Req CTE 1743C and CTE 2310C
CTE 2745C	Patternmaking Level 2	3	Pre-Req CTE 1743C
CTE 2330C	Clothing Construction Methods Level 2	3	Pre-Req CTE 2310C
<b>FALL Semester 3</b>			
CTE 2722C	Fashion Design 2	3	Pre-Req CTE 1721C
CTE 1841C	Apparel Evaluation & Production	3	Pre-Req CTE 2745C and CTE 2330C
CTE 2749C	Patternmaking Level 3	3	Pre-Req CTE 2745C
CTE 2342C	Clothing Construction Methods Level 3	3	Pre-Req CTE 2330C
<b>SPRING Semester 4</b>			
CTE 2120	Portfolio Collection Development	3	Pre-Req CTE 1841C, CTE 2749,
CTE 1760C	Creative Design	3	Pre-Req CTE 1841C, CTE 2722C,
CTE 1942	Fashion Industry Internship	3	Pre-Req Departmental Approval
<b>General Education – 15 Credits Required</b>			
<b>Communications – 3 Credits Required</b>			
ENC 1101	English Composition 1	3	Pre-Req Approved Placement Testing
<b>Oral Communication – 3 Credits Required</b>			
SPC 1017	Fundamentals of Speech Communications	3	
<b>Humanities – 3 Credits Required</b>			
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
<b>Behavioral and Social Science – 3 Credits Required</b>			
ECO 2013	Principles of Economics (MACRO)	3	
<b>Mathematics – 3 Credits Required</b>			
MAC 1105	College Algebra (recommended for the Fashion Business Track)	3	Pre-Req MAT 1033 or Placement Testing
<b>OR</b>			
MGF 1106	Math for the Liberal Arts (Recommended for the Fashion Business Track)	3	
<b>Computer Competency</b>			
CGS 1060C	Introduction to Computer Technology & Applications (OR Computer Competency Test (CCT))	4	*State Required

**A Grade of C or higher is needed to pass all CTE classes.**

## FASHION MERCHANDISING

**C.I.P. (1252021210)**

**Associate in Science | Code: 22020 | 60 credits**

Effective Term: Spring 2020 (2203)

The Associate in Science degree in Fashion Merchandising offers students a comprehensive education of the fashion business. The program offers students instruction in process, skills and designs from concept development through production for emergence into the fashion business or fashion design segments of the industry.

Course	Course Title	Cr.	Pre-/Co-Requisites
<b>Semester 1 – 12 Credits</b>			
CTE 1050	Introduction to Fashion Design & Related Industries	3	
CTE 2732	Fashion Illustration Technology	3	
MAR 1011	Principles of Marketing	3	
GEB 1011	Principles of Business	3	
<b>Semester 2 – 12 Credits</b>			
CTE 2610	Fashion Forecasting & Research	3	Pre-Req CTE 1050, MAR 1011
CTE 1801	Introduction to Merchandising	3	Pre-Req CTE 1050
CTE 2301	Product Development	3	Co-Req CTE 1801
MAR 1720	Marketing in the Digital World	3	
<b>Semester 3 – 9 Credits</b>			
CTE 2388	Principles of Contemporary Retailing	3	Pre-Req MAN 2021
CTE 2802	Fashion Merchandising Strategies	3	Pre-Req CGS 1060C
CTE 2836	Global Merchandising	3	Co-Req CTE 2802
<b>Semester 4 – 12 - Credits</b>			
CTE 2800	Textile, Apparel & Retail Analysis	3	Pre-Req CTE 2388
CTE 2111C	Digital Fashion Portfolio	3	Pre-Req CTE 2732. CTE 2802
CTE 1942	Fashion Industry Internship	3	Departmental Approval & Completion of the Program Core Req
ENT 2212	Entrepreneurial Leadership	3	
<b>General Education – 15 Credits Required</b>			
<b>Communications – 3 Credits Required</b>			
ENC 1101	English Composition 1	3	Pre-Req Approved Placement Testing
<b>Oral Communication – 3 Credits Required</b>			
SPC 1017	Fundamentals of Speech Communications	3	
SPC 2608	Introduction to Public Speaking	3	
<b>Humanities – 3 Credits Required</b>			
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
<b>Behavioral and Social Science – 3 Credits Required</b>			
ECO 2013	Principles of Economics (MACRO)	3	
<b>Mathematics – 3 Credits Required</b>			
MAC 1105	College Algebra (recommended for the Fashion Business Track)	3	Pre-Req MAT 1033 or Placement Testing
<b>Computer Competency</b>			
	Computer Competency Test (CCT)		

**A Grade of C or higher is needed to pass all classes.**



## Film Production Technology

(CIP 1650060213)

Associate in Science | Code: 26044 | 64 credits

Effective Term: Summer 2020 (2205)

### Program description:

Lights... Camera... Action! South Florida has become a hotbed for independent filmmakers and music video producers. Learn what it takes to become a successful film producer, director, writer, editor, cinematographer, production manager and crewmember while earning an Associate in Science (A.S.) degree in Film Production Technology. Learn to write scripts, shoot film and digital media, and edit projects on non-linear editing systems. Students have opportunities to exhibit their work in film showcases and participate in hands-on workshops and seminars held in collaboration with the Miami International Film Festival.

### GENERAL EDUCATION REQUIREMENTS (15.00 CREDITS)

#### Communications (3.00 credits)

ENC 1101	English Composition 1	3
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#### Oral Communication (3.00 credits)

SPC 1017	Fundamentals of Speech Communications	3
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#### Humanities (3.00 credits)

PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
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#### Behavioral and Social Science (3.00 credits)

CLP 1006	Psychology of Personal Effectiveness	3
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#### Math/Natural Science (3.00 credits)

BSC 1084	Functional Human Anatomy	3	BSC 1084L (Optional)
PHY*			
MAC*			
MGF*			

\* Any course with the following prefix excluding labs.

### Computer Competency Requirement

Computer Competency Test (CCT)

---Or---

CGS 1060C - Introduction to Computer Technology & Applications

### Major Course Requirements (43.00 credits)

FIL1030	History of Film	3
FIL1100	Screenwriting 1	3
FIL1420C	Film Production 1	4
FIL1431C	Film Production 2	4
FIL2131	Screenwriting 2	3
FIL2552C	Editing: Level 1	3
FIL2553C	Editing: Level 2	3
FIL2560C	Editing: Level 3	3
FIL2480C	Film Production 3	4

FIL2515C	Film Production 4	4
FIL2611	Film Business, Marketing, Distribution & Exhibition	3
RTV1240C	Sound Design	3
VIC1000	Visual Communications	3

**Major Course Elective (6.00 credits)**

FIL1055	American Independent Cinema	3
FIL1060	Survey of Documentary Film	3
FIL2413	Screenwriting 3	3
FIL2945	Film Internship	3
FIL2990	Special Topics	3
FIL2951	Film Festival Experience	3
TPP*		3



## **Financial Services – Banking Specialization**

**(CIP 1252080100)**

*Associate in Science | Code: 22026 | 60 credits*

Effective Term: Fall 2020 (2203)

The Associate in Science in Financial Services – Banking Specialization is designed to meet the needs of students who plan to seek employment with banks, credit unions and related financial organizations. It is also planned for students who are currently employed and desire advancement to positions of greater responsibility with financial services organizations. This program meets most of the requirements for the American Bankers Association (ABA) diploma/certificates.

### **GENERAL EDUCATION REQUIREMENTS – 21 CREDITS REQUIRED**

#### **1. COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)
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#### **2. ORAL COMMUNICATIONS (3.00 credits)**

SPC 1017	Fundamentals of Speech Communication	(3 credits)
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SPC 2608	Introduction to Public Speaking	(3 credits)
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#### **3. HUMANITIES (3.00 credits)**

PHI 2604	Critical Thinking/Ethics	(3 credits)
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#### **4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**

CLP 1006	Psychology of Personal Effectiveness	(3 credits)
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ECO 2013	Principles of Economics (Macro)	(3 credits)
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#### **5. MATH/SCIENCE (9.00 credits)**

MAC 1105	College Algebra	(3 credits)
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MAC 2233	Business Calculus	(3 credits)
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QMB 2100	Basic Business Statistics	(3 credits)
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### **Computer Competency Requirement**

Computer Competency Test (CCT)

**---Or---**

CGS 1060C - Introduction to Computer Technology & Applications

### **MAJOR COURSE REQUIREMENTS (21.00 credits)**

ACG 2021	Financial Accounting	(3 credits)
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ACG 2021L	Financial Accounting Lab	(1 credits)
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ACG 2071	Managerial Accounting	(3 credits)
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ACG 2071L	Managerial Accounting Lab	(1 credits)
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BAN 1004	Principles of Banking	(3 credits)
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BAN 2210	Analyzing Financial Statements	(3 credits)
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BAN 2511	Marketing for Financial Services	(3 credits)
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MNA 1130	Writing for Financial Services	(1 credit)
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MKA 1022	Relationship Selling and Sales Strategies	(3 credits)
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**PROGRAM CORE REQUIRED (18.00 credits)**

ACG 1403	Excel for Business	(2 credits)
BAN 1231	Commercial Lending	(3 credits)
BAN 1240	Essentials for Retail Lending	(3 credits)
BAN 2211	Applied Financial Statement Analysis	(3 credits)
REE 2304	Commercial Real Estate	(3 credits)
BAN 2501	Money, Banking and Financial Markets	(3 credits)
FIN 1930	Special Topic Seminar	(1 credit)





## **Financial Services - Wealth Management**

**(CIP 1252080100)**

*Associate in Science | Code: 22024 | 60 credits*

***Effective Term – Spring 2020 (2203)***

The Financial Services program is designed to meet the needs of students who plan to seek employment with commercial banks, stock brokerage companies and related financial organizations. It is also planned for students who are currently employed and desire advancement to positions of greater responsibility with financial organizations. This program meets most of the requirements for the American Institute of Banking diploma/certificates. The Associate in Arts degree is also available to the student planning to transfer to a senior institution after graduation from MDC. Consult an advisor about which additional courses are included in that program.

### **GENERAL EDUCATION REQUIREMENTS (21 credits)**

#### **1. COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	3 credits
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#### **2. ORAL COMMUNICATIONS (3.00 credits)**

SPC 1017	Fundamentals of Speech Communication	3 credits
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SPC 2608	Introduction to Public Speaking	3 credits
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#### **3. HUMANITIES (3.00 credits)**

PHI 2604	Critical Thinking and Ethics	3 credits
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#### **4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**

CLP 1006	Psychology of Personal Effectiveness	3 credits
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ECO 2013	Principles of Economics (Macro)	3 credits
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#### **5. MATH/SCIENCE (9.00 credits)**

MAC 1105	College Algebra	3 credits
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MAC 2233	Business Calculus	3 credits
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QMB 2100	Basic Business Statistics	3 credits
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### **COMPUTER COMPETENCY REQUIREMENT**

Computer Competency Test (CCT)

**---Or---**

CGS 1060C - Introduction to Computer Technology & Applications

### **MAJOR COURSE REQUIREMENTS (21.00 credits)**

ACG 2021	Financial Accounting	3 credits
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ACG 2021L	Financial Accounting Lab	1 credit
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ACG 2071	Managerial Accounting	3 credit
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ACG 2071L	Managerial Accounting Lab	1 credit
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BAN 1004	Banking Fundamentals, Evolution and Compliance	3 credits
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FIN 2032	Fundamentals of Wealth Management, Institutions, Markets and Products	3 credits
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FIN 2000	Principles of Finance	3 credits
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MNA 1130	Writing for Financial Services	1 credit
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MKA 1022	Relationship Selling and Sales Strategies	3 credits
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**PROGRAM CORE REQUIREMENTS (18.00 credits)**

ACG 1920	Excel for Business	2 credits
BAN 2210	Analyzing Financial Statements	3 credits
FIN 2010	Investments in Stocks and Bonds	3 credits
FIN 2100	Personal Finance	3 credits
FIN 2462	Financial Analysis and Valuation	3 credits
FIN 2031	Risk Management and Compliance	3 credits
FIN 1930	Special Topic Seminar	1 credit

Pre-Req: ACG 2021, 2021L,  
BAN2210

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: FIRE SCIENCE TECHNOLOGY (27018)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMMUNICATIONS** (3.00 credits)

☐ ENC 1101 - English Composition 1 (3 credits)

**2. ORAL COMMUNICATIONS** (3.00 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

**3. HUMANITIES** (3.00 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

**4. BEHAVIORAL/SOCIAL SCIENCE** (3.00 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

**5. MATH/SCIENCE** (3.00 credits)

☐ CHM 1033 - Chemistry for Health Sciences (3 credits)

☐ MAC 1105 - College Algebra (3 credits)

☐ PSC 1515 - Energy in the Natural Environment (3 credits)

**6. COMPUTER COMPETENCY**

Test type(s) needed:

☐ CGS 1060

**7. MAJOR COURSE REQUIREMENTS** (22.00 credits)

☐ EMS 1119 - Emergency Medical Technician (4 credits)

☐ FFP 1505 - Fire Prevention (3 credits)

☐ FFP 1710 - Supervision-Leadership for Fire Officers (3 credits)

☐ FFP 2510 - Fire and Building Codes (3 credits)

☐ FFP 2700 - Fire Department Management (3 credits)

☐ FFP 2740 - Fire Service Instructor (3 credits)

☐ FFP 2810 - Fire Fighting Tactics and Strategy (3 credits)

**8. PROGRAM CORE ELECTIVE** (23.00 credits)

☐ CGS 1060

☐ FFP 2120 - Building Construction for Fire Science (3 credits)

☐ FFP 2301 - Fire Hydraulics (3 credits)

☐ FFP 2305 - Fire Apparatus and Equipment (3 credits)

☐ FFP 2401 - Hazardous Materials 1 (3 credits)

☐ FFP 2402 - Hazardous Materials 2 (3 credits)

☐ FFP 2521 - Blueprint Readings and Plans Review (3 credits)

☐ FFP 2540 - Fire Detection and Suppression Systems (3 credits)

☐ FFP 2590 - Fire Inspector Preparation (1.00 - 9.00 credits)

☐ FFP 2604 - Arson Detection and Investigation (3 credits)

☐ FFP 2741 - Fire Service Instructor (Course Design) (3 credits)

☐ MAT 1033 - Intermediate Algebra (3 credits)

\* End of Program Sheet \*



## Funeral Services

CIP (1312030100)

Associate in Science | Code: 23073 | 72 credits

**Effective Term:** Summer 2020 (2205)

Students in the Funeral Services program are given a broad understanding of all phases of funeral home operations as well as the public health responsibilities of the funeral director and embalmer. All students must register to take the International Conference of Funeral Service Examining Boards, Inc. National Board Examination during their final semester. Students who plan Funeral Service licensure in other states must contract the respective state board to determine licensing requirements and the student is responsible for complying with all particular laws of that state. **The Funeral Service Education Program at Miami Dade College is accredited by the American Board of Funeral Service Education (ABFSE), 992 Mantua Pike, Suite 108, Woodbury Heights, NJ 08097, (816) 233-3747. Web: [www.abfse.org](http://www.abfse.org). National Board Examination pass rates, graduation rates, and employment rates for this and other ABFSE-accredited programs are available at [www.abfse.org](http://www.abfse.org). To request a printed copy of this program's rates, go to the Funeral Service Education Office (Building 3142) or by e-mail at [jfinocch@mdc.edu](mailto:jfinocch@mdc.edu), or by telephone 305-237-1244.**

Course	Course Title	Credits	Pre-/Co-Requisites
<b><u>General Education: 15 Credits Required</u></b>			
<b>Communications – 3 Credits Required</b>			
ENC 1101	English Composition 1	3	
<b>Humanities – 3 Credits Required</b>			
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
<b>Behavioral and Social Science – 3 Credits Required</b>			
SYG 2000	Introduction to Sociology	3	
<b>Science – 3 Credits Required</b>			
BSC 1084	Functional Human Anatomy	3	BSC 1084 (Optional Laboratory)
<b>Mathematics – 3 Credits Required</b>			
MAC*, MGF*, MAP*, MAS*, STA*		3	
<b><u>Major Course Requirements: 53 Credits Required</u></b>			
<b><u>Group A – 3 Credit Hours Required</u></b>			
FSE 1000	History of Funeral Service	3	
<b><u>Group B – 3 Credit Hours Required</u></b>			
BUL 2131	Legal Environment	3	
BUL 2241	Business Law 1	3	
<b><u>Group C – 3 Credit Hours Required</u></b>			
FSE 2202	Funeral Home Management	3	
GEB 1011	Principles of Management	3	

**Group D – 3 Credit Hours Required**

FSE 1105	Thanatochemistry	3	
CHM 1033	Chemistry for Health Sciences	3	Pre-Req MAT 1033 Co-Req CHM 1033L
CHM 1020	General Education Chemistry	3	
CHM 1025	Introduction to Chemistry	3	

**Group E – 3 Credit Hours Required**

FSE 2106	Funeral Service Microbiology	3	
MCB 2010	Microbiology I	3	Pre-Req BSC 2010/2010L or BSC 2085/2085L, CHM 1033/1033L or CHM 1045/1045L Co-Req MCB 2010L

**Group F – 3 Credit Hours Required**

FSE 2200	Funeral Service Accounting	3	
ACG 2001	Principles of Accounting 1	3	Co-Req ACG 2001L
ACG 2021	Financial Accounting	3	Co-Req ACG 2021L

**Group G – 33 Credits Required**

FSE 1080	Funeral Law	3	
FSE 2060	Funeral Directing	3	
FSE 2061	Thanatology	3	
FSE 2100	Embalming 1	3	Pre-Req BSC 1084
FSE 2100L	Embalming 1 Lab	2	Pre/Co-Req FSE 2100
FSE 2120C	Restorative Art	4	Pre-Req FSE 2100; Recommended: FSE 2100L
FSE 2140	Embalming 2	3	Pre-Req FSE 2100
FSE 2140L	Embalming 2 Lab	2	Pre-Req FSE 2100L; Recommended: FSE 2100, 2140
FSE 2160	Pathology	3	
FSE 2201	Funeral Home Operations	3	
FSE 2203	Funeral Home Applications	4	Pre-Req FSE 2060, 2201

**Group H – 2 Credits Required**

FSE 2930	Professional Review	2	Taken in Final Semester
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**Elective Course Requirements: 4-6 Credit Hours**

ACG 2001L	Principles of Accounting 1 Lab	1	Co-Req ACG 2001
ACG 2021L	Financial Accounting Lab	1	Co-Req ACG 2021
CHM 1033L	Chemistry for Health Sciences Lab	1	Pre-Req MAT 1033; Co-Req CHM 1033
CLP 1006	Psychology of Personal Effectiveness	3	
ENC 1102	English Composition II	3	Pre-Req ENC1101
MCB 2010L	Microbiology Lab 1	1	Pre-Req BSC 2010/2010L or BSC 2085/2085L, CHM 1033/1033L or CHM 1045/1045L; Co-Req MCB 2010
SLS 1125	Student Support Seminar	3	
SLS 1510	Preparing for Student Success	3	
SPC 1017	Fundamentals of Speech Communication	3	

**Additional Information:**

**Students must apply in person in the FSE office.** Students are required to attend program orientation prior to admission into the Funeral Service Education Program.

A minimum cumulative grade point average of 2.0 is required for graduation.

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements rests with the student.

Students must pass both sections of the National Board Examination in order to be licensed as a Combination Funeral Director & Embalmer or Embalmer Only in the State of Florida (2015).

Florida Statutes require fingerprinting and a background check upon application for licensure. Additionally, many funeral homes require a background check as well as drug testing prior to employment. Individuals who possess a criminal record or history of bad character may be denied licensure in this or any other state solely based on their criminal background / character even though they successfully complete this program.

### **Program Requirements**

Students must complete all coursework with a “C” or better to complete the degree.

Admission requirement into the Associate in Science degree program is completion of all general education classes with a 2.5 GPA or higher.

Applicants with more than three (3) grades of “D”, “F”, or “W” in the required general education courses are not eligible for entry in the Associate in Science degree program.

Students in the Associate in Science program with more than three (3) grades of “D”, “F”, or “W” in the Major Course Requirement classes will be removed from the program.

Students who possess the College Credit Certificate in Funeral Service Education and have more than three (3) grades of “D”, “F”, or “W” cannot apply to the Associate in Science in Funeral Service Education Program.

Students must maintain a 2.0 GPA while admitted to Associate in Science program or be withdrawn from the program.

Students must be enrolled in at least 6 credit hours for 2 out of 3 semesters in an academic year or they will be removed from the program.

Students who are withdrawn from the program may re-apply for admission.

Students may take up to 12 credit hours of course requirements at another institution while admitted to the Associate in Science degree program.

The last 30 hours of **major subject content** of the Associate in Science degree must be completed at the home institution.

Students are strongly encouraged to take SPC1017 – Fundamentals of Speech Communication prior to entry of the program.

All laboratory and practical classes must be completed at the home institution.

Students of the program must register for the National Board Examination as administered by the International Conference of Funeral Service Examining Boards ([www.theconferenceonline.org](http://www.theconferenceonline.org)) to be awarded the Associate in Science degree.



## Game Development and Design

CIP (1550041100)

Associate in Science | Code: 25075 | 60 credits

### Program Description:

This curriculum allows students to explore the entertainment technology landscape while still pursuing a broad-based education. With an emphasis on game programming, the program exposes students to the development and design processes. Students can further specialize in game design, production, engines and systems, graphics programming and animation, mobile, and more.

Course	Course Title	Credits	Pre-/Co-Requisites
<b><u>GENERAL EDUCATION – 15 Credits Required</u></b>			
<b>Communications – 3 Credits Required</b>			
ENC 1101	English Composition 1	3	Pre-Req Approved Placement Testing
<b>Oral Communication – 3 Credits Required</b>			
SPC 1017	Fundamentals of Speech Communications	3	
<b>Humanities – 3 Credits Required</b>			
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
<b>Behavioral and Social Science – 3 Credits Required</b>			
CLP 1006	Psychology of Personal Effectiveness	3	
<b>Mathematics – 3 Credits Required</b>			
MAC 1105	College Algebra	3	Pre-Req MAT 1033 or Placement Testing
<b>Computer Competency</b>			
CGS 1060C	Introduction to Computer Technology & Applications		<b>*Credits count towards Major Core</b>
OR	Computer Competency Test (CCT)		
<b><u>MAJOR CORE REQUIREMENTS – 12 Credits Required</u></b>			
CGS 1060C	Introduction to Computer Technology & Applications	4	
COP 1334	Introduction to C++ Programming	4	Pre/Co-Req: CGS 1060C
COP 2335	Object Orientated Programming Using C++	4	Pre-Req: COP 1334
<b><u>PROGRAM CORE REQUIREMENTS – 33 Credits Required</u></b>			
CAP 2047	User Interface Design	4	
CAP 2048	Game Development Project I	3	Pre-Req: CAP 2047, COP 1334, 2335, DIG 1430, 1710
CAP 2920C	Game Development Project II	3	Pre-Req: CAP 2048
DIG 1430	Storyboarding	3	
DIG 1705	3D Programming	4	Pre-Req: COP 2335, DIG 1710, MAC 1105
DIG 1710	Introduction to Game Development	4	
DIG 1712	Level Building & Design	4	
DIG 2626	Artificial Intelligence	4	Pre-Req: COP 2335, MAC 1105
DIG 2717C	Game System Design	4	Pre-Req: DIG 1710, MAC 1105



## Graphic Design Technology

Associate in Science | Code: 26031 | 64 credits

### Program Description:

The Graphic Design Technology A.S. degree program prepares students for employment as graphic designers, illustrators, photo editors, page layout artists, advertising designers, package designers, branding and visual identity designers. Coursework includes the production workflow process from the design concept to the finished printed or multimedia product.

### GENERAL EDUCATION REQUIREMENTS (15 credits)

1. **COMMUNICATIONS (3 credits)**  
ENC 1101 - English Composition 1 (3 credits)
2. **ORAL COMMUNICATIONS (3 credits)**  
SPC 1017 - Fundamentals of Speech Communication (3 credits)
3. **HUMANITIES (3 credits)**  
PHI 2604 - Critical Thinking/Ethics (3 credits)
4. **BEHAVIORAL/SOCIAL SCIENCE (3 credits)**  
CLP 1006 - Psychology of Personal Effectiveness (3 credits)
5. **MATH/SCIENCE (3 credits)**  
MAC 1105 - College Algebra (3 credits)

### COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C - Introduction to Computer Technology & Applications

### MAJOR COURSE REQUIREMENTS (46.00 credits)

GRA 1111C	Graphic Design Fundamentals	(4 credits)
GRA 1113C	Visual Identity & Branding Design	(4 credits)
GRA 1206C	Typography Fundamentals	(4 credits)
GRA 1280C	Digital Imaging Fundamentals	(4 credits)
GRA 1750	Web Design Fundamentals	(3 credits)
GRA 2117C	Digital Illustration Fundamentals	(4 credits)
GRA 2121C	Publication Design	(4 credits)
GRA 2151C	Advanced Digital Illustration and Imaging	(4 credits)
GRA 2203C	Portfolio and Business Practices for Designers	(3 credits)
GRA 2207C	Capstone Project	(4 credits)
GRA 2545C	Package Design	(4 credits)
GRA 2546C	Advertising Design	(4 credits)

### MAJOR COURSE ELECTIVE (3.00 credits)

ART 1300C	Drawing	(3 to 4 credits)
ART 1330C	Figure Drawing	(3 to 4 credits)
GRA 1949	Co-op Work Experience 1: GRA	(3 credits)
GRA 2305C	Special Topics in Graphic Design	(3 credits)
GRA 2949	Co-op Work Experience 2: GRA	(3 credits)



## **Graphic Internet Technology**

*Associate in Science | Code: 26050 | 60 credits*

### **Program Description:**

The Graphic Internet Technology program is designed to prepare creative students for a rewarding and challenging career as web designers. Students will develop a wide variety of Internet communications skills and will learn to design, produce and distribute communications on the web.

### **GENERAL EDUCATION REQUIREMENTS (15 credits)**

- 1. COMMUNICATIONS (3.00 credits)**  
ENC 1101 - English Composition 1 (3 credits)
- 2. ORAL COMMUNICATIONS (3.00 credits)**  
SPC 1017 - Fundamentals of Speech Communication (3 credits)
- 3. HUMANITIES (3.00 credits)**  
PHI 2604 - Critical Thinking/Ethics (3 credits)
- 4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**  
CLP 1006 - Psychology of Personal Effectiveness (3 credits)
- 5. MATH/SCIENCE (3.00 credits)**  
MAC 1105 - College Algebra (3 credits)

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C - Introduction to Computer Technology & Applications

### **MAJOR COURSE REQUIREMENTS (42.00 credits)**

GRA 1111C	Graphic Design Fundamentals	(4 credits)
GRA 1206C	Typography Fundamentals	(4 credits)
GRA 1280C	Digital Imaging Fundamentals	(4 credits)
GRA 1750	Web Design Fundamentals	(3 credits)
GRA 1751	Fixed-Layout Web Design	(4 credits)
GRA 1752	Motion Graphics for Web Design	(4 credits)
GRA 1754	Responsive Web Design	(4 credits)
GRA 2117C	Digital Illustration Fundamentals	(4 credits)
GRA 2156C	User Interface and Experience Design	(4 credits)
GRA 2203C	Portfolio and Business Practices for Designers	(3 credits)
GRA 2727	Dynamic Web Design	(4 credits)

### **MAJOR COURSE ELECTIVE (3.00 credits)**

GRA 1949	Co-op Work Experience 1: GRA	(3 credits)
GRA 2207C	Capstone Project	(4 credits)
GRA 2755	Emerging Technologies for Multimedia Web Design	(3 credits)
GRA 2949	Co-op Work Experience 2: GRA	(3 credits)



### Health Care Services Specialist

College Credit Certificate | Code: 63021 | 27 credits

CIP (0351070102)

Effective Term: Summer 2023 (2235)

The 27-credit hour certificate program includes a series of courses that prepare students to become proficient on the latest software used in medical offices. A medical office manager plays an integral part in the day-to-day operations of a medical practice. Medical office manager responsibilities include, but are not limited to, monitoring the office budget, ordering medical supplies and implementing office policies and procedures. Graduates will also be trained to understand the complexities of healthcare insurance regulations and payment systems. This certificate is upward compatible with the A.S. degree, Health Services Management.

#### **MAJOR CORE REQUIREMENTS (27 credits)**

BSC 2085	Human Anatomy and Physiology 1	(3 credits)	Corequisite: BSC 2085L
BSC 2085L	Human Anatomy and Physiology 1 Laboratory	(1 credit)	Corequisite: BSC 2085
GEB 1011	Principles of Business	(3 credits)	
HIM 1300	Health Care Facilities and Delivery System	(2 credits)	
HIM 2472	Medical Terminology	(3 credits)	
HIM 2253C	Current Procedural Terminology Coding	(2 credits)	
HSA 1380	Health Care Quality Management	(3 credits)	
HSA 2181	Health Services Management Concepts	(3 credits)	
HSC 2810	Professional Practice Experience	(4 credits)	
MAN 2021	Principles of Management	(3 credits)	



### Health Science - Health Services Management

Associate in Science | Code: 23082 | 60 credits

CIP (1351070101)

Effective Term: Summer 2023 (2235)

The Associate in Science degree in Health Sciences: Health Service Management is designed to introduce graduates to the healthcare field and an in-depth background on health care management to prepare them for a health-related career or a graduate professional health program or other graduate programs. In addition, students will acquire extensive knowledge on legal and ethical responsibilities within the health care system, current issues in the health care system, health services management concepts, Health care quality management, and managing organizations in a multi-cultural environment.

#### **GENERAL EDUCATION REQUIREMENTS – 15 CREDITS REQUIRED**

##### **COMMUNICATIONS (3.00 credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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##### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	Prerequisite: ENC 1101
HUM 1020	Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	
THE 2000	Theatre Appreciation	(3 credits)	

##### **MATHEMATICS (3.00 credits)**

MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.
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##### **NATURAL SCIENCE (3.00 credits)**

BSC 2085	Human Anatomy and Physiology 1	(3 credits)	Corequisite: BSC 2085L
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##### **SOCIAL SCIENCE (3.00 credits)**

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

##### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C	Introduction to Computer Technology & Application	
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##### **SCIENCE REQUIREMENTS (5 credits)**

BSC 2085L	Human Anatomy and Physiology 1 Laboratory	(1 credits)	Corequisite: BSC 2085
BSC 2086	Human Anatomy & Physiology 2	(3 credits)	Prerequisite: BSC 2085; Corequisite: BSC2 086L
BSC 2086L	Human Anatomy & Physiology 2 Laboratory	(1 credits)	Prerequisite: BSC 2085, BSC 2085L; Corequisite: BSC 2086

**MAJOR CORE REQUIREMENTS (40 credits)**

ACG 2021	Financial Accounting	(3 credits)	Corequisite: ACG 2021L
ACG 2021L	Financial Accounting Lab	(1 credits)	Corequisite: ACG 2021
GEB 1011	Principles of Business	(3 credits)	
HIM 1300	Health Care Facilities and Delivery System	(2 credits)	
HIM 2012	Legal Aspects of Health Care	(2 credits)	
HIM 2253C	Current Procedural Terminology Coding	(2 credits)	
HIM 2472	Medical Terminology	(3 credits)	
HIM 2652C	Electronic Health Records	(3 credits)	
HSA 1102	Current Issues in Health	(3 credits)	
HSA 1380	Health Care Quality Management	(3 credits)	
HSA 2001	Interprofessional Team Based Health Care	(2 credits)	
HSA 2181	Health Services Management Concepts	(3 credits)	
HSC 1149	General Pharmacology for Health Care Professions	(3 credits)	
HSC 2810	Professional Practice Experience	(4 credits)	
MAN 2021	Principles of Management	(3 credits)	



## Health Information Technology

Associate in Science | Code: 23052 | 70 credits

**CIP (1351070700)**

**Effective Term: Fall 2022 (2227)**

The Health Information Technology program is designed to educate and prepare graduates with entry-level job skills. The Associate in Science degree in Health Information Technology engages students in healthcare, business, and the technology used in the industry.

### **GENERAL EDUCATION REQUIREMENTS (15 Credits Required)**

#### **Communications (3.00 Credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **Humanities (3.00 Credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **Mathematics (3.00 Credits)**

STA 2023	Statistical Methods	(3 credits)	Prerequisite: MAT 1033 or MGF 1106
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#### **Natural Science (3.00 Credits)**

BSC 2085	Human Anatomy and Physiology 1	(3 credits)	Corequisite: BSC 2085L
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#### **Social Sciences (3.00 Credits)**

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

### **COMPUTER COMPETENCY**

*Test type(s) needed:*

Computer Competency Test (CCT)

---or---

CGS 1060C - Introduction to Computer Technology & Applications

### **SCIENCE REQUIREMENTS (5.00 credits)**

BSC 2085L	Human Anatomy and Physiology 1 Laboratory	(1 credits)	Corequisite: BSC 2085
BSC 2086	Human Anatomy & Physiology 2	(3 credits)	Prerequisite: BSC 2085, BSC 2085L Corequisite: BSC 2086L
BSC 2086L	Human Anatomy & Physiology 2 Laboratory	(1 credits)	Prerequisite: BSC 2085, BSC 2085L Corequisite: BSC 2086

### **ELECTIVE REQUIREMENT (3.00 credits)**

MAT 1033	Intermediate Algebra	(3 credits)	Prerequisite: MAT0022C, or MAT 0028, or MAT0057 or by placement score, or eligible exemption
MAT 1033L	Intermediate Algebra Recitation Hall	(0 credits)	Corequisite: MAT 1033

### **MAJOR CORE REQUIREMENTS (47 credits)**

HIM 1000	Health Information Technology	(2 credits)	
HIM 1110	Health Record Technology & Data Collection	(2 credits)	Corequisite: HIM 1110L
HIM 1110L	Health Record Technology & Data Collection Laboratory	(3 credits)	Corequisite: HIM 1110
HIM 1300	Health Care Facilities and Delivery System	(2 credits)	
HIM 1800	Professional Practice I	(2 credits)	Corequisites: HIM 1110, HIM 1110L
HIM 2012	Legal Aspects of Health Care	(2 credits)	
HIM 2211C	Health Information Technologies	(2 credits)	Prerequisite: HIM 1110L
HIM 2214C	Health Statistics	(2 credits)	Prerequisites: HIM1110, HIM 1110L
			Corequisite: HIM 2512C
HIM 2222	ICD Coding Systems	(2 credits)	Prerequisites: BSC 2085, BSC 2085L
			Corequisite: HIM 2222L
HIM 2222L	ICD Coding Systems Laboratory	(3 credits)	Prerequisites: BSC 2085, 2085L
			Corequisite: HIM 2222
HIM 2234	Advanced ICD Coding Systems & Reimbursement	(2 credits)	Prerequisite: HIM 2222, HIM 2222L
HIM 2234L	Advanced ICD Coding Systems & Reimbursement Laboratory	(1 credits)	Prerequisite: HIM 2222, HIM 2222L
HIM 2253C	Current Procedural Terminology	(2 credits)	
HIM 2400C	Diversified Non-Hospital Health Record	(2 credits)	
HIM 2433	Pathophysiology and Pharmacology	(3 credits)	Prerequisites: BSC 2085, BSC 2085L, BSC 2086, BSC 2086L
HIM 2472	Medical Terminology	(3 credits)	
HIM 2500	Data Management/Quality Assessment	(2 credits)	Prerequisites: HIM 1110, HIM 1110L
			Corequisite: HIM 2500L
HIM 2500L	Data Management/Quality Assessment Laboratory	(1 credits)	Prerequisites: HIM 1110, HIM 1110L
			Corequisite: HIM 2500
HIM 2512C	Supervision and Management for Health Information Technology	(2 credits)	Prerequisites: HIM 1000, HIM 1110, HIM 1110L, HIM 1800
HIM 2652C	Electronic Health Record	(3 credits)	Prerequisite: HIM 2211C
HIM 2810	Professional Practice Experience 2	(2 credits)	Corequisites: HIM 2234, HIM 2234L
HIM 2820	Seminar and Professional Practice Experience 3	(2 credits)	Prerequisite: HIM 2810
			Corequisites: HIM 2500, HIM 2500L

**\*HSC 0003 Introduction to Health Care Lecture and Lab**

Student must be enrolled or have successfully completed HSC 0003 – Introduction to Health Care (2.5 credits) and HSC 0003L – Introduction to Health Care Lab (.5 credits) *prior to applying to the program.*

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: HISTOLOGIC TECHNOLOGY (23063)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## **I. GENERAL EDUCATION REQUIREMENTS**

### **1. COMMUNICATIONS (3.00 credits)**

- ☐ ENC 1101 - English Composition 1 (3 credits)

### **2. ORAL COMMUNICATIONS (3.00 credits)**

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### **3. HUMANITIES (3.00 credits)**

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### **4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### **5. MATH/SCIENCE (3.00 credits)**

- ☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)

### **6. COMPUTER COMPETENCY**

Test type(s) needed:

- ☐ CGS 1060

### **7. FIRST TERM IN PROGRAM (10.00 credits)**

- ☐ BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits)  
☐ CHM 1033 - Chemistry for Health Sciences (3 credits)  
☐ CHM 1033L - Chemistry for Health Sciences lab (1 credits)

- ☐ HIM 2472 - Medical Terminology (3 credits)  
☐ MLT 1752 - Quality Control Laboratory Mathematics (2 credits)

### **8. SECOND TERM IN PROGRAM (17.00 credits)**

- ☐ BSC 2010 - Principles of Biology (3 credits)  
☐ BSC 2086 - Human Anatomy & Physiology 2 (3 credits)  
☐ BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits)  
☐ MLT 1191 - Histotechnology 1 (3 credits)

- ☐ MLT 1191L - Histotechnology 1 Lab (2 credits)  
☐ MLT 1195C - Tissue Identification 1 (3 credits)  
☐ MLT 1196 - Laboratory Safety and Regulations (2 credits)

### **9. THIRD TERM IN PROGRAM (14.00 credits)**

- ☐ MCB 2010 - Microbiology (3 credits)  
☐ MCB 2010L - Microbiology Laboratory (2 credits)  
☐ MLT 2192 - Histotechnology 2 (3 credits)

- ☐ MLT 2192L - Histotechnology 2 Laboratory (2 credits)  
☐ MLT 2197C - Tissue Identification 2 (4 credits)

### **10. FOURTH TERM IN PROGRAM (8.00 credits)**

- ☐ MLT 2180C - Infectious Diseases & Control Practices (3 credits)  
☐ MLT 2198 - Histochemistry (3 credits)

- ☐ MLT 2198L - Histochemistry Laboratory (2 credits)

### **11. FIFTH TERM IN PROGRAM (5.00 credits)**

- ☐ MLT 1840L - Histotechnology Practicum 1 (5 credits)

### **12. SIXTH TERM IN PROGRAM (7.00 credits)**

☐ MLT 2841L - Histotechnology Practicum 2 (5 credits)

☐ MLT 2931 - Histotechnology Seminar (2 credits)

\* End of Program Sheet \*



## Hospitality & Tourism Management

CIP (1252090101)

Associate in Science | Code: 22016 | 60 credits

### Program Description:

The Hospitality and Tourism Management program provides professional preparation for a career in the hospitality industry. Hospitality management is presented as a core curriculum with emphasis on hotel, cruise-line, resorts, conventions, and institutional management. An internship program is required to provide practical experience in the field of the student's choice. The Associate in Arts degree is also available to the student planning to transfer to a four-year institution after graduation from MDC. Consult an advisor about which additional courses are included in that program.

Course	Course Title	Credits	Pre/Co-Requisites
<b><u>GENERAL EDUCATION – 18 Credits Required</u></b>			
<b><u>Communications – 6 Credits Required</u></b>			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
<b><u>Oral Communication – 3 Credits Required</u></b>			
SPC 1017	Fundamentals of Speech Communications	3	
<b><u>Humanities – 3 Credits Required</u></b>			
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
<b><u>Behavioral and Social Science – 3 Credits Required</u></b>			
CLP 1006	Psychology of Personal Effectiveness	3	
<b><u>Mathematics/Natural Science – 3 Credits Required</u></b>			
MAC1105	College Algebra	3	Pre-Req MAT 1033
MGF 1106	Mathematics for Liberal Arts 1	3	Pre-Req MAT 1033
<b><u>Computer Competency</u></b>			
Computer Competency Test			
<b>Or</b>			
CGS 1060C	Introduction to Computer Technology & Applications	4	<b>*Credits fall in elective area</b>
<b><u>MAJOR CORE REQUIREMENTS – 12 Credits Required</u></b>			
HFT 1000	Introduction to Hospitality and Tourism	3	
HFT 1210	Human Resources in Hospitality	3	
HFT 2421	Managerial Accounting for Hospitality	3	
HFT 2449	Information Systems in the Hospitality and Tourism Industries	3	Pre-Req HFT 1000
<b><u>PROGRAM ELECTIVES – 30 Credits Required</u></b>			
CGS 1060C	Introduction to Computer Technology & Applications	4	
FSS 1100	Foodservice Purchasing	3	
FSS 1200	Culinary Terminology and Procedures	3	
FSS 1202L	Food Production 1	3	
HFT 1212	Safety and Sanitation	3	
HFT 1220	Communication and Supervision Development	3	
HFT 1300	Executive Housekeeping	3	
HFT 1454	Food and Beverage Cost Controls	3	
HFT 1611	Responsible Beverage Vendor	1	
HFT 1631	Risk Management & Security	3	
HFT 1841	Dining Room Service	3	Co-Req HFT 1000

HFT 1841L	Dining Room Service Laboratory	1	
HFT 1852	Menu and Facilities Planning	3	Pre-Req HFT 1000
HFT 1949	Coop Workstudy Internships I	3	
HFT 2223	Training Skills and Development	3	
HFT 2241	Quality Guest Services in Hospitality	3	
HFT 2261	Restaurant Management	3	Pre-Req HFT 1000
HFT 2410	Front Office Procedures and Lodging Operations	4	
HFT 2500	Marketing of Hospitality Services	3	
HFT 2501	Hospitality and Tourism Sales	3	
HFT 2750	Event and Meeting Management	3	
HFT 2800	Food and Beverage Management	3	
HFT 2949	Coop Workstudy internships 2	3	

### **Additional Information**

**Computer Competency:** By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass

**Or**

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test**.

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: INTERIOR DESIGN TECHNOLOGY (26030)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## **I. GENERAL EDUCATION REQUIREMENTS**

### **1. COMMUNICATIONS (3.00 credits)**

Test type(s) needed:

- ☐ ENC 1101 - English Composition 1 (3 credits)

### **2. ORAL COMMUNICATIONS (3.00 credits)**

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### **3. HUMANITIES (3.00 credits)**

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### **4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### **5. MATH/SCIENCE (3.00 credits)**

- ☐ MAC 1105 - College Algebra (3 credits)

### **6. COMPUTER COMPETENCY**

Test type(s) needed:

- ☐ CGS 1060

### **7. MAJOR COURSE REQUIREMENTS (53.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> ARC 1115 - Architectural Communications 1 (2 credits)             | <input type="checkbox"/> IND 1300 - Interior Design Presentations 1 (2 credits)      |
| <input type="checkbox"/> ARC 1126  | <input type="checkbox"/> IND 2201 - Design Principles for Kitchen & Bath (3 credits) |
| <input type="checkbox"/> ARC 2171 - Computer Aided Drafting 1 (4 credits)                  | <input type="checkbox"/> IND 2210 - Interior Design 3 (4 credits)                    |
| <input type="checkbox"/> ARC 2461 - Architectural Materials and Construction 1 (4 credits) | <input type="checkbox"/> IND 2220 - Interior Design 4 (4 credits)                    |
| <input type="checkbox"/> IND 1020 - Interior Design 1 (4 credits)                          | <input type="checkbox"/> IND 2330 - Interior Design Presentations 2 (3 credits)      |
| <input type="checkbox"/> IND 1100 - History of Interiors 1 (3 credits)                     | <input type="checkbox"/> IND 2430 - Lighting Design (3 credits)                      |
| <input type="checkbox"/> IND 1130 - History of Interiors 2 (3 credits)                     | <input type="checkbox"/> IND 2500 - Professional Practices (3 credits)               |
| <input type="checkbox"/> IND 1200 - Interior Design 2 (4 credits)                          | <input type="checkbox"/> IND 2608 - Sustainable Design (3 credits)                   |

### **8. MAJOR COURSE ELECTIVE (7.00 credits)**

- |   |   |
|---|---|
| <input type="checkbox"/> ARC 1113 - Sketchbook Studies (3 credits)                        | <input type="checkbox"/> ARC 2767 - Architectural History: Urban Spaces (3 credits)         |
| <input type="checkbox"/> ARC 2053 - Architectural Computer Applications (4 credits)       | <input type="checkbox"/> ARC 2312C - Introduction to Building Assembly Modeling (4 credits) |
| <input type="checkbox"/> ARC 2056 - Computer Aided Architectural Presentation (4 credits) | <input type="checkbox"/> CTE 1401 - Introduction to Textile Science (3 credits)             |
| <input type="checkbox"/> ARC 2172 - Computer Aided Drafting 2 (4 credits)                 | <input type="checkbox"/> IND 2421 - Introduction to Furniture Design (3 credits)            |
| <input type="checkbox"/> ARC 2765 - An Introduction to: Cities of the World (3 credits)   |   |

\* End of Program Sheet \*



## **Landscape & Horticulture Technology**

**CIP (1101060502)**

*Associate in Science | Code: 21005 | 60 credits | 2 years to complete*

Effective Term: Spring 2019 (2193)

The purpose of this program is to prepare students for employment in horticulture and landscape industries. The students will learn about plant growth, nutrition and fertilization, plant classification and identification, propagation, pest control, pruning, maintenance and drainage. Students will also gain business management and job skills.

### **GENERAL EDUCATION REQUIREMENTS (15.00 credits)**

- 1. COMMUNICATIONS (3.00 credits)**  
ENC 1101 – English Composition 1 (3 credits)
- 2. ORAL COMMUNICATIONS (3.00 credits)**  
SPC 1017 – Fundamentals of Speech Communication (3 credits)  
SPC 2608 – Introduction to Public Speaking (3 credits)
- 3. HUMANITIES (3.00 credits)**  
PHI 2604 – Critical Thinking/Ethics (3 credits)
- 4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**  
CLP 1006 – Psychology of Personal Effectiveness (3 credits)  
ECO2013 – Principles of Economics (3 credits)
- 5. MATH/SCIENCE (3.00 credits)**  
BOT 1010 – Introduction to Botany (3 credits)  
BSC 1050 – Biology & Environment (3 credits)  
EVR 1001 – Introduction to Environmental Science (3 credits)

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---Or---

CGS 1060C – Introduction to Computer Technology & Applications (4 credits)

### **MAJOR COURSE REQUIREMENTS (27.00 credits)**

#### **Group A (24.00 credits)**

- HOS 1010 – Horticulture 1 (3 credits)
- HOS 1011 – Horticulture 2 (3 credits)
- IPM 2112 – Principles of Entomology (3 credits)
- IPM 2301 – Pesticide Applications (3 credits)
- LDE 2310 – Irrigation Design & Maintenance (3 credits)
- ORH 1251 – Nursery Practices 1 (3 credits)
- ORH 2949 – Landscape Technology Internship (3 credits)
- SBM 1000 – Small Business Management (3 credits)

---And---

**Group B (3 credits)**

ORH 1510 – Landscape Plant Identification 1 (3 credits)

BOT 2150C – Native Plant Identification and Usage in South Florida (3 credits)

**MAJOR COURSE ELECTIVE (18.00 credits)**

ACG 2021 – Financial Accounting (3 credit)

ACG 2021L – Financial Accounting Lab (1 credit)

ACG 2071 – Managerial Accounting (3 credit)

ACG 2071L – Managerial Accounting Lab (1 credit)

ARC 2171 – Computer Aided Draft 1 (4credits)

BOT 1010 – Introduction to Botany (3 credits)

BOT 1010L – Introduction to Botany Lab (1 credit)

BOT 2150C – Native Plant Identification and Usage in South Florida (3 credits)

BSC 1005 – General Education Biology (3 credits)

BSC 1050 – Biology & Environment (3 credits)

BSC 2010 – Principles of Biology (3 credit)

BSC 2010L – Principles of Biology Lab (2 credit)

BSC 2011 – Principles of Biology 2 (3 credit)

BSC 2011L – Principles of Biology 2 (2 credit)

CGS 1060 – Introduction to Microcomputer Usage (4 credits)

CHM 1025 – Introductory Chemistry (3 credits)

CHM 1045 – General Chemistry and Qualitative Analysis (3 credits)

CHM 1045L – General Chemistry and Qualitative Analysis Lab (2 credits)

ECO 2013 – Principles of Economics (Macro) (3 credits)

EVR 1001 – Introduction to Environmental Science (3 credits)

FIN 2000 – Principles of Finance (3 credit)

LDE 2000 – Planting Design 1 (4 credits)

MAC\*

MAN 2021 – Principles of Management (3 credits)

MAR 1720 – Introduction to E-Commerce (3 credits)

MGF\*

MKA 1021 – Fundamentals of Selling (3 credits)

QMB 2100 – Basic Business Statistics (3 credits)

QMB 2100L – Basic Business Statistics Laboratory (1 credits)

ORH 1840C – Landscape Construction (2 credits)

ORH 2932 – Special Topics in Landscaping (1 credit)

STA 2023 – Statistical Methods (3 credits)

TRA 1154 – Introduction to Supply Chain Management (3 credits)

TRA 2010 – Introduction to Transportation and Logistics (3 credits)

ZOO 1010 – Zoology (3 credits)

ZOO 1010L – Zoology Lab (1 credit)



## **Marketing**

*Associate in Science | Code: 25047 | 60 credits | 2 years to complete*  
Effective Term: Spring 2020 (2203)

### **GENERAL EDUCATION REQUIREMENTS – 24 credits**

- 1. COMMUNICATIONS (6.00 credits)**  
ENC 1101 - English Composition 1 (3 credits)  
ENC 1102 – English Composition 2 (3 credits)
- 2. ORAL COMMUNICATIONS (3.00 credits)**  
SPC 1017 - Fundamentals of Speech Communication (3 credits)
- 3. HUMANITIES (3.00 credits)**  
PHI 2604 - Critical Thinking/Ethics (3 credits)
- 4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**  
ECO 2013 – Principles of Economics (Marco) (3 credits)
- 5. MATHEMATICS (9.00 credits)**  
MAC 1105 – College Algebra (3 credits)  
MAC 2233 – Business Calculus (3 credits)  
QMB 2100 - Basic Business Statistics (3 credits)

### **Computer Competency Requirement**

Computer Competency Test (CCT)

---Or---

CGS 1060C      Introduction to Computer Technology & Applications

### **MAJOR COURSE REQUIREMENTS (11.00 credits)**

ACG 2021 Financial Accounting (3 credits)

ACG 2021L Financial Accounting Lab (1 credit)

---Or---

ACG 2011 Principles of Accounting 2 (3 credits)

ACG 2011L Principles of Accounting 2 Lab (1 credit)

---AND---

ACG 2071 Managerial Accounting (3 credits)

ACG 2071L Managerial Accounting Lab (1 credits)

ECO 2023 Principles of Economics (Micro) (3 credits)

**PROGRAM CORE REQUIREMENTS (18 credits)**

(Students must select one track)

**Track 1 - DIGITAL MARKETING (18.00 Credits)**

MAR 1011	Principles of Marketing	(3 credits)
MAR 1720	Marketing in a Digital World	(3 credits)
MAR 2101	Social Media Marketing	(3 credits)
MAR 2952	Digital Marketing Capstone	(3 credits)
MAR 2704	Marketing Web Analytics	(3 credits)
MAR 2703	Marketing Content, Branding and Strategy	(3 credits)

---OR---

**Track 2 - SALES AND CUSTOMER SERVICE (18.00 Credits)**

MAR 1440	Fundamentals of Negotiations	(3 credits)	
MKA 1160	Customer Relationship Management	(3 credits)	
MAR 1502	Sales and Consumer Behavior	(3 credits)	
MKA 1022	Relationship Selling	(3 credits)	
MAR 2419	Technology in Sales	(3 credits)	Pre-req: MKA 1160
MKA 2024	Organizational Sales Management	(3 credits)	

---OR---

**Track 3 - MARKETING (18.00 Credits)**

MAR*		
MKA*		
OST 2335	Business Writing	(3 credits)

**ELECTIVES (7.00 credits)**

<input type="checkbox"/> ACG*	<input type="checkbox"/> ECO*	<input type="checkbox"/> MNA*
<input type="checkbox"/> BAN*	<input type="checkbox"/> FIN*	<input type="checkbox"/> MTB*
<input type="checkbox"/> BRC*	<input type="checkbox"/> GEB*	<input type="checkbox"/> OST*
<input type="checkbox"/> BUL*	<input type="checkbox"/> LIS*	<input type="checkbox"/> PUR*
<input type="checkbox"/> CGS*	<input type="checkbox"/> MAN*	<input type="checkbox"/> QMB*
<input type="checkbox"/> CIS*	<input type="checkbox"/> MAR*	<input type="checkbox"/> REE*
<input type="checkbox"/> COP*	<input type="checkbox"/> MKA*	<input type="checkbox"/> TRA*

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: MUSIC BUSINESS - BUSINESS MANAGEMENT (25019)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (3.00 credits)

- ☐ ENC 1101 - English Composition 1 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### 5. MATH/SCIENCE (3.00 credits)

- ☐ MAC 1105 - College Algebra (3 credits)

### 6. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

### 7. MAJOR COURSE REQUIREMENTS (15.00 credits)

- |   |  |
|---|--|
| <input type="checkbox"/> MUM 2700 - Music Business 1 (3 credits)          | <input type="checkbox"/> MUM 2704 - Music Business 4-Computer Applications (3 credits) |
| <input type="checkbox"/> MUM 2702 - Music Business 2-Careers (3 credits)  | <input type="checkbox"/> MUM 1949 - Co-op Work Experience 1: MUM (3 credits)           |
| <input type="checkbox"/> MUM 2703 - Music Business 3-Computer (3 credits) |  |

### 8. MAJOR COURSE REQUIREMENTS (13.00 credits)

Must take 9.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> GEB 1011 - Principles of Business (3 credits)    | <input type="checkbox"/> MAR 1011 - Principles of Marketing (3 credits) |
| <input type="checkbox"/> SBM 1000 - Small Business Management (3 credits) |   |

- - - And - - -

Must take 4.0 credits from the following group.

- ☐ COP 2822 - Web Page Design and Programming (4 credits)

### 9. PROGRAM CORE REQUIRED (14.00 credits)

- |   |  |
|---|--|
| <input type="checkbox"/> ACG 2021 - Financial Accounting (3 credits)      | <input type="checkbox"/> GEB 2350 - Introduction to International Business (3 credits) |
| <input type="checkbox"/> ACG 2021L - Financial Accounting Lab (1 credits) | <input type="checkbox"/> MUL 1010 - Music Appreciation (3 credits)                     |
| <input type="checkbox"/> BUL 2241 - Business Law 1 (3 credits)            | <input type="checkbox"/> MVK 1111 - Class Piano 1 (1 credits)                          |

### 10. MAJOR COURSE ELECTIVE (7.00 credits)

- |   |   |
|---|---|
| <input type="checkbox"/> BUL 2242 - Business Law 2 (3 credits)                            | <input type="checkbox"/> MUT 2641 - Introduction to Jazz Improvisation 1 (3 credits)    |
| <input type="checkbox"/> CGS 1060   | <input type="checkbox"/> MUT 2238 - Introduction to Jazz Keyboard Harmony (1 credits)   |
| <input type="checkbox"/> MAN 2021 - Principles of Management (3 credits)                  | <input type="checkbox"/> MUT 2351 - Introduction to Popular Music Arranging (3 credits) |
| <input type="checkbox"/> MAN 2930 - Creative Leadership (3 credits)                       | <input type="checkbox"/> PUR 2003 - Public Relations (3 credits)                        |
| <input type="checkbox"/> MKA 1511 - Principles of Advertising and Copywriting (3 credits) | <input type="checkbox"/> RTV 1241C - Television Production 1 (4 credits)                |
| <input type="checkbox"/> MKA 1021 - Fundamentals of Selling (3 credits)                   | <input type="checkbox"/> TAX 2010 - Business Taxes & Returns (3 credits)                |



- |  |   |
|--|---|
| <input type="checkbox"/> MUC 2601 - Introduction to Songwriting (3 credits)        | <input type="checkbox"/> MVS*   |
| <input type="checkbox"/> MUC 2617 - Songwriting 2 (3 credits)                      | <input type="checkbox"/> MUN*   |
| <input type="checkbox"/> MUH 2111 - Survey of Music History 1 (3 credits)          | <input type="checkbox"/> MVB*   |
| <input type="checkbox"/> MUH 2112 - Survey of Music History 2 (3 credits)          | <input type="checkbox"/> MVJ*   |
| <input type="checkbox"/> MUL 2380 - Jazz and Popular Music in America (3 credits)  | <input type="checkbox"/> MVK*   |
| <input type="checkbox"/> MUM 2600 - Sound Recording 1 (3 credits)                  | <input type="checkbox"/> MVO*   |
| <input type="checkbox"/> MUM 2600L - Sound Recording 1 Lab (1 credits)             | <input type="checkbox"/> MVP*   |
| <input type="checkbox"/> MUM 2601 - Sound Recording 2 (3 credits)                  | <input type="checkbox"/> MVV*   |
| <input type="checkbox"/> MUM 2601L - Sound Recording 2 Lab (1 credits)             | <input type="checkbox"/> MVW*   |
| <input type="checkbox"/> MUM 2623C - MIDI Electronic Music 1 (2.00 - 3.00 credits) | <input type="checkbox"/> MUM 2604 - Multi-Track Mixdown Techniques (1 credits)      |
| <input type="checkbox"/> MUM 2624C - MIDI-Electronic Music 2 (2.00 - 3.00 credits) | <input type="checkbox"/> MUM 2605 - Multi-Track Production Techniques 1 (1 credits) |
| <input type="checkbox"/> MUM 2640L - Multi-Track Mixdown Techniques (1 credits)    |   |

\* End of Program Sheet \*

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: MUSIC BUSINESS - CREATIVE PERFORMANCE (25043)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (3.00 credits)

- ☐ ENC 1101 - English Composition 1 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### 5. MATH/SCIENCE (3.00 credits)

- ☐ MAC 1105 - College Algebra (3 credits)

### 6. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

### 7. MAJOR COURSE REQUIREMENTS (15.00 credits)

- |   |  |
|---|--|
| <input type="checkbox"/> MUM 2700 - Music Business 1 (3 credits)          | <input type="checkbox"/> MUM 2704 - Music Business 4-Computer Applications (3 credits) |
| <input type="checkbox"/> MUM 2702 - Music Business 2-Careers (3 credits)  | <input type="checkbox"/> MUM 1949 - Co-op Work Experience 1: MUM (3 credits)           |
| <input type="checkbox"/> MUM 2703 - Music Business 3-Computer (3 credits) |  |

### 8. MAJOR COURSE REQUIREMENTS (13.00 credits)

Must take 9.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> GEB 1011 - Principles of Business (3 credits)    | <input type="checkbox"/> MAR 1011 - Principles of Marketing (3 credits) |
| <input type="checkbox"/> SBM 1000 - Small Business Management (3 credits) |   |

- - - And - - -

Must take 4.0 credits from the following group.

- ☐ COP 2822 - Web Page Design and Programming (4 credits)

### 9. PROGRAM CORE REQUIRED (17.00 credits)

Must take 3.0 credits from the following group.

- |                               |                               |
|-------------------------------|-------------------------------|
| <input type="checkbox"/> MVB* | <input type="checkbox"/> MVP* |
| <input type="checkbox"/> MVJ* | <input type="checkbox"/> MVS* |
| <input type="checkbox"/> MVK* | <input type="checkbox"/> MVV* |
| <input type="checkbox"/> MVO* | <input type="checkbox"/> MVW* |

- - - And - - -

Must take 14.0 credits from the following group.

- |  |   |
|--|---|
| <input type="checkbox"/> MUC 2601 - Introduction to Songwriting (3 credits)        | <input type="checkbox"/> MUT 1112 - Theory 2 (3 credits)                                      |
| <input type="checkbox"/> MUM 2623C - MIDI Electronic Music 1 (2.00 - 3.00 credits) | <input type="checkbox"/> MUT 1241 - Sight-singing & Ear Training 1 Year (1.00 - 2.00 credits) |
| <input type="checkbox"/> MUM*  |   |

- ☐ MUN\*
- ☐ MUT 1111 - Theory 1 (3 credits)

- ☐ MUT 1242 - Sight-singing & Ear Training 2 Year (1.00 - 2.00 credits)
- ☐ MVK 1111 - Class Piano 1 (1 credits)
- ☐ MVK 1112 - Class Piano 2 (1 credits)

**10. MAJOR COURSE ELECTIVE (4.00 credits)**

- ☐ BUL 2242 - Business Law 2 (3 credits)
- ☐ CGS 1060
- ☐ MAN 2021 - Principles of Management (3 credits)
- ☐ MAN 2930 - Creative Leadership (3 credits)
- ☐ MKA 1511 - Principles of Advertising and Copywriting (3 credits)
- ☐ MKA 1021 - Fundamentals of Selling (3 credits)
- ☐ MUC 2601 - Introduction to Songwriting (3 credits)
- ☐ MUC 2617 - Songwriting 2 (3 credits)
- ☐ MUH 2111 - Survey of Music History 1 (3 credits)
- ☐ MUH 2112 - Survey of Music History 2 (3 credits)
- ☐ MUL 2380 - Jazz and Popular Music in America (3 credits)
- ☐ MUM 2600 - Sound Recording 1 (3 credits)
- ☐ MUM 2600L - Sound Recording 1 Lab (1 credits)
- ☐ MUM 2601 - Sound Recording 2 (3 credits)
- ☐ MUM 2601L - Sound Recording 2 Lab (1 credits)
- ☐ MUM 2623C - MIDI Electronic Music 1 (2.00 - 3.00 credits)
- ☐ MUM 2624C - MIDI-Electronic Music 2 (2.00 - 3.00 credits)
- ☐ MUM 2640L - Multi-Track Mixdown Techniques (1 credits)
- ☐ MUT 2641 - Introduction to Jazz Improvisation 1 (3 credits)
- ☐ MUT 2238 - Introduction to Jazz Keyboard Harmony (1 credits)
- ☐ MUT 2351 - Introduction to Popular Music Arranging (3 credits)
- ☐ PUR 2003 - Public Relations (3 credits)
- ☐ RTV 1241C - Television Production 1 (4 credits)
- ☐ TAX 2010 - Business Taxes & Returns (3 credits)
- ☐ MUN\*
- ☐ MVB\*
- ☐ MVJ\*
- ☐ MVK\*
- ☐ MVO\*
- ☐ MVP\*
- ☐ MVS\*
- ☐ MVV\*
- ☐ MVW\*
- ☐ MUM 2604 - Multi-Track Mixdown Techniques (1 credits)
- ☐ MUM 2605 - Multi-Track Production Techniques 1 (1 credits)

\* End of Program Sheet \*

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: MUSIC BUSINESS - CREATIVE PRODUCTION (25044)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (3.00 credits)

- ☐ ENC 1101 - English Composition 1 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### 5. MATH/SCIENCE (3.00 credits)

- ☐ MAC 1105 - College Algebra (3 credits)

### 6. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

### 7. MAJOR COURSE REQUIREMENTS (15.00 credits)

- |   |  |
|---|--|
| <input type="checkbox"/> MUM 2700 - Music Business 1 (3 credits)          | <input type="checkbox"/> MUM 2704 - Music Business 4-Computer Applications (3 credits) |
| <input type="checkbox"/> MUM 2702 - Music Business 2-Careers (3 credits)  | <input type="checkbox"/> MUM 1949 - Co-op Work Experience 1: MUM (3 credits)           |
| <input type="checkbox"/> MUM 2703 - Music Business 3-Computer (3 credits) |  |

### 8. MAJOR COURSE REQUIREMENTS (13.00 credits)

Must take 9.0 credits from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> GEB 1011 - Principles of Business (3 credits)    | <input type="checkbox"/> MAR 1011 - Principles of Marketing (3 credits) |
| <input type="checkbox"/> SBM 1000 - Small Business Management (3 credits) |   |

- - - And - - -

Must take 4.0 credits from the following group.

- ☐ COP 2822 - Web Page Design and Programming (4 credits)

### 9. PROGRAM CORE REQUIRED (14.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> MUM 2623C - MIDI Electronic Music 1 (2.00 - 3.00 credits) | <input type="checkbox"/> MUT 1241 - Sightsinging & Ear Training 1 Year (1.00 - 2.00 credits) |
| <input type="checkbox"/> MUM 2600 - Sound Recording 1 (3 credits)                  | <input type="checkbox"/> MVK 1111 - Class Piano 1 (1 credits)                                |
| <input type="checkbox"/> MUM 2600L - Sound Recording 1 Lab (1 credits)             | <input type="checkbox"/> MVK 1112 - Class Piano 2 (1 credits)                                |
| <input type="checkbox"/> MUT 1111 - Theory 1 (3 credits)                           | <input type="checkbox"/> MUN*  |

### 10. MAJOR COURSE ELECTIVE (7.00 credits)

- |  |   |
|--|---|
| <input type="checkbox"/> BUL 2242 - Business Law 2 (3 credits)           | <input type="checkbox"/> MUT 2641 - Introduction to Jazz Improvisation 1 (3 credits)    |
| <input type="checkbox"/> CGS 1060  | <input type="checkbox"/> MUT 2238 - Introduction to Jazz Keyboard Harmony (1 credits)   |
| <input type="checkbox"/> MAN 2021 - Principles of Management (3 credits) | <input type="checkbox"/> MUT 2351 - Introduction to Popular Music Arranging (3 credits) |
| <input type="checkbox"/> MAN 2930 - Creative Leadership (3 credits)      | <input type="checkbox"/> PUR 2003 - Public Relations (3 credits)                        |

- ☐ MKA 1511 - Principles of Advertising and Copywriting (3 credits)
- ☐ MKA 1021 - Fundamentals of Selling (3 credits)
- ☐ MUC 2601 - Introduction to Songwriting (3 credits)
- ☐ MUC 2617 - Songwriting 2 (3 credits)
- ☐ MUH 2111 - Survey of Music History 1 (3 credits)
- ☐ MUH 2112 - Survey of Music History 2 (3 credits)
- ☐ MUL 2380 - Jazz and Popular Music in America (3 credits)
- ☐ MUM 2600 - Sound Recording 1 (3 credits)
- ☐ MUM 2600L - Sound Recording 1 Lab (1 credits)
- ☐ MUM 2601 - Sound Recording 2 (3 credits)
- ☐ MUM 2601L - Sound Recording 2 Lab (1 credits)
- ☐ MUM 2623C - MIDI Electronic Music 1 (2.00 - 3.00 credits)
- ☐ MUM 2624C - MIDI-Electronic Music 2 (2.00 - 3.00 credits)
- ☐ MUM 2640L - Multi-Track Mixdown Techniques (1 credits)

- ☐ RTV 1241C - Television Production 1 (4 credits)
- ☐ TAX 2010 - Business Taxes & Returns (3 credits)
- ☐ MUN\*
- ☐ MVB\*
- ☐ MVJ\*
- ☐ MVK\*
- ☐ MVO\*
- ☐ MVP\*
- ☐ MVS\*
- ☐ MVV\*
- ☐ MVW\*
- ☐ MUM 2604 - Multi-Track Mixdown Techniques (1 credits)
- ☐ MUM 2605 - Multi-Track Production Techniques 1 (1 credits)

\* End of Program Sheet \*



## **Networking Services Technology – Enterprise Cloud Computing**

**CIP (1511100112)**

Associate in Science | Code: 25077 | 60 credits

Effective Term: Spring 2021 (2213)

### **Program Description:**

The Enterprise Cloud Computing program is designed to provide an opportunity to establish foundation in architect scalable, highly available application solutions that leverage cloud computing services. Utilizing best practices focusing on cloud security, cost, and reliability. Graduates of the track in Enterprise Cloud Computing will utilize core design patterns and infrastructure expertise to implement solutions to deploy and maintain workloads and applications. Graduates are prepared for positions as entry-level Solutions Architect, Cloud Architect, Cloud Engineer and Cloud Application Architect.

**Note:** *There is only one A.S. program in Networking Services Technology with three (3) track specializations—Network Infrastructure, Network Security, and Enterprise Cloud Computing. Students may select from one of the three options, but the A.S. in Networking Services Technology will be awarded to the student only once.*

### **GENERAL EDUCATION REQUIREMENTS – 15 Credit Hours**

#### **1. Communications (3 credits)**

ENC 1101 English Composition (3 credits)

#### **2. Oral Communications (3 credits)**

SPC 1017 Fundamentals of Speech Communication (3 credits)

#### **3. Humanities (3 credits)**

PHI 2604 Critical Thinking/Ethics (3 credits)

#### **4. Behavioral/Social Science (3 credits)**

CLP 1006 Psychology of Personal Effectiveness (3 credits)

#### **5. Mathematics (3 credits)**

MAC 1105 College Algebra (3 credits)

### **MAJOR COURSE REQUIREMENTS – 16 Credit Hours**

CGS 1060C Introduction to Computer Technology & Applications (4 credits)

CTS 1120 Cybersecurity Fundamentals (4 credits)

CTS 1134 Networking Technologies (4 credits)

CTS 2303 Configuring Windows Servers (4 credits)

### **PROGRAM CONCENTRATION CORE – 24 Credit Hours**

CTS 1111 Linux + (4 credits)

CGS 1540C Database Concepts Design (4 credits)

CTS 1145	Cloud Essentials	(4 credits)
CTS 2306	Windows Networking Services	(4 credits)
CTS 2375C	Cloud Infrastructure and Services	(4 credits)
CTS 2960	Cloud Computing Capstone	(4 credits)

**PROGRAM COURSE ELECTIVE – 5 Credit Hours**

CGS*, CIS*, COP*, CTS*		
COP 1047	Python Programming	(4 credits)



## **Networking Services Technology – Network Infrastructure**

**CIP (1511100112)**

Associate in Science | Code: 25062 | 60 credits

Effective Term: Spring 2021 (2213)

### **Program Description:**

The Networking Services Technology program provides an opportunity to establish a foundation in the field of network design and administration for employment in commercial, industrial and government institutions. The Network Infrastructure concentration offers the training needed to connect and secure multiple computing systems and software platforms. Students are additionally eligible to sit for the Cisco Certified Networking Associate (CCNA) certification exam. Graduates are prepared for positions as information technology specialists, help desk specialists, network specialists, entry level security specialists and network systems analysts.

**Note:** *There is only one A.S. program in Networking Services Technology with three (3) track specializations—Network Infrastructure, Network Security, and Enterprise Cloud Computing. Students may select from one of the three options, but the A.S. in Networking Services Technology will be awarded to the student only once.*

### **GENERAL EDUCATION REQUIREMENTS – 15 Credit Hours**

#### **1. Communications (3 credits)**

ENC 1101 English Composition (3 credits)

#### **2. Oral Communications (3 credits)**

SPC 1017 Fundamentals of Speech Communication (3 credits)

#### **3. Humanities (3 credits)**

PHI 2604 Critical Thinking/Ethics (3 credits)

#### **4. Behavioral/Social Science (3 credits)**

CLP 1006 Psychology of Personal Effectiveness (3 credits)

#### **5. Mathematics (3 credits)**

MAC 1105 College Algebra (3 credits)

### **MAJOR COURSE REQUIREMENTS – 16 Credit Hours**

CGS 1060C Introduction to Computer Technology & Applications (4 credits)

CTS 1120 Cybersecurity Fundamentals (4 credits)

CTS 1134 Networking Technologies (4 credits)

CTS 2303 Configuring Windows Servers (4 credits)



**PROGRAM CONCENTRATION CORE – 20 Credit Hours**

CTS 1650	CCNA 1: Cisco Fundamentals	(4 credits)
CTS 1651	CCNA 2: Routing and Switching	(4 credits)
CTS 2306	Windows Networking Services	(4 credits)
CTS 2334	Windows Identity Services	(4 credits)
CTS 2652	CCNA 3: Advanced Routing and Switching	(4 credits)

**PROGRAM ELECTIVES – 9 Credit Hours**

CGS*, CIS*, COP*, CTS*		(4 credits)
CGS 1560	A+ Computer Operating Systems	(4 credits)
CIS 2900	Directed Information Technology Study	(1 credit)
CTS 1111	Linux +	(4 credits)
CTS 1328	Supporting Microsoft Clients	(4 credits)
CTS 1437	Microsoft SQL Administration	(4 credits)
CTS 2153	Supporting Windows Users & Applications	(4 credits)



## **Networking Services Technology – Network Security**

Associate in Science | Code: 25078 | 60 credits

Effective Term: Spring 2021 (2213)

**CIP (1511100112)**

### **Program Description:**

The Networking Services Technology program provides an opportunity to establish a basic foundation in the field of network design and administration for employment in commercial, industrial and government institutions. The program has an emphasis on operations, hardening and administration of network security devices. Graduates of the AS program in this concentration acquire a skill set that allows the student to collect and analyze system logs, perform network penetration testing, and install and operate IDS/IPS, VPNs, firewalls and honeypots.

**Note:** *There is only one A.S. program in Networking Services Technology with three (3) track specializations. Students may select from one of the three options, but the A.S. in Networking Services Technology will be awarded to the student only once.*

### **GENERAL EDUCATION REQUIREMENTS – 15 Credit Hours**

#### **1. Communications (3 credits)**

ENC 1101 English Composition 1 (3 credits)

#### **2. Oral Communications (3 credits)**

SPC 1017 Fundamentals of Speech Communication (3 credits)

#### **3. Humanities (3 credits)**

PHI 2604 Critical Thinking/Ethics (3 credits)

#### **4. Behavioral/Social Science (3 credits)**

CLP 1006 Psychology of Personal Effectiveness (3 credits)

#### **5. Mathematics (3 credits)**

MAC 1105 College Algebra (3 credits)

### **MAJOR COURSE REQUIREMENTS – 16 Credit Hours**

CGS 1060C	Introduction to Computer Technology & Applications	(4 credits)
CTS 1120	Cybersecurity Fundamentals	(4 credits)
CTS 1134	Networking Technologies	(4 credits)
CTS 2303	Configuring Windows Servers	(4 credits)

**PROGRAM CONCENTRATION CORE – 24 Credit Hours**

CTS 1111	Linux +	(4 credits)
CTS 1650	CCNA 1: Cisco Fundamentals	(4 credits)
CTS 1651	CCNA 2: Routing and Switching	(4 credits)
CTS 2314	Network Defense and Countermeasures	(4 credits)
CTS 2334	Windows Identity Services	(4 credits)
CTS 2670	Check Point Security Administration	(4 credits)

**PROGRAM ELECTIVES – 5 Credit Hours**

CGS*, CIS*, COP*, CTS*	(4 credits)	
CIS 1949	Co-op Work Experience 1: CIS	(1-4 credits)
CIS 2900	Directed Information Technology Study	(1-4 credits)
CTS 2306	Windows Networking Services	(4 credits)
CTS 2317	Advanced Network Security	(4 credits)
CTS 2652	CCNA 3: Advanced Routing and Switching	(4 credits)
CTS 2671	Check Point Security Engineering	(4 credits)

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: NUCLEAR MEDICINE TECHNOLOGY (23069)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## **I. GENERAL EDUCATION REQUIREMENTS**

### **1. COMMUNICATIONS (3.00 credits)**

- ☐ ENC 1101 - English Composition 1 (3 credits)

### **2. ORAL COMMUNICATIONS (3.00 credits)**

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### **3. HUMANITIES (3.00 credits)**

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### **4. SOCIAL ENVIRONMENT (3.00 credits)**

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### **5. MATHEMATICS (3.00 credits)**

- ☐ MAC 1105 - College Algebra (3 credits)

### **6. COMPUTER COMPETENCY**

Test type(s) needed:

- ☐ CGS 1060

### **7. FIRST TERM IN PROGRAM (8.00 credits)**

- |  |                                   |
|--|-----------------------------------|
| <input type="checkbox"/> BSC 2085 - Human Anatomy and Physiology 1 (3 credits)             | <input type="checkbox"/> CGS 1060 |
| <input type="checkbox"/> BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits) |                                   |

### **8. SECOND TERM IN PROGRAM (12.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2086 - Human Anatomy & Physiology 2 (3 credits)             | <input type="checkbox"/> CHM 1033L - Chemistry for Health Sciences lab (1 credits) |
| <input type="checkbox"/> BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits) | <input type="checkbox"/> PHY 1004 - Physics with Applications 1 (3 credits)        |
| <input type="checkbox"/> CHM 1033 - Chemistry for Health Sciences (3 credits)            | <input type="checkbox"/> PHY 1004L - Physics with Applications 1 Lab (1 credits)   |

### **9. THIRD TERM IN PROGRAM (7.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> NMT 1002 - Introduction to Nuclear Medicine (2 credits)             | <input type="checkbox"/> NMT 1312 - Radiation Protection (2 credits)     |
| <input type="checkbox"/> NMT 1002L - Introduction to Nuclear Medicine Laboratory (1 credits) | <input type="checkbox"/> NMT 2613 - Nuclear Medicine Physics (2 credits) |

### **10. FOURTH TERM IN PROGRAM (12.00 credits)**

- |   |   |
|---|---|
| <input type="checkbox"/> NMT 1713 - Nuclear Medicine Procedures 1 (2 credits) | <input type="checkbox"/> NMT 2534 - Nuclear Medicine Instruction (2 credits)                  |
| <input type="checkbox"/> NMT 2130 - Nuclear Medicine Pharmacology (2 credits) | <input type="checkbox"/> NMT 2804C - Nuclear Medicine Clinic Practice & Conference 1 credits) |

### **11. FIFTH TERM IN PROGRAM (12.00 credits)**

- |   |   |
|---|---|
| <input type="checkbox"/> NMT 2102 - Nuclear Medicine Administration (2 credits) | <input type="checkbox"/> NMT 2723 - Nuclear Medicine Procedures 2 (2 credits)                 |
| <input type="checkbox"/> NMT 2573 - Nuclear Medicine QA/QC (2 credits)          | <input type="checkbox"/> NMT 2814C - Nuclear Medicine Clinic Practice & Conference 2 credits) |

### **12. SIXTH TERM IN PROGRAM (9.00 credits)**

☐ NMT 2824C - Nuclear Medicine Clinic 3 (7 credits)

☐ NMT 2932 - Nuclear Medicine Seminar (2 credits)

\* End of Program Sheet \*



# **Nursing - R.N. (Accelerated)**

**CIP (1351380100)**

**Associate in Science - Nursing | Code: 23031 | 72 credits**

**Effective Term: Spring 2022 (2223)**

The Accelerated Generic Nursing Option is designed to prepare students without previous health care education that hold a baccalaureate degree for careers as Registered Nurses. The program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Rd. N.E., Suite 850, Atlanta, Ga., 30326, 404-975-5000, [acenursing.org](http://acenursing.org) and approved by the Florida Board of Nursing (FBON). Graduates are eligible to apply to write the National Council Licensing Examination for Registered Nurses (NCLEX-RN). Selection is based on scores on pre-admission testing and completion of required prerequisite courses. See the School of Nursing Information website for more specific details about admission requirements. Pre-Admission tests – Applicants must take the ATI Test of Adult Basic Education (TEASE).

Course	Course Title	Credits	Pre-/Co-Requisites
<b>Discipline Courses First Semester - 21 Credits Required (Offered Fall &amp; Spring)</b>			
NUR 1025	Fundamentals of Nursing	3	
NUR 1025C	Fundamentals of Nursing Skills Lab	1	
NUR 1025L	Fundamentals of Nursing Clin Lab	2	
NUR 1060C	Adult Health Assessment	3	
NUR 1141	Nursing Math and Pharmacology	3	
NUR 1142	Introduction to Nursing Math/Pharmacology	1	
NUR 1211	Medical-Surgical Nursing	3	
NUR1211L	Medical-Surgical Nursing Clinical Lab	4	
NUR 1214C	Medical-Surgical Nursing Skills lab	1	
<b>Second Semester - 7 Credits Required</b>			
NUR 2310	Pediatric Nursing	2	
NUR 2310L	Pediatric Nursing Clinical Lab	1	
NUR 2420	Obstetrical Nursing	2	
NUR 2420L	Obstetrical Nursing Lab	1	
NUR 2680L	Community Health Nursing Lab	1	
<b>Third Semester (14 Credits Required)</b>			
NUR 2520	Psychiatric Nursing	2	
NUR 2520L	Psychiatric Nursing Clinical Lab	2	
NUR 2212	Advanced Medical-Surgical Unit	3	
NUR 2212L	Advanced Medical-Surgical Nursing Clinical Lab	3	
NUR 2811C	Professional Nursing Leadership	4	

Course	Course Title	Credits	Pre-/Co-Requisites
<b>Mathematics/Science – 18 Credits Required</b>			
BSC 2085	Human Anat & Phy 1	3	Co-Req BSC2085L
BSC 2085L	Human Anat & Phy Lab 1	1	Co-Req BSC2085
BSC 2086	Human Anat & Phy 2	3	Pre-Req BSC2085/L; Co-Req BSC2086L
BSC 2086L	Human Anat & Phy Lab 2	1	Pre-Req BSC2085/L; Co-Req BSC2086
MAC 1105	College Algebra	3	Pre-req MAT 1033
MCB 2010	Microbiology	3	Pre-req BSC2085/L and CHM 1033
CHM 1033	Chemistry for Health Sciences	3	Pre=Req MAT 1033
CHM 1033L	Chemistry Lab	1	Pre=Req MAT 1033 and Co- Req CHM 1033

*In order to complete 18 credits in the Mathematics/Science area, select additional credits with any prefix in the areas of natural science/mathematics that do not include courses used to meet the 18 credit general education requirements. Completion of the required sciences satisfies the general education science requirement.*

*Credits used in this area may not be used to satisfy another area.*

#### **GENERAL EDUCATION REQUIREMENTS – 12 CREDITS REQUIRED**

##### **Behavioral Science – 3 Credits Required**

DEP 2000 Human Growth & Dev 3

##### **Communications – 3 Credits Required**

ENC 1101 English Comp 1 3

##### **Oral Communications – 3 Credits Required**

SPC 1017 Fund of Speech Comm 3

##### **Humanities - 3 Credits Required**

PHI 2604 Crit Think/Ethics 3 Pre-Req ENC1101

*Students must have 12 credits in natural science/math, including all content contained in both Human Anatomy and Physiology courses and their corresponding labs.*

##### **Computer Competency (Waived with a Associates of Art degree or higher from an accredited institution)**

By the 16th earned college level credit (excluding EAP and college preparatory courses), a student **must** take the Computer Competency Test and **pass**

**or**

By the 31st earned college level credit (excluding EAP and college preparatory courses), a student must **pass** CGS 1060, an equivalent continuing education or vocational credit course **or** retest with a **passing** score on the Computer Competency Test.

**Total credits required for Associate in Science degree is 72.**

**Additional Information:**

Due to the limited number of students that can progress to discipline courses in the School of Nursing Associate Degree Programs, it is important that students be properly informed. For information, advisement, application forms and deadline dates, interested students should contact the New Student Center, Medical Center Campus.

Students with 2 or more grades of "D", "F", or "W" in required science courses are not eligible to progress into the Associate Degree Nursing program discipline courses. Students are also required to have no more than (2) enrollments (D, F, W) for any individual science course for the program. Minimum GPA of 2.0 is required.

Licensing requirement for the Florida Board of Nursing must be met please review at <https://floridasnursing.gov/licensing/licensed-practical-nurse-registered-nurse-by-examination/>.

Students should check their academic requirement report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami-Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements stated in your academic requirement report rests with you.





# **Nursing - R.N. (Generic Full-Time)**

**CIP (1351380100)**

**Associate in Science - Nursing | Code: 23028 | 72 credits**

**Effective Term: Spring 2022 (2223)**

The Generic Nursing Option is designed to prepare students without previous health care education for careers as Registered Nurses. The program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Rd. N.E., Suite 850, Atlanta, Ga., 30326, 404-975-5000, acenursing.org and approved by the Florida Board of Nursing (FBON). Graduates are eligible to apply to write the National Council Licensing Examination for Registered Nurses (NCLEX-RN). Selection is based on scores on pre-admission testing and completion of required prerequisite courses. See the School of Nursing Information website for more specific details about admission requirements. Pre-Admission tests – Applicants must take the ATI Test of Adult Basic Education (TEASE).

Course	Course Title	Credits	Pre-/Co-Requisites
<b>Discipline Courses First Semester - 10 Credits Required (Offered Fall &amp; Spring)</b>			
NUR 1025	Fund of Nursing	3	Pre-Req Program admission; Co-Req NUR 1060, 1025L, 1025C, 1142
NUR 1025C	Fund of Nur Skills Lab	1	Co-Req NUR 1025, 1025L, 1060, 1142
NUR 1025L	Fund of Nursing Clin Lab	2	Co-Req NUR 1025, 1025C, 1060, 1142
NUR 1142	Intro Nursing Math & Phar	1	Co-Req NUR 1025, 1025C, 1025L, 1060
NUR 1060C	Adult Nursing Assessment	3	Co-Req NUR 1025, 1025L, 1025C, 1142

## **Discipline Courses Second Semester - 11 Credits Required (Offered Spring and Summer)**

NUR 1211	Med-Surg Nursing	3	Pre-Req NUR 1025, 1025C, 1025L, 1060C, 1142; Co-Req NUR 1211L, 1141, 1214C
NUR 1211L	Med-Surg Nur Clin Lab	4	Co-Req NUR 1211, 1214C
NUR 1214C	Med-Surg Nur Skills Lab	1	Co-Req NUR 1211, 1211L
NUR 1141	Nursing Math & Phar	3	Co-Req NUR 1211, 1211L, 1214C

Course	Course Title	Credits	Pre-/Co-Requisites
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## **Discipline Courses Third Semester - 11 Credits Required (Offered Fall & Spring)**

NUR 2680L	Comm Health Nursing Lab	1	Pre-Req: NUR 1211, 1211L, 1214C or 1002, 1002L; Co-Req: NUR 2310, 2310L, 2420, 2420L, 2520, 2520L
NUR 2520	Psychiatric Nursing	2	Co-Req NUR 2520L
NUR 2520L	Psych Nursing Clin Lab	2	Co-Req NUR 2520
NUR 2310	Pediatric Nursing	2	Co-Req NUR 2310L
NUR 2310L	Pediatric Nursing Lab	1	Co-Req NUR 2310
NUR 2420	Obstetrical Nursing	2	Co-Req NUR 2420L
NUR 2420L	Obstetrical Nursing Clin Lab	1	Co-Req NUR 2420

**Discipline Courses Fourth Semester - 10 Credits Required****(Offered Fall & Spring)**

NUR 2212	Adv Med-Surg Nursing	3	Co-Req NUR 2212L
NUR 2212L	Adv Med-Surg Nur Clin	3	Co-Req NUR 2211
NUR 2810C	Prof Nursing Leadership	4	Pre-Req NUR2211, 2212L

Course	Course Title	Credits	Pre-/Co-Requisites
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**Mathematics/Science – 18 Credits Required**

BSC 2085	Human Anat & Phy 1	3	Co-Req BSC 2085L
BSC 2085L	Human Anat & Phy Lab 1	1	Co-Req BSC 2085
BSC 2086	Human Anat & Phy 2	3	Pre-Req BSC 2085/L; Co-Req BSC 2086L
BSC 2086L	Human Anat & Phy Lab 2	1	Pre-Req BSC 2085/L; Co-Req BSC 2086
MAC 1105	College Algebra	3	Pre-req MAT 1033
MCB 2010	Microbiology	3	Pre-req BSC 2085/L and CHM 1033
CHM 1033	Chemistry for Health Sciences	3	Pre=Req MAT 1033
CHM 1033L	Chemistry Lab	1	Pre=Req MAT 1033 and Co- Req CHM 1033

*In order to complete 18 credits in the Mathematics/Science area, select additional credits with any prefix in the areas of natural science/mathematics that do not include courses used to meet the 18 credit general education requirements. Completion of the required sciences satisfies the general education science requirement.*

*Credits used in this area may not be used to satisfy another area.*

**GENERAL EDUCATION REQUIREMENTS – 12 CREDITS REQUIRED****Behavioral Science – 3 Credits Required**

DEP 2000	Human Growth & Dev	3
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**Communications – 3 Credits Required**

ENC 1101	English Comp 1	3
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**Oral Communications – 3 Credits Required**

SPC 1017	Fund of Speech Comm	3
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**Humanities - 3 Credits Required**

PHI 2604	Crit Think/Ethics	3	Pre-Req ENC1101
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*Students must have 12 credits in natural science/math, including all content contained in both Human Anatomy and Physiology courses and their corresponding labs.*

**Computer Competency (Waived with a Associates of Art degree or higher from an accredited institution)**

By the 16th earned college level credit (excluding EAP and college preparatory courses), a student **must** take the Computer Competency Test and **pass**

**or**

By the 31st earned college level credit (excluding EAP and college preparatory courses), a student must **pass** CGS 1060, an equivalent continuing education or vocational credit course **or** retest with a **passing** score on the Computer Competency Test.

**Total credits required for Associate in Science degree is 72.**

**Additional Information:**

Due to the limited number of students that can progress to discipline courses in the School of Nursing Associate Degree Programs, it is important that students be properly informed. For information, advisement, application forms and deadline dates, interested students should contact the New Student Center, Medical Center Campus.

Students with 2 or more grades of “D”, “F”, or “W” in required science courses are not eligible to progress into the Associate Degree Nursing program discipline courses. Students are also required to have no more than (2) enrollments (D, F, W) for any individual science course for the program. Minimum GPA of 2.0 is required.

Licensing requirement for the Florida Board of Nursing must be met please review at <https://floridasnursing.gov/licensing/licensed-practical-nurse-registered-nurse-by-examination/>.

Students should check their academic requirement report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami-Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements stated in your academic requirement report rests with you.



# **Nursing - R.N. (Generic Part-Time)**

**CIP (1351380100)**

**Associate in Science - Nursing | Code: 23027 | 72 credits**

**Effective Term: Spring 2022 (2223)**

The Generic Nursing Option is designed to prepare students without previous health care education for careers as Registered Nurses. The program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Rd. N.E., Suite 850, Atlanta, Ga., 30326, 404-975-5000, acenursing.org and approved by the Florida Board of Nursing (FBON). Graduates are eligible to apply to write the National Council Licensing Examination for Registered Nurses (NCLEX-RN). The part-time track is designed for individuals who must work while they attend school. Selection is based on scores on pre-admission testing and completion of required pre-requisite courses. See the School of Nursing Information website for more specific details about admission requirements. Pre-Admission tests – Applicants must take the ATI Test of Adult Basic Education (TEASE).

Course	Course Title	Credits	Pre-/Co-Requisites
<b>Discipline Courses First Semester - 10 Credits Required (Offered Fall &amp; Spring)</b>			
NUR 1025	Fund of Nursing	3	Pre-Req Program admission; Co-Req NUR 1060, 1025L, 1025C, 1142
NUR 1025C	Fund of Nur Skills Lab	1	Co-Req NUR 1025, 1025L, 1060, 1142
NUR 1025L	Fund of Nursing Clin Lab	2	Co-Req NUR 1025, 1025C, 1060, 1142
NUR 1142	Intro Nursing Math & Phar	1	Co-Req NUR 1025, 1025C, 1025L, 1060
NUR 1060C	Adult Nursing Assessment	3	Co-Req NUR 1025, 1025L, 1025C, 1142

## **Discipline Courses Second Semester - 11 Credits Required (Offered Spring and Summer)**

NUR 1211	Med-Surg Nursing	3	Pre-Req NUR 1025, 1025C, 1025L, 1060C, 1142; Co-Req NUR 1211L, 1141, 1214C
NUR 1211L	Med-Surg Nur Clin Lab	4	Co-Req NUR 1211, 1214C
NUR 1214C	Med-Surg Nur Skills Lab	1	Co-Req NUR 1211, 1211L
NUR 1141	Nursing Math & Phar	3	Co-Req NUR 1211, 1211L, 1214C

Course	Course Title	Credits	Pre-/Co-Requisites
<b>Discipline Courses Third Semester - 11 Credits Required (Offered Fall &amp; Spring)</b>			
NUR 2680L	Comm Health Nursing Lab	1	Pre-Req: NUR 1211, 1211L, 1214C or 1002, 1002L; Co-Req: NUR 2310, 2310L, 2420, 2420L, 2520, 2520L
NUR 2520	Psychiatric Nursing	2	Co-Req NUR 2520L

NUR 2520L	Psych Nursing Clin Lab	2	Co-Req NUR 2520
NUR 2310	Pediatric Nursing	2	Co-Req NUR 2310L
NUR 2310L	Pediatric Nursing Lab	1	Co-Req NUR 2310
NUR 2420	Obstetrical Nursing	2	Co-Req NUR 2420L
NUR 2420L	Obstetrical Nursing Clin Lab	1	Co-Req NUR 2420

**Discipline Courses Fourth Semester - 10 Credits Required  
(Offered Fall & Spring)**

NUR 2212	Adv Med-Surg Nursing	3	Co-Req NUR 2212L
NUR 2212L	Adv Med-Surg Nur Clin	3	Co-Req NUR 2211
NUR 2810C	Prof Nursing Leadership	4	Pre-Req NUR2211, 2212L

Course	Course Title	Credits	Pre-/Co-Requisites
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**Mathematics/Science – 18 Credits Required**

BSC 2085	Human Anat & Phy 1	3	Co-Req BSC 2085L
BSC 2085L	Human Anat & Phy Lab 1	1	Co-Req BSC 2085
BSC 2086	Human Anat & Phy 2	3	Pre-Req BSC 2085/L; Co-Req BSC 2086L
BSC 2086L	Human Anat & Phy Lab 2	1	Pre-Req BSC 2085/L; Co-Req BSC 2086
MAC 1105	College Algebra	3	Pre-req MAT 1033
MCB 2010	Microbiology	3	Pre-req BSC 2085/L and CHM 1033
CHM 1033	Chemistry for Health Sciences	3	Pre=Req MAT 1033
CHM 1033L	Chemistry Lab	1	Pre=Req MAT 1033 and Co- Req CHM 1033

*In order to complete 18 credits in the Mathematics/Science area, select additional credits with any prefix in the areas of natural science/mathematics that do not include courses used to meet the 18 credit general education requirements. Completion of the required sciences satisfies the general education science requirement.*

*Credits used in this area may not be used to satisfy another area.*

**GENERAL EDUCATION REQUIREMENTS – 12 CREDITS REQUIRED**

**Behavioral Science – 3 Credits Required**

DEP 2000	Human Growth & Dev	3
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**Communications – 3 Credits Required**

ENC 1101	English Comp 1	3
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**Oral Communications – 3 Credits Required**

SPC 1017	Fund of Speech Comm	3
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**Humanities - 3 Credits Required**

PHI 2604	Crit Think/Ethics	3	Pre-Req ENC1101
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*Students must have 12 credits in natural science/math, including all content contained in both Human Anatomy and Physiology courses and their corresponding labs.*

**Computer Competency (Waived with a Associates of Art degree or higher from an accredited institution)**

By the 16th earned college level credit (excluding EAP and college preparatory courses), a student **must** take the Computer Competency Test and **pass**

**or**

By the 31st earned college level credit (excluding EAP and college preparatory courses), a student must **pass** CGS 1060, an equivalent continuing education or vocational credit course **or** retest with a **passing** score on the Computer Competency Test.

**Total credits required for Associate in Science degree is 72.**

**Additional Information:**

Due to the limited number of students that can progress to discipline courses in the School of Nursing Associate Degree Programs, it is important that students be properly informed. For information, advisement, application forms and deadline dates, interested students should contact the New Student Center, Medical Center Campus.

Students with 2 or more grades of “D”, “F”, or “W” in required science courses are not eligible to progress into the Associate Degree Nursing program discipline courses. Students are also required to have no more than (2) enrollments (D, F, W) for any individual science course for the program. Minimum GPA of 2.0 is required.

Licensing requirement for the Florida Board of Nursing must be met please review at <https://floridasnursing.gov/licensing/licensed-practical-nurse-registered-nurse-by-examination/>.

Students should check their academic requirement report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami-Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements stated in your academic requirement report rests with you.

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: NURSING (ASSOCIATE DEGREE) R.N. - (TRANSITIONAL FULL-TIME)**  
**(23029)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (3.00 credits)

Gordon rule assigned

- ☐ ENC 1101 - English Composition 1 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

Gordon rule assigned

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. BEHAVIORAL SCI/SOC ENVIRONMENT (3.00 credits)

- ☐ DEP 2000 - Human Growth and Development (3 credits)

### 5. NATURAL SCIENCE (3.00 credits)

- ☐ CHM 1033 - Chemistry for Health Sciences (3 credits)

### 6. MATHEMATICS (3.00 credits)

Gordon rule assigned

- ☐ MAC 1105 - College Algebra (3 credits)

- ☐ MAC\*

- ☐ MGF\*

### 7. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

### 8. SCIENCE (12.00 credits)

- ☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)  
☐ BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits)  
☐ BSC 2086 - Human Anatomy & Physiology 2 (3 credits)

- ☐ BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits)  
☐ CHM 1033L - Chemistry for Health Sciences lab (1 credits)  
☐ MCB 2010 - Microbiology (3 credits)

### 9. FIRST TERM IN PROGRAM (21.00 credits)

- ☐ NUR 1002 - Transition to Professional Nursing (6 credits)  
☐ NUR 1002L - Transition to Professional Nursing Laboratory (4 credits)

- ☐ NUR 1142 - Introduction to Nursing Math & Pharmacology (1 credits)  
☐ NUR 9995 - Nursing (10 credits)

### 10. SECOND TERM IN PROGRAM (11.00 credits)

- ☐ NUR 2310 - Pediatric Nursing (2 credits)  
☐ NUR 2310L - Pediatric Nursing Clinical Lab (1 credits)  
☐ NUR 2420 - Obstetrical Nursing (2 credits)  
☐ NUR 2420L - Obstetrical Nursing Clinical Lab (1 credits)

- ☐ NUR 2520 - Psychiatric Nursing (2 credits)  
☐ NUR 2520L - Psychiatric Nursing Clinical Lab (2 credits)  
☐ NUR 2680L - Community Health Nursing Lab (1 credits)

### 11. THIRD TERM IN PROGRAM (10.00 credits)

- ☐ NUR 2212 - Advanced Medical-Surgical Nursing (3 credits)

- ☐ NUR 2811C - Professional Nursing Leadership (4 credits)

☐ NUR 2212L - Advanced Medical-Surgical Nursing Clinical (3 credits)

\* End of Program Sheet \*



**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: NURSING (ASSOCIATE DEGREE) R.N. - (TRANSITIONAL PART-TIME)**  
**(23029)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (3.00 credits)

Gordon rule assigned

- ☐ ENC 1101 - English Composition 1 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

Gordon rule assigned

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. BEHAVIORAL SCI/SOC ENVIRONMENT (3.00 credits)

- ☐ DEP 2000 - Human Growth and Development (3 credits)

### 5. NATURAL SCIENCE (3.00 credits)

- ☐ CHM 1033 - Chemistry for Health Sciences (3 credits)

### 6. MATHEMATICS (3.00 credits)

Gordon rule assigned

- ☐ MAC 1105 - College Algebra (3 credits)

- ☐ MAC\*

- ☐ MGF\*

### 7. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

The following course(s) are not allowed for credit in this area.  
 All Labs

### 8. SCIENCE (12.00 credits)

- ☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)  
☐ BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits)  
☐ BSC 2086 - Human Anatomy & Physiology 2 (3 credits)

- ☐ BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits)  
☐ CHM 1033L - Chemistry for Health Sciences lab (1 credits)  
☐ MCB 2010 - Microbiology (3 credits)

### 9. 1ST & 2ND TERM IN PROGRAM (21.00 credits)

- ☐ NUR 1002 - Transition to Professional Nursing (6 credits)  
☐ NUR 1002L - Transition to Professional Nursing Laboratory (4 credits)

- ☐ NUR 1142 - Introduction to Nursing Math & Pharmacology (1 credits)  
☐ NUR 9995 - Nursing (10 credits)

### 10. 3RD & 4TH TERM IN PROGRAM (11.00 credits)

- ☐ NUR 2310 - Pediatric Nursing (2 credits)  
☐ NUR 2310L - Pediatric Nursing Clinical Lab (1 credits)  
☐ NUR 2420 - Obstetrical Nursing (2 credits)  
☐ NUR 2420L - Obstetrical Nursing Clinical Lab (1 credits)

- ☐ NUR 2520 - Psychiatric Nursing (2 credits)  
☐ NUR 2520L - Psychiatric Nursing Clinical Lab (2 credits)  
☐ NUR 2680L - Community Health Nursing Lab (1 credits)

**11. 5TH & 6TH TERM IN PROGRAM** (10.00 credits)

- ☐ NUR 2212 - Advanced Medical-Surgical Nursing (3 credits)
- ☐ NUR 2212L - Advanced Medical-Surgical Nursing Clinical (3 credits)
- ☐ NUR 2811C - Professional Nursing Leadership (4 credits)

\* End of Program Sheet \*

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: OPTICIANRY (23040)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (3.00 credits)

- ☐ ENC 1101 - English Composition 1 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. SOCIAL ENVIRONMENT (3.00 credits)

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### 5. MATHEMATICS (3.00 credits)

- ☐ MAC 1105 - College Algebra (3 credits)

### 6. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

### 7. FIRST TERM IN PROGRAM (9.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> OPT 1110 - Physical & Geometrical Optics (4 credits)                | <input type="checkbox"/> OPT 1330 - Clinical Data Collection 1 (2 credits) |
| <input type="checkbox"/> OPT 1205 - Ocular anatomy, Physiology & Pathophysiology (3 credits) |  |

### 8. SECOND TERM IN PROGRAM (11.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> OPT 1150 - Ophthalmic Lenses (2 credits)                      | <input type="checkbox"/> OPT 1450L - Ophthalmic Dispensing Procedures 1 Laboratory (1 credits) |
| <input type="checkbox"/> OPT 1331 - Clinical Data Collection 2 (2 credits)             | <input type="checkbox"/> OPT 2070L - Computers for Vision Care (1 credits)                     |
| <input type="checkbox"/> OPT 1331L - Clinical Data Collection 2 Laboratory (1 credits) | <input type="checkbox"/> OPT 2505 - Contact Lenses 1 (3 credits)                               |
| <input type="checkbox"/> OPT 1450 - Ophthalmic Dispensing Procedures 1 (1 credits)     |  |

### 9. THIRD TERM IN PROGRAM (12.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> OPT 2375 - Refractometry (1 credits)                      | <input type="checkbox"/> OPT 2451L - Ophthalmic Dispensing Procedures Laboratory (1 credits) |
| <input type="checkbox"/> OPT 2375L - Refractometry Laboratory 1 (1 credits)        | <input type="checkbox"/> OPT 2506 - Contact Lenses 2 (2 credits)                             |
| <input type="checkbox"/> OPT 2420 - Eyewear Fabrication 1 (2 credits)              | <input type="checkbox"/> OPT 2506L - Contact Lenses 2 Lab (1 credits)                        |
| <input type="checkbox"/> OPT 2420L - Eyewear Fabrication 1 Laboratory (1 credits)  | <input type="checkbox"/> OPT 2800L - Vision Care Clinic 1 (2 credits)                        |
| <input type="checkbox"/> OPT 2451 - Ophthalmic Dispensing Procedures 2 (1 credits) |  |

### 10. FOURTH TERM IN PROGRAM (12.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> OPT 2421C - Eyewear Fabrication 2 (3 credits)   | <input type="checkbox"/> OPT 2875L - Ophthalmic Dispensing Practicum 1 (2 credits) |
| <input type="checkbox"/> OPT 2801L - Vision Care Clinic 2 (4 credits)    | <input type="checkbox"/> OPT 2376L - Refractometry Lab 2 (1 credits)               |
| <input type="checkbox"/> OPT 2830C - Contact Lenses Clinic 1 (2 credits) |  |

### 11. FIFTH TERM IN PROGRAM (13.00 credits)

- |   |  |
|---|--|
| <input type="checkbox"/> OPT 2060 - Ophthalmic Management Policy & Procedures (2 credits) | <input type="checkbox"/> OPT 2831L - Contact Lense Clinic 2 (1 credits)            |
| <input type="checkbox"/> OPT 2422C - Eyewear Fabrication 3 (3 credits)                    | <input type="checkbox"/> OPT 2876L - Ophthalmic Dispensing Practicum 2 (2 credits) |
|   | <input type="checkbox"/> OPT 2377L - Refractometry 3 Laboratory (1 credits)        |

☐ OPT 2802L - Vision Care Clinic 3 (4 credits)

\* End of Program Sheet \*

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: PARALEGAL STUDIES - ABA APPROVED (27013)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (6.00 credits)

☐ ENC 1101 - English Composition 1 (3 credits)

☐ ENC 1102 - English Composition 2 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### 5. NATURAL SCIENCE (3.00 credits)

☐ PSC 1515 - Energy in the Natural Environment (3 credits)

### 6. COMPUTER COMPETENCY

Test type(s) needed:

☐ CGS 1060

### 7. MAJOR COURSE REQUIREMENTS (43.00 credits)

Must take 3.0 credits from the following group.

☐ PLA 1949 - Co-op Work Experience 1: PLA (3 credits)

☐ PLA 2940 - Legal Assisting Internship (1.00 - 3.00 credits)

- - And - -

Must take 40.0 credits from the following group.

☐ BUL 2241 - Business Law 1 (3 credits)

☐ BUL 2242 - Business Law 2 (3 credits)

☐ PLA 2003 - Fundamentals of Law (3 credits)

☐ PLA 2104 - Legal Research (3 credits)

☐ PLA 2114 - Legal Writing (3 credits)

☐ PLA 2203 - Trial Preparation (3 credits)

☐ PLA 2223 - Trial Practice & Appeals (3 credits)

☐ PLA 2273 - Torts (3 credits)

☐ PLA 2303 - Criminal Law & Litigation (3 credits)

☐ PLA 2600 - Wills, Trust, Estate (3 credits)

☐ PLA 2763 - Law Office Management (3 credits)

☐ PLA 2800 - Family Law (3 credits)

☐ REE 2040 - Real Estate Principles and Practices (P&P 1) (4 credits)

### 8. PROGRAM CORE REQUIREMENTS (3.00 credits)

☐ PLA 2931 - Legal Specialty Seminars (1 credits)

☐ PLA 2932 - Legal Specialty Seminars (1 credits)

☐ PLA 2933 - Legal Specialty Seminars (1 credits)

☐ PLA 2934 - Legal Specialty Seminars (1 credits)

☐ PLA 2935 - Legal Specialty Seminars (1 credits)

\* End of Program Sheet \*

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: PHOTOGRAPHIC TECHNOLOGY (26032)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## **I. GENERAL EDUCATION REQUIREMENTS**

### **1. COMMUNICATIONS (3.00 credits)**

- ☐ ENC 1101 - English Composition 1 (3 credits)

### **2. ORAL COMMUNICATIONS (3.00 credits)**

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### **3. HUMANITIES (3.00 credits)**

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### **4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### **5. MATH/SCIENCE (3.00 credits)**

- ☐ MAC 1105 - College Algebra (3 credits)

### **6. COMPUTER COMPETENCY**

Test type(s) needed:

- ☐ CGS 1060

### **7. MAJOR COURSE REQUIREMENTS (40.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> ART 1202C - Two-Dimensional Design (3.00 - 4.00 credits) | <input type="checkbox"/> PGY 2238 - Illustrative Photography 1 (4 credits)             |
| <input type="checkbox"/> ART 1300C - Drawing (3.00 - 4.00 credits)                | <input type="checkbox"/> PGY 2239 - Illustrative Photography 2 (4 credits)             |
| <input type="checkbox"/> PGY 2110C - Color Photography 1 (3.00 - 4.00 credits)    | <input type="checkbox"/> PGY 2401C - Introduction to Photography (3.00 - 4.00 credits) |
| <input type="checkbox"/> PGY 2211 - Portrait and Still Photography (4 credits)    | <input type="checkbox"/> PGY 2404C - Intermediate Photography (3.00 - 4.00 credits)    |
| <input type="checkbox"/> PGY 2111C - Color Photography 2 (4 credits)              | <input type="checkbox"/> PGY 2470C - Portfolio Preparation (4 credits)                 |

### **8. OTHER ELECTIVES (9.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> ART 1205C - Color and Composition 1 (3.00 - 4.00 credits)     | <input type="checkbox"/> GRA 2151C - Digital Graphic Painting (4 credits)       |
| <input type="checkbox"/> ART 2600C - Computer Art (3.00 - 4.00 credits)                | <input type="checkbox"/> GRA 2156C - Electronic Photoshop (4 credits)           |
| <input type="checkbox"/> ART 2601C - Intermediate Computer Art (3.00 - 4.00 credits)   | <input type="checkbox"/> GRA 2203C - Advanced Electronic Publishing (4 credits) |
| <input type="checkbox"/> ART 2602C - Advanced computer Art (4 credits)                 | <input type="checkbox"/> PGY 2112C - Color Photography 3 (4 credits)            |
| <input type="checkbox"/> ART 2802C - Visual Arts Workshop (1.00 - 4.00 credits)        | <input type="checkbox"/> PGY 2222 - Fashion Photography (4 credits)             |
| <input type="checkbox"/> GRA 1280C - Introduction to Digital Imaging (4 credits)       | <input type="checkbox"/> PGY 2475 - Advanced Photography (3.00 - 4.00 credits)  |
| <input type="checkbox"/> GRA 2117C - Computer Assisted Graphic Design (4 credits)      | <input type="checkbox"/> PGY 2800C - Digital Photography (4 credits)            |
| <input type="checkbox"/> GRA 2121C - Professional Desktop Publishing Media (4 credits) |   |

\* End of Program Sheet \*



## Professional Pilot Technology

Associate in Science | Code: 26029 | 64 credits  
Effective Term: Fall 2019 (2197)

CIP (1649010200)

The Professional Pilot Technology program is primarily developed to meet the challenging regional airline requirements for pilots; therefore, graduates of the program will earn the following Federal Aviation Administration (FAA) Certificates: Private, Commercial Pilot with Single and Multi-Engine Ratings. In addition, these certificates can be applied toward a Certified Flight Instructor (CFI) Certificate. The Accelerated track was developed to meet the emerging workforce needs and prepare students for employment within 12 months.

Course	Course Title	Credits	Pre-/Co-Requisites
<b><u>GENERAL EDUCATION – 15 Credits Required</u></b>			
<b><u>Communications – 3 Credits Required</u></b>			
ENC 1101	English Composition 1	3	Pre-Req Approved Placement Testing
<b><u>Oral Communication – 3 Credits Required</u></b>			
SPC 1017	Fundamentals of Speech Communications	3	
SPC 2608	Introduction to Public Speaking	3	
<b><u>Humanities – 3 Credits Required</u></b>			
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
<b><u>Behavioral and Social Science – 3 Credits Required</u></b>			
CLP1006	Psychology of Personal Effectiveness	3	
<b><u>Mathematics – 3 Credits Required</u></b>			
MAC 1105	College Algebra	3	Pre-Req MAT 1033 or Appropriate Test Scores

### **COMPUTER COMPETENCY**

Computer Competency Test (CCT)

--- or ---

CGS 1060C Introduction to Computer Technology & Applications

### **PROGRAM CORE REQUIREMENTS – 40 - 45 Credits Required**

#### **Group A: Non-Accelerated Track (40 credits required)**

ASC1210	Aviation Meteorology	3
ASC1550	Aerodynamics	3
ASC1610	Aircraft Engines and Structures	3
ASC2320	Aviation Laws and Regulations	3
ASC2470	Physiology/Psychology of Flight	3
ASC2670	Aircraft Systems	3
ATF2210	Commercial Pilot Flight	3
ATF2305	Instrument Pilot Flight	3
ATT1100	Private Pilot Theory	3
ATT1101	Private Pilot Applications	3
ATT2110	Commercial Pilot Theory	4
ATT2120	Instrument Pilot Theory	3
ATT2820	Air Traffic Control	3

---OR---

#### **Group B: Accelerated Track (45 credits required)**

ASC1210	Aviation Meteorology	3
ASC1550	Aerodynamics	3
ASC1610	Aircraft Engines and Structures	3

ASC2320	Aviation Laws and Regulations	3
ASC2470	Physiology/Psychology of Flight	3
ASC2670	Aircraft Systems	3
ATF1100L	Private Pilot Flight Accelerated *	3
ATF2210L	Commercial Pilot Flight Accelerated	3
ATF2305L	Instrument Pilot Flight Accelerated	3
ATT1100	Private Pilot Theory	3
ATT1101	Private Pilot Applications	3
ATT2110	Commercial Pilot Theory	4
ATT2120	Instrument Pilot Theory	3
ATT2133	Multi-Engine Pilot Theory	2
ATT2820	Air Traffic Control	3

**ELECTIVES – 6 - 9 Credits Required**

ATF2400	Multi-Engine Pilot Flight	1
ATF2501	Flight Instructor-Flight Training	3
ATF2501L	Flight Instructor laboratory	1
ATT2131	Flight Instructor Theory	3
ATT2133	Multi-Engine Pilot Theory	2
ATT2660	Regional Airline Operations	3
ATT2821	Air Traffic Control (ATC) Radar	3
ATT2822	VFR Tower Operations	3
ATT2823	Air Traffic Control (ATC) Non-Radar	3
AVM 1949	Co-Op Work Experience 1: AVI	3
CGS 1060C	Introduction to Computer Technology & Applications	4

*\*This course is not eligible for Veteran's Affairs Benefits.*



## Physical Therapist Assistant

(CIP 1351080601)

Associate in Science - Health Sciences | Code: 23035 | 74 credits

**Effective Term – Summer 2020 (2205)**

The Physical Therapist Assistant program prepares students for employment in hospitals, rehabilitation centers, nursing homes, private practices or other qualified health agencies. Graduates will work under the supervision of a physical therapist in the promotion of optimal human health and function through the application of scientific principles to prevent, identify, correct or alleviate acute or prolonged physical disability of anatomic or physiologic origin. Externship or clinical practice is conducted in local health care facilities under the supervision of qualified professional personnel. The program is accredited by the Commission on Accreditation in Physical Therapy Education. Graduates of the program are eligible to take the State Board Examination.

### **FIRST TERM IN PROGRAM – 18 credits**

ENC 1101	English Composition 1	3	Pre-Req Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
BSC 2085	Human Anatomy & Physiology 1	3	Pre/Co-Req BSC 2085L
BSC 2085L	Human Anatomy & Physiology I Lab	1	Pre/Co-Req BSC 2085
HIM 2472	Medical Terminology	3	
Mathematics	(MAC 1105, MGF 1107, or STA 2023)	3	Pre-Req MAT 1033 or Appropriate Placement Score
PHY 1004	Physics with Applications 1	3	Pre-Req MAT 1033 or Higher
PHY 1004L	Physics with Applications 1 Lab	1	Co-Req PHY 1004
Elective	(CGS 1060C, IDS 1107, LIS 2004, MAC 1105, MAT 1033, SPC 1017, PHI 2604, STA 2023)	1	Pre-Req Check with advisor

### **SECOND TERM IN PROGRAM – 15 credits**

BSC 2086	Human Anatomy & Physiology II	3	Pre-Req BSC 2085; Co-Req BSC 2086L
BSC 2086L	Human Anatomy & Physiology II Lab	1	Pre-Req BSC 2085L; Co-Req BSC 2086
PHT 1102C	Anatomy for the Physical Therapist Assistant	4	Pre-Req BSC 2085, 2085L, PHY 1004, 1004L Co-Req PHT 1201, 1201L, 1211, 1211L
PHT 1201	Introduction to Physical Therapy	2	Pre-Req BSC 2085, 2085L, PHY 1004, 1004L Co-Req PHT 1102C, 1201L, 1211, 1211L
PHT 1201L	Introduction to Physical Therapy Lab	1	Pre-Req BSC 2085, 2085L, PHY 1004, 1004L Co-Req PHT 1102C, 1201, 1211, 1211L
PHT 1211	Disabilities & Therapeutic Procedures I	2	Pre-Req BSC 2085, 2085L, PHY 1004, 1004L Co-Req PHT 1102C, 1201, 1201L, 1211L
PHT 1211L	Disabilities & Therapeutic Procedures I Lab	2	Pre-Req BSC 2085, 2085L, PHY 1004, 1004L Co-Req PHT 1102C, 1201, 1201L, 1211

### **THIRD TERM IN PROGRAM – 13 credits**

PHT 2120	Applied Kinesiology	2	Pre-Req BSC 2085, 2085L, PHT 1102C, 1201, 1201L, 1211, 1211L Co-Req PHT 2120L, 2224, 2224L, 2801C
PHT 2120L	Applied Kinesiology Lab	1	Pre-Req BSC 2085, 2085L, PHT 1102C, 1201, 1201L, 1211, 1211L Co-Req PHT 2120, 2224, 2224L, 2801C
PHT 2224	Disabilities and Therapeutic Procedures II	3	Pre-Req BSC 2085, 2085L, PHT 1102C, 1201, 1201L,

PHT 2224L	Disabilities and Therapeutic Procedures II	2	1211, 1211L Co-Req PHT 2120, 2120L, 2224L, 2801C Pre-Req BSC 2085, 2085L, PHT 1102C, 1201, 1201L, 1211, 1211L
PHT 2801C	Clinical Practice & Conference I	2	Co-Req PHT 2120, 2120L, 2224, 2801C Pre-Req BSC 2085, 2085L, PHT 1102C, 1201, 1201L, 1211, 1211L
Humanities Selection (ARH 1000, HUM 1020, LIT 2000, MUL 1010, PHI 2010, THE 2000)		3	Co-Req PHT 2120, 2120L, 2224, 2224L Pre-Req ENC 1101 (for LIT 2000 and PHI 2010)
<b><u>FOURTH TERM IN PROGRAM – 15 credits</u></b>			
PHT 2162	Survey of Neurological Deficits	3	Pre-Req PHT 2120, 2120L, 2224, 2224L, 2801C Co-Req PHT 2701, 2701L, 2810
PHT 2701	Rehabilitation Procedures	3	Pre-Req PHT 2120, 2120L, 2224, 2224L, 2801C Co-Req PHT 2162, 2701L, 2810
PHT 2701L	Rehabilitation Procedures Lab	2	Pre-Req PHT 2120, 2120L, 2224, 2224L, 2801C Co-Req PHT 2162, 2701, 2810
PHT 2810	Clinical Practice and Conference II	7	Pre-Req PHT 2120, 2120L, 2224, 2224L, 2801C Co-Req PHT 2162, 2701, 2701L
<b><u>FIFTH TERM IN PROGRAM – 13 credits</u></b>			
PHT 2820	Clinical Practice and Conference III	7	Pre-Req PHT 2162, 2701, 2701L, 2810 Co-Req PHT 2931
PHT 2931	Seminar	3	Pre-Req PHT 2162, 2701, 2701L, 2810 Co-Req PHT 2820
PSY 2012	Introduction to Psychology	3	



## Radio and Television Broadcast Programming

(CIP 1610020202)

Associate in Science | Code: 26043 | 64 credits

Effective Term: Summer 2020 (2205)

### Program description:

Cue Camera 1! Students are trained in a State-of-the-Art, High-Definition broadcast facility to perform all functions of a television production crew including; director, camera operator, floor manager, production assistant, technical director, graphics operator, audio engineer, and teleprompter operator. Field production and broadcasting practices enhance the student's advantage towards gaining lucrative employment in the expanding South Florida radio and television industries.

### GENERAL EDUCATION REQUIREMENTS (15.00 CREDITS)

#### Communications (3.00 credits)

ENC 1101	English Composition 1	3
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#### Oral Communication (3.00 credits)

SPC 1017	Fundamentals of Speech Communications	3
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#### Humanities (3.00 credits)

PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
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#### Behavioral and Social Science (3.00 credits)

CLP 1006	Psychology of Personal Effectiveness	3
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#### Math/Natural Science (3.00 credits)

BSC 1084	Functional Human Anatomy	3	BSC 1084L (Optional)
PHY*			
MAC*			
MGF*			

\* Any course with the following prefix excluding labs.

### Computer Competency Requirement

Computer Competency Test (CCT)

---Or---

CGS 1060C - Introduction to Computer Technology & Applications

### Major Course Requirements (43.00 credits)

MMC2000	Introduction to Mass Comm	3
RTV1000	Fundamentals of Broadcasting	3
RTV1240C	Sound Design	3
RTV1241C	TV Studio Production 1	4
RTV1242C	TV Studio Production 2	4
RTV2243C	TV Directing	3
RTV2245C	Electronic Field Production 1	4
RTV2246C	Electronic Field Production 2	4

RTV2300	Broadcast Writing	3
FIL2552C	Editing: Level 1	3
FIL2553C	Editing: Level 2	3
FIL2560C	Editing: Level 3	3
VIC1000	Visual Communications	3

**Major Course Elective (6.00 credits)**

FIL1030	History of Film	3
FIL1100	Screenwriting 1	3
FIL2990	Special Topics	3
RTV2230C	Radio & TV Announcing	3
RTV2942	Spring TV Practicum	3
RTV2943	Summer TV Practicum	3
RTV2940	TV Internship	3
RTV2941	TV Practicum	3
RTV2205C	TV Workshop	3

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: RADIOGRAPHY (23036)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## **I. GENERAL EDUCATION REQUIREMENTS**

### **1. COMMUNICATIONS (3.00 credits)**

☐ ENC 1101 - English Composition 1 (3 credits)

### **2. ORAL COMMUNICATIONS (3.00 credits)**

☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### **3. HUMANITIES (3.00 credits)**

☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### **4. SOCIAL ENVIRONMENT (3.00 credits)**

☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### **5. MATH/SCIENCE (6.00 credits)**

☐ BSC 2085 - Human Anatomy and Physiology 1 (3 credits)

☐ MAC 1105 - College Algebra (3 credits)

### **6. COMPUTER COMPETENCY**

Test type(s) needed:

☐ CGS 1060

### **7. SCIENCE (5.00 credits)**

☐ BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits)

☐ BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits)

☐ BSC 2086 - Human Anatomy & Physiology 2 (3 credits)

### **8. FIRST TERM IN PROGRAM (2.00 credits)**

☐ RTE 1000 - Orientation to the Imaging Sciences (2 credits)

### **9. SECOND TERM IN PROGRAM (11.00 credits)**

☐ RTE 1613 - Radiologic Physics (2 credits)

☐ RTE 1503L - Radiographic Positioning Laboratory 1 (1 credits)

☐ RTE 1503 - Radiographic Positioning 1 (3 credits)

☐ RTE 1804 - Radiographic Clinic 1 (5 credits)

### **10. THIRD TERM IN PROGRAM (12.00 credits)**

☐ RTE 1513 - Radiographic Positioning 2 (3 credits)

☐ RTE 1418 - Radiographic Technology 1 (3 credits)

☐ RTE 1513L - Radiographic Positioning Laboratory 2 (1 credits)

☐ RTE 1814 - Radiographic Clinic 2 (5 credits)

### **11. FOURTH TERM IN PROGRAM (5.00 credits)**

☐ RTE 1824 - Radiographic Clinic 3 (5 credits)

### **12. FIFTH TERM IN PROGRAM (10.00 credits)**

☐ RTE 2457 - Radiologic Technology 2 (3 credits)

☐ RTE 2834 - Radiographic Clinic 4 (5 credits)

☐ RTE 2563 - Radiographic Positioning 3 (2 credits)

### **13. SIXTH TERM IN PROGRAM (10.00 credits)**

☐ RTE 2385 - Radiation Biology (2 credits)

☐ RTE 2844 - Radiographic Clinic 5 (8 credits)

**14. SEVENTH TERM IN PROGRAM** (4.00 credits)☐ RTE 2854 - Radiographic Clinic 6 (3 credits)☐ RTE 2010 - New Imaging Modalities in Radiology (1 credits)

\* End of Program Sheet \*

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: RESPIRATORY CARE - ACCELERATED (23045)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (3.00 credits)

- ☐ ENC 1101 - English Composition 1 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. SOCIAL ENVIRONMENT (3.00 credits)

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### 5. MATH/SCIENCE (3.00 credits)

- ☐ CHM 1033 - Chemistry for Health Sciences (3 credits)

### 6. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

### 7. SCIENCE (8.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2085 - Human Anatomy and Physiology 1 (3 credits)             | <input type="checkbox"/> BSC 2086 - Human Anatomy & Physiology 2 (3 credits)             |
| <input type="checkbox"/> BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits) | <input type="checkbox"/> BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits) |

### 8. COMPLETION POINT A (23.00 credits)

- ☐ RET 9995 - Respiratory Care (23 credits)

### 9. COMPLETION POINT B (3.00 credits)

- |   |   |
|---|---|
| <input type="checkbox"/> RET 2414 - Pulmonary Studies (2 credits) | <input type="checkbox"/> RET 2414L - Pulmonary Studies Laboratory (1 credits) |
|---|---|

### 10. COMPLETION POINT C (4.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> RET 2284 - Principles of Mechanical Ventilation (2 credits) | <input type="checkbox"/> RET 2284L - Principles of Mechanical Ventilation Laboratory (2 credits) |
|--|--|

### 11. COMPLETION POINT D (13.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> RET 2264 - Advanced Modalities and Monitoring (2 credits)       | <input type="checkbox"/> RET 2714L - Perinatal & Pediatric Respiratory Care Laboratory (2 credits) |
| <input type="checkbox"/> RET 2714 - Perinatal and Pediatric Respiratory Care (2 credits) | <input type="checkbox"/> RET 2834 - Respiratory Care Clinic 3 (8 credits)                          |

### 12. COMPLETION POINT E (11.00 credits)

- |  |   |
|--|---|
| <input type="checkbox"/> RET 2601 - Respiratory Care Seminar (2.00 - 3.00 credits) | <input type="checkbox"/> RET 2835 - Respiratory Care Clinic 4 (8 credits) |
|--|---|

\* End of Program Sheet \*

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: RESPIRATORY CARE (23045)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMMUNICATIONS** (3.00 credits)

- ☐ ENC 1101 - English Composition 1 (3 credits)

**2. ORAL COMMUNICATIONS** (3.00 credits)

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

**3. HUMANITIES** (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

**4. SOCIAL ENVIRONMENT** (3.00 credits)

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

**5. MATH/SCIENCE** (3.00 credits)

- ☐ CHM 1033 - Chemistry for Health Sciences (3 credits)

**6. COMPUTER COMPETENCY**

Test type(s) needed:

- ☐ CGS 1060

**7. SCIENCE** (8.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2085 - Human Anatomy and Physiology 1 (3 credits)             | <input type="checkbox"/> BSC 2086 - Human Anatomy & Physiology 2 (3 credits)             |
| <input type="checkbox"/> BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits) | <input type="checkbox"/> BSC 2086L - Human Anatomy & Physiology 2 Laboratory (1 credits) |

**8. FIRST TERM IN PROGRAM** (8.00 credits)

- |  |   |
|--|---|
| <input type="checkbox"/> RET 1024 - Introduction to Respiratory Care (2 credits)             | <input type="checkbox"/> RET 2274 - Respiratory Care Theory 1 (2 credits)             |
| <input type="checkbox"/> RET 1024L - Introduction to Respiratory Care Laboratory (1 credits) | <input type="checkbox"/> RET 2274L - Respiratory Care Theory Laboratory 1 (1 credits) |
| <input type="checkbox"/> RET 1484 - Respiratory Care Pathophysiology 1 (2 credits)           |   |

**9. SECOND TERM IN PROGRAM** (13.00 credits)

- |   |  |
|---|--|
| <input type="checkbox"/> RET 2275 - Respiratory Care Theory 2 (2 credits)             | <input type="checkbox"/> RET 2414L - Pulmonary Studies Laboratory (1 credits)      |
| <input type="checkbox"/> RET 2275L - Respiratory Care Theory Laboratory 2 (1 credits) | <input type="checkbox"/> RET 2503 - Respiratory Care Pathophysiology 2 (3 credits) |
| <input type="checkbox"/> RET 2350 - Respiratory Care Pharmacology (2 credits)         | <input type="checkbox"/> RET 2832 - Respiratory Care Clinic 1 (2 credits)          |
| <input type="checkbox"/> RET 2414 - Pulmonary Studies (2 credits)                     |  |

**10. THIRD TERM IN PROGRAM** (9.00 credits)

- |  |   |
|--|---|
| <input type="checkbox"/> RET 2284 - Principles of Mechanical Ventilation (2 credits)             | <input type="checkbox"/> RET 2833 - Respiratory Care Clinic 2 (5 credits) |
| <input type="checkbox"/> RET 2284L - Principles of Mechanical Ventilation Laboratory (2 credits) |   |

**11. FOURTH TERM IN PROGRAM** (13.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> RET 2264 - Advanced Modalities and Monitoring (2 credits)       | <input type="checkbox"/> RET 2714L - Perinatal & Pediatric Respiratory Care Laboratory (1 credits) |
| <input type="checkbox"/> RET 2714 - Perinatal and Pediatric Respiratory Care (2 credits) | <input type="checkbox"/> RET 2834 - Respiratory Care Clinic 3 (8 credits)                          |



**12. FIFTH TERM IN PROGRAM** (10.00 credits)☐ RET 2601 - Respiratory Care Seminar (2.00 - 3.00 credits)☐ RET 2835 - Respiratory Care Clinic 4 (8 credits)

\* End of Program Sheet \*

**Sign Language Interpretation**
*Associate in Science | Code: 23033 | 66 credits*

Effective Term: Summer 2021 (2215)

The Associate in Science (AS) degree in Sign Language Interpretation (SLI) is offered through a 66-unit program with an estimated completion time of two years of full-time study. Students prepare to work as entry-level ASL interpreters or to transfer to a bachelor's degree program in (ASL)-English Interpreting.

**GENERAL EDUCATION REQUIREMENTS (15 CREDITS)**

1. **COMMUNICATIONS (3.00 credits)**  
ENC 1101 English Composition 1 (3 credits)
2. **ORAL COMMUNICATIONS (3.00 credits)**  
SPC 1017 Fundamentals of Speech Communication (3 credits)
3. **HUMANITIES (3.00 credits)**  
PHI 2604 Critical Thinking/Ethics (3 credits)
4. **BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**  
CLP 1006 Psychology of Personal Effectiveness (3 credits)
5. **MATH (3.00 credits)**  
MGF 1107 Mathematics for Liberal Arts 2 (3 credits)

**COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C Introduction to Computer Technology &amp; Applications

**MAJOR COURSE REQUIREMENTS (47 CREDITS)**

ASL 1150C	American Sign Language 2	(4 credits)
ASL 2160C	American Sign Language 3	(4 credits)
ASL 2200C	American Sign Language 4	(4 credits)
ASL 2210	ASL Conversational Skills	(3 credits)
ASL 2220	Receptive Skills Development	(3 credits)
ASL 2400	Linguistics of American Sign Language	(3 credits)
ASL 2430	Manual Alphabet Skills Development	(3 credits)
ASL 2510	Deaf Culture and Community	(3 credits)
INT 1000	Interpreting Ethics and Professionalism	(3 credits)
INT 1202	Sign to Voice Interpreting	(3 credits)
INT 1240	Voice to Sign Interpreting	(3 credits)
INT 1400	Educational Interpreting	(3 credits)
INT 1480	Interpreting: Special Settings & Populations	(3 credits)
INT 1941	Interpreting Internship	(5 credits)

**MAJOR COURSE ELECTIVE (4 credits)**

ASL 1140C	American Sign Language 1	(4 credits)
ASL 1906	Directed Independent Studies	(1.00 - 2.00 credits)
CGS 1060C	Introduction to Computer Technology & Applications	(4 credits)
DEP 2000	Human Growth and Development	(3 credits)
EDF 1005	Introduction to the Teaching Profession	(3 credits)
EEX 2000	Introduction to Special Education	(3 credits)
HUS 1001	Introduction to Human Services	(3 credits)
PCO 2731	Human Relations	(3 credits)
PSY 2012	Introduction to Psychology	(3 credits)
SOP 2002	Social Psychology	(3 credits)
SPA 2001	Introduction to Communication Disorders	(3 credits)
SPC 2050	Voice and Diction	(3 credits)



## **Social and Human Services - Addictions Studies**

*Associate in Science | Code: 25067 | 60 credits*

### **Program Description**

The Social and Human Services program with a specialization in Addiction Studies is designed to prepare students for employment as human services specialists, human services practitioners, chemical dependency practitioners, addiction specialists, mental health and social service practitioners, or to provide supplemental training for persons previously or currently employed in these occupations. The program is also designed to provide most of the general academic and addiction specific requirements of the Certification Board for Addiction Professionals of Florida.

### **GENERAL EDUCATION REQUIREMENTS – 15 Credits Required**

#### **1. COMMUNICATIONS (3.00 credits)**

ENC 1101 - English Composition 1 (3 credits)

#### **2. ORAL COMMUNICATIONS (3.00 credits)**

SPC 1017 - Fundamentals of Speech Communication (3 credits)

#### **3. HUMANITIES (3.00 credits)**

PHI 2604 - Critical Thinking/Ethics (3 credits)

#### **4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**

CLP 1006 - Psychology of Personal Effectiveness (3 credits)

#### **5. MATH/SCIENCE (3.00 credits)**

BSC 1005 - General Education Biology (3 credits)

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

--- or ---

CGS 1060C - Introduction to Computer Technology & Applications

### **CORE REQUIREMENTS - 18.00 Credits Required**

HUS 1001 - Introduction to Human Services (3 credits)

HUS 1318 - Domestic Abuse and Family Violence (3 credits)

HUS 1480 - HIV/AIDS and the Substance Abuser (3 credits)

HUS2500 - Issues and Ethics in Human Services (3 credits)

HUS 2493- Addiction Counseling Competencies (3 credits)

PSY 2012 - Introduction to Psychology (3 credits)

### **PROGRAM REQUIREMENTS - 24.00 Credits Required**

HUS 1428 - Addiction Treatment Delivery Systems (3 credits)

HUS 1302 - Basic Counseling Skills (3 credits)

HUS 1421 - Assessment and Treatment Planning in Addictions (3 credits)

HUS 1423 - Group Counseling in Substance Abuse (3 credits)

HUS 1440 - Family Issues in Chemical Dependency (3 credits)

HUS 1475 - Addiction Counseling and the law (3 credits)

HUS 2303 - Counseling Techniques (3 credits)

PSB 2442 – The Psychology of Addictions (3 Credits)

**FIELD EXPERIENCE REQUIREMENT - 3 Credits Required**

HUS 2820 - Field Experience in Human Service (3 credits)



## **Social and Human Services – Generalist**

*Associate in Science | Code: 25026 | 60 credits*

### **Program Description**

The Generalist Human Services Associate in Science degree prepares the students for employment in the network of programs and agencies which provide a vast array of human needs. These include areas such as child care, criminal justice, education, health, housing, income maintenance, mental health and retardation, among others. These needs are provided for a variety of settings, such as clinics, hospitals, nursing homes, rehabilitation centers and social agencies.

### **GENERAL EDUCATION REQUIREMENTS – 15 Credits Required**

#### **1. COMMUNICATIONS (3.00 credits)**

ENC 1101 - English Composition 1 (3 credits)

#### **2. ORAL COMMUNICATIONS (3.00 credits)**

SPC 1017 - Fundamentals of Speech Communication (3 credits)

#### **3. HUMANITIES (3.00 credits)**

PHI 2604 - Critical Thinking/Ethics (3 credits)

#### **4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**

CLP 1006 - Psychology of Personal Effectiveness (3 credits)

#### **5. MATH/SCIENCE (3.00 credits)**

BSC 1005 - General Education Biology (3 credits)

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

--- or ---

CGS 1060C - Introduction to Computer Technology & Applications

### **CORE REQUIREMENTS - 18.00 Credits Required**

HUS 1001 - Introduction to Human Services (3 credits)

HUS 1318 - Domestic Abuse and Family Violence (3 credits)

HUS 1480 - HIV/AIDS and the Substance Abuser (3 credits)

HUS 2500 - Issues & Ethics in Human Services (3 credits)

PSY 2012 - Introduction to Psychology (3 credits)

SOP 2002 - Social Psychology (3 credits)

### **PROGRAM REQUIREMENTS - 24.00 Credits Required**

CLP 2140 - Abnormal Psychology (3 credits)

DEP 2000 - Human Growth and Development (3 credits)

HUS 1302 - Basic Counseling Skills (3 credits)

HUS 2303 - Counseling Techniques (3 credits)

ISS 1120 - The Social Environment (3 credits)

PSB 2442 - The Psychology of Addiction (3 credits)

SYG 2010 - Social Problems (3 credits)

SYG 2430 - Marriage and the Family (3 credits)

**FIELD EXPERIENCE REQUIREMENT - 3 Credits Required**

HUS 2820 - Field Experience in Human Service (3 credits)



## Surgical Technology

Associate in Science | Code: 23077 | 64 credits

CIP (1351090901)

Effective Term: Fall 2022 (2227)

The Associate in Science degree in Surgical Technology is designed to educate and prepare graduates with skills required for entry-level employment as a member of the healthcare team. In addition, students will acquire extensive knowledge of legal and ethical responsibilities, anatomy, physiology, pathophysiology, microbiology, aseptic techniques, patient care procedures, surgical technology procedures, patient safety, and use and care of equipment and supplies.

### **GENERAL EDUCATION REQUIREMENTS (15 Credits Required)**

#### **Communications (3.00 Credits)**

ENC 1101	English Composition 1	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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#### **Humanities (3.00 Credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	Prerequisite: ENC 1101
THE 2000	Theatre Appreciation	(3 credits)	

#### **Mathematics (3.00 Credits)**

MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	Prerequisite: Course, placement score, or eligible exemption.
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#### **Natural Science (3.00 Credits)**

BSC 2085	Human Anatomy and Physiology 1	(3 credits)	Corequisite: BSC2085L
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#### **Social Science (3.00 Credits)**

AMH 2020	History of the US since 1877	(3 credits)	
POS 2041	American Federal Government	(3 credits)	

### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

---or---

CGS 1060C - Introduction to Computer Technology & Applications

### **SCIENCE REQUIREMENTS (5.00 credits)**

BSC 2085L	Human Anatomy and Physiology 1 Laboratory	(1 credits)	Corequisite: BSC2085
BSC 2086	Human Anatomy & Physiology 2	(3 credits)	Prerequisite: BSC2085; Corequisite: BSC2086L
BSC 2086L	Human Anatomy & Physiology 2 Laboratory	(1 credits)	Prerequisite: BSC2085, BSC2085L; Corequisite: BSC2086

### **MAJOR CORE REQUIREMENTS (44 credits)**

HIM 2472	Medical Terminology	(3 credits)
STS 1302	Introduction to Surgical Technology	(2 credits)
STS 1303	Fundamentals of Surgical Technology	(3 credits)
STS 1304L	Operating Room Techniques Laboratory	(3 credits)
STS 1307	Surgical Equipment and Instrumentation	(3 credits)
STS 1308	Perioperative Patient Care Concepts	(2 credits)

STS 1323	Surgical Procedures I	(3 credits)
STS 1327L	Principles and Practices of Surgical Technology Laboratory	(2 credits)
STS 1931	Surgical Technology Special Topics Seminar	(3 credits)
STS 2179	Surgical Biomedical Fundamentals	(3 credits)
STS 2324	Surgical Procedures II	(3 credits)
STS 2340	Surgical Pharmacology	(3 credits)
STS 2360	Professional Skills for the Surgical Technologist	(2 credits)
STS 2944	Surgical Clinical I	(3 credits)
STS 2945	Surgical Clinical II	(3 credits)
STS 2946	Surgical Clinical III	(3 credits)



**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: TRANSLATION-INTERPRETATION STUDIES (24050)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. COMMUNICATIONS (3.00 credits)

- ☐ ENC 1101 - English Composition 1 (3 credits)

### 2. ORAL COMMUNICATIONS (3.00 credits)

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### 3. HUMANITIES (3.00 credits)

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### 4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### 5. MATH/SCIENCE (3.00 credits)

- |   |   |
|---|---|
| <input type="checkbox"/> MAC*   | <input type="checkbox"/> CHM*   |
| <input type="checkbox"/> MAD*   | <input type="checkbox"/> GLY*   |
| <input type="checkbox"/> MAP*   | <input type="checkbox"/> HUN 1201 - Essentials of Human Nutrition (3 credits) |
| <input type="checkbox"/> MAS*   | <input type="checkbox"/> MCB*   |
| <input type="checkbox"/> MGF*   | <input type="checkbox"/> MET*   |
| <input type="checkbox"/> QMB*   | <input type="checkbox"/> OCE*   |
| <input type="checkbox"/> STA*   | <input type="checkbox"/> PCB 2033 - Introduction to Ecology (3 credits)       |
| <input type="checkbox"/> AST 1002 - Descriptive Astronomy (3 credits) | <input type="checkbox"/> PHY*   |
| <input type="checkbox"/> BOT*   | <input type="checkbox"/> PSC*   |
| <input type="checkbox"/> BSC*   | <input type="checkbox"/> ZOO*   |

### 6. COMPUTER COMPETENCY

Test type(s) needed:

- ☐ CGS 1060

### 7. MAJOR COURSE REQUIREMENTS (48.00 credits)

Must take 3.0 credits from the following group.

- ☐ HAI 2341 - Haitian-Creole for Native Speakers 2 (3 credits)      ☐ SPN 2341 - Spanish for Native Speakers 2 (3 credits)

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ HAT 2802 - Contrastive Analysis: Haitian/Creole (3 credits)      ☐ SPT 2842 - Contrastive Analysis Spanish/English (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

- - - And - - -

Must take 3.0 credits from the following group.

- ☐ HCW 2020 - Selected Readings in Haitian-Creole Literature 3 (3 credits)      ☐ SPW 2020 - Selected Readings in Latin American Literature (3 credits)

The following course(s) are not allowed for credit in this area.

All Labs

- - - And - - -

Must take 39.0 credits from the following group.

- |  |  |
|--|--|
| <input type="checkbox"/> ENC 1102 - English Composition 2 (3 credits)                  | <input type="checkbox"/> FOT 2826 - Legal Translation (3 credits)                  |
| <input type="checkbox"/> FOT 2802 - Introduction to Translation (3 credits)            | <input type="checkbox"/> FOT 2827 - Medical Translation (3 credits)                |
| <input type="checkbox"/> FOT 2821 - Introduction to Interpretation (3 credits)         | <input type="checkbox"/> FOT 2828 - Medical Interpretation (3 credits)             |
| <input type="checkbox"/> FOT 2822 - Court Interpreting Skills (3 credits)              | <input type="checkbox"/> FOT 2829 - Financial and Business Translation (3 credits) |
| <input type="checkbox"/> FOT 2823 - Consecutive Interpretation (3 credits)             | <input type="checkbox"/> LIN 2606 - Introduction to Sociolinguistics (3 credits)   |
| <input type="checkbox"/> FOT 2824 - Simultaneous Interpretation Strategies (3 credits) | <input type="checkbox"/> SPC 2608 - Introduction to Public Speaking (3 credits)    |
| <input type="checkbox"/> FOT 2825 - Computer Assisted Translation 1 (3 credits)        |  |

The following course(s) are not allowed for credit in this area.  
All Labs

\* End of Program Sheet \*



## Transportation and Logistics

Associate in Science | Code: 28000 | 64 credits

CIP (1652020301)

Effective Term: Fall 2018 (2187)

This Transportation and Logistics A.S. degree program provides core courses in transportation policy, law, safety, security, management and marketing, and an integrated understanding of the intermodal relationship between the various modes of transportation. In addition, college credit certificates will be offered in Intermodal Freight Transportation and International Freight Transportation.

Course	Course Title	Credits	Pre-/Co-Requisites
<b><u>GENERAL EDUCATION – 18 Credits Required</u></b>			
<b>Communications – 3 Credits Required</b>			
ENC 1101	English Composition 1	3	Pre-Req Approved Placement Testing
<b>Oral Communication – 3 Credits Required</b>			
SPC 1017	Fundamentals of Speech Communications	3	
<b>Humanities – 3 Credits Required</b>			
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
<b>Behavioral and Social Science – 3 Credits Required</b>			
ECO 2013	Principles of Economics (MACRO)	3	
<b>Mathematics – 6 Credits Required</b>			
MAC 1105	College Algebra	3	Pre-Req MAT 1033 or Appropriate Test Scores
QMB 2100	Basic Business Statistics	3	Co-Req QMB 2100L
<b>--- OR ---</b>			
STA 2023	Statistical Methods	3	Pre-Req MAT 1033
<b><u>COMPUTER COMPETENCY</u></b>			
Computer Competency Test (CCT)			
<b>--- or ---</b>			
CGS 1060C	Introduction to Computer Technology & Applications		
<b><u>MAJOR CORE REQUIREMENTS – 20 Credits Required</u></b>			
ACG 2021	Financial Accounting	3	Co-Req ACG 2021L
ACG 2021L	Financial Accounting Lab	1	Co-Req ACG 2021
ACG 2071	Managerial Accounting	3	Pre-Req ACG 2021; Co-Req ACG 2071L
ACG 2071L	Managerial Accounting Lab	1	Pre-Req ACG2021/L; Co-Req ACG 2071
ECO 2023	Principles of Economics (MICRO)	3	
MAN 2021	Principles of Management	3	
TRA 1154	Introduction to Supply Chain Management	3	
TRA 2010	Introduction to Transportation and Logistics	3	
<b><u>PROGRAM CORE REQUIREMENTS – 21 Credits Required</u></b>			
<b>Group A – 18 Credits</b>			
AVM 2120	Air Cargo Operations	3	
DSC 2242	Transportation and Border Security	3	
TRA 2156	Operations Management for Transportation	3	
TRA 2321	Transportation Public Policy, Law and Regulations	3	
TRA 2402	Intermodal Transportation Operations and Project Management	3	
TRA 2702	International Logistics and Transportation	3	

--- and ---

**Group B – 3 Credits**

TRA 1430	Introduction to Port Freight Operations	3
TRA 1410	Introduction to Rail Freight Operations	3
TRA 1420	Introduction to Trucking Operations	3

**CAPSTONE COURSE REQUIREMENT – 1 Credit Required**

TRA 2945	Transportation & Logistics Capstone I	1	Pre-Req Departmental Approval & Completion of the Program Core Requirements
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**ELECTIVES – 4 Credits Required**

ACG*	FIN2*	MAN2*	OST*	TAX*
BUL*	GEB*	MAR*	PUR*	TRA*
ECO*	HFT*	MAR1011	QMB*	
FIN1*	MAN1*	MAR2150	SBM*	

AVM 1062	Aviation Career Planning	1	
AVM 1949	Co-Op Work Experience 1: AVI	3	Pre-Req Departmental Permission
CGS 1060C	Introduction to Computer Technology & Applications	4	
MAT 1033	Intermediate Algebra	3	
QMB 2100L	Basic Business Statistics Lab	1	

**ASSOCIATE IN SCIENCE DEGREE**  
**PROGRAM OF STUDY: VETERINARY TECHNOLOGY (23062)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## **I. GENERAL EDUCATION REQUIREMENTS**

### **1. COMMUNICATIONS (3.00 credits)**

- ☐ ENC 1101 - English Composition 1 (3 credits)

### **2. ORAL COMMUNICATIONS (3.00 credits)**

- ☐ SPC 1017 - Fundamentals of Speech Communication (3 credits)

### **3. HUMANITIES (3.00 credits)**

- ☐ PHI 2604 - Critical Thinking/Ethics (3 credits)

### **4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)**

- ☐ CLP 1006 - Psychology of Personal Effectiveness (3 credits)

### **5. MATH/SCIENCE (4.00 credits)**

- ☐ CHM 1033 - Chemistry for Health Sciences (3 credits)

- ☐ CHM 1033L - Chemistry for Health Sciences lab (1 credits)

### **6. COMPUTER COMPETENCY**

Test type(s) needed:

- ☐ CGS 1060

### **7. FIRST TERM IN PROGRAM (8.00 credits)**

- ☐ ATE 1110 - Animal Anatomy (3 credits)

- ☐ ATE 1110L - Animal Anatomy & Physiology Lab (1 credits)

- ☐ ATE 1211 - Animal Physiology (3 credits)

- ☐ ATE 1650L - Introduction to Clinical Practice 1 (1 credits)

### **8. SECOND TERM IN PROGRAM (11.00 credits)**

- ☐ ATE 2636 - Large Animal Clinic & Nursing Skills (2 credits)

- ☐ ATE 2636L - Large Animal Clinic & Nursing Skills Laboratory (1 credits)

- ☐ ATE 2638 - Animal Lab Procedures 1 (3 credits)

- ☐ ATE 2638L - Animal Lab Procedures 1 Laboratory (2 credits)

- ☐ ATE 2652L - Introduction to Clinical Practice 2 (1 credits)

- ☐ ATE 2671C - Lab Animal Medicine (2 credits)

### **9. THIRD TERM IN PROGRAM (9.00 credits)**

- ☐ ATE 1630 - Pharmacology for Veterinary Technicians (2 credits)

- ☐ ATE 2639 - Animal Lab Procedures 2 (3 credits)

- ☐ ATE 2639L - Animal Lab Procedures 2 Laboratory (2 credits)

- ☐ ATE 2722C - Avian & Exotic Pet Medicine (2 credits)

### **10. FOURTH TERM IN PROGRAM (12.00 credits)**

- ☐ ATE 1940 - Veterinary Clinical Experience 1 (3 credits)

- ☐ ATE 2611 - Animal Medicine 1 (3 credits)

- ☐ ATE 2631 - Small Animal Nursing 1 (3 credits)

- ☐ ATE 2655L - Animal Nursing & Medicine Laboratory 1 (2 credits)

- ☐ ATE 2661 - Large Animal Diseases (1 credits)

### **11. FIFTH TERM IN PROGRAM (13.00 credits)**

- ☐ ATE 1941 - Veterinary Clinical Experience 2 (3 credits)

- ☐ ATE 2050L - Animal Nursing & Medicine Laboratory 2 (2 credits)

- ☐ ATE 2612 - Small Animal Nursing 2 (3 credits)

- ☐ ATE 2614 - Animal Medicine 2 (3 credits)

- ☐ ATE 2710 - Animal Emergency Medicine (2 credits)

### **12. SIXTH TERM IN PROGRAM (4.00 credits)**

- ☐ ATE 2942 - Veterinary Clinical Experience 3 (4 credits)

\* End of Program Sheet \*

**PROGRAM OF STUDY: BIOTECHNOLOGY (C6028)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. ADV. CERT. CORE REQUIRED (13.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2426 - Biotechnology Methods and Applications 1 (3 credits)           | <input type="checkbox"/> BSC 2427L - Biotechnology Methods & Applications 2 Laboratory (2 credits) |
| <input type="checkbox"/> BSC 2426L - Biotechnology Methods & Applications 1 Laboratory (2 credits) | <input type="checkbox"/> BSC 2943L - Bioscience Internship (3.00 - 6.00 credits)                   |
| <input type="checkbox"/> BSC 2427 - Biotechnology Methods and Applications 2 (3 credits)           |  |

**2. ADV. CERT. PROG. REQUIREMENTS (20.00 credits)**

- |   |   |
|---|---|
| <input type="checkbox"/> BSC 2423C - Methods & Applications of Cell Culture & Protein Biotechnology (4 credits) | <input type="checkbox"/> ETI 1172 - Introduction to Quality Assurance (3 credits) |
| <input type="checkbox"/> CGS 1021 - Scientific Computing (4 credits)  | <input type="checkbox"/> MCB 2010 - Microbiology (3 credits)                      |
| <input type="checkbox"/> CHM 2200 - Survey of Organic Chemistry (3 credits)                                     | <input type="checkbox"/> MCB 2010L - Microbiology Laboratory (2 credits)          |
| <input type="checkbox"/> CHM 2200L - Survey of Organic Chemistry Laboratory (1 credits)                         | <input type="checkbox"/> PCB 2061 - Genetics (3 credits)                          |
| <input type="checkbox"/> ETI 1040 - Introduction to Bioscience Manufacturing (3 credits)                        |   |

\* End of Program Sheet \*

**PROGRAM OF STUDY: BIOTECHNOLOGY - BIOINFORMATICS (C6029)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. ADV. CERT. CORE REQUIRED (13.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2426 - Biotechnology Methods and Applications 1 (3 credits)           | <input type="checkbox"/> BSC 2427L - Biotechnology Methods & Applications 2 Laboratory (2 credits) |
| <input type="checkbox"/> BSC 2426L - Biotechnology Methods & Applications 1 Laboratory (2 credits) | <input type="checkbox"/> BSC 2943L - Bioscience Internship (3.00 - 6.00 credits)                   |
| <input type="checkbox"/> BSC 2427 - Biotechnology Methods and Applications 2 (3 credits)           |  |

**2. ADV. CERT. PROG. REQUIREMENTS (20.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> CGS 1021 - Scientific Computing (4 credits)                        | <input type="checkbox"/> COP 1334 - Introduction to C++ Programming (4 credits)  |
| <input type="checkbox"/> CGS 1145 - Introduction to Bioinformatics (4 credits)              | <input type="checkbox"/> COP 2700 - Database Application Programming (4 credits) |
| <input type="checkbox"/> CIS 1321 - Introduction to Systems Analysis and Design (4 credits) |  |

\* End of Program Sheet \*



**PROGRAM OF STUDY: BIOTECHNOLOGY - CHEMICAL TECHNOLOGY (C6030)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. ADV. CERT. CORE REQUIRED (13.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2426 - Biotechnology Methods and Applications 1 (3 credits)           | <input type="checkbox"/> BSC 2427L - Biotechnology Methods & Applications 2 Laboratory (2 credits) |
| <input type="checkbox"/> BSC 2426L - Biotechnology Methods & Applications 1 Laboratory (2 credits) | <input type="checkbox"/> BSC 2943L - Bioscience Internship (3.00 - 6.00 credits)                   |
| <input type="checkbox"/> BSC 2427 - Biotechnology Methods and Applications 2 (3 credits)           |  |

**2. ADV. CERT. PROG. REQUIREMENTS (20.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> CHM 1046 - General Chemistry and Qualitative Analysis (3 credits)    | <input type="checkbox"/> CHM 2124C - Survey of Quantitative Analysis (4 credits)     |
| <input type="checkbox"/> CHM 1046L - General Chemistry & Qualitative Analysis Lab (2 credits) | <input type="checkbox"/> CHS 2311C - Analytical Chemical Instrumentation (4 credits) |
| <input type="checkbox"/> CHM 2200 - Survey of Organic Chemistry (3 credits)                   | <input type="checkbox"/> ETI 1172 - Introduction to Quality Assurance (3 credits)    |
| <input type="checkbox"/> CHM 2200L - Survey of Organic Chemistry Laboratory (1 credits)       |  |

\* End of Program Sheet \*



## **Compensation and Benefits**

**CIP (0552020166)**

*Advanced Technical Certificate | Code: C6002 | 18 Credits*

**Effective Term:** Fall 2020 (2207)

### **Program Description:**

The Advanced Technical Certificate in Compensation and Benefits will prepare students to design and manage compensation and benefits systems to attract, motivate and retain various employee groups.

### **Major Course Requirements (18 credits)**

MAN3025	Organizational Management	3 cr.	Pre-Req: None
MAN3301	Human Resources Management	3 cr.	Pre-Req: None
MAN4330	Compensation Management	3 cr.	Pre-Req: MAN 3025 and MAN 3301
MAN4335	Employee Benefit Planning	3 cr.	Pre-Req: MAN 3025 and MAN 3301
MAN4361	Organizational Staffing	3 cr.	Pre-Req: MAN 3025 and MAN 3301
MAN4402	Employment Law and Regulation	3 cr.	Pre-Req: MAN 3025 and MAN 3301



## **Hospitality Management**

**(CIP 0252090166)**

Advanced Technical Certificate | Code: C6000 | 18 credits

**Effective Term:** Fall 2020 (2207)

The Advanced Technical Certificate (ATC) in Hospitality Management will assist new and experienced hospitality industry personnel upgrade their management skills to increase employment opportunities. This certificate focuses on enhancing the skills needed for restaurant management, bar and beverage management, hotel and lodging management, food service management, business supervision and management, accounting and revenue management, and hospitality industry policies and regulations.

### **Major Course Requirements (18 credits)**

HFT 3263	Restaurant Management	3 credits
HFT 3603	Hospitality Law	3 credits
HFT 4064	Bar and Beverage Management	3 credits
HFT 4253	Hotel Management	3 credits
HFT 4809	Food Service Management	3 credits
HFT 4468	Revenue Management in the Hospitality Industry	3 credits





## **Human Resources Management**

**(CIP 0552020166)**

*Advanced Technical Certificate | Code: C6001 | 24 credits*

**Effective Term:** Fall 2020 (2207)

### **Program Description**

The Advanced Technical Certificate (ATC) in Human Resources Management will assist new and experienced human resource professionals upgrade their knowledge and skills in order to increase their employment opportunities. The student will be able to plan, direct, and coordinate the recruiting, interviewing, hiring and retaining employees.

### **Major Course Requirements (24 credits)**

MAN3025	Organizational Management	3 cr.	
MAN3301	Human Resources Management	3 cr.	
MAN3322	Human Resources Information Systems	3 cr.	Pre-Req MAN 3025, MAN 3301
MAN4330	Compensation Management	3 cr.	Pre-Req MAN 3025, MAN 3301
MAN4335	Employee Benefit Planning	3 cr.	Pre-Req MAN 3025, MAN 3301
MAN4352	Effective Employee Training	3 cr.	Pre-Req MAN 3025, MAN 3301
MAN4361	Organizational Staffing	3 cr.	Pre-Req MAN 3025, MAN 3301
MAN4402	Employment Law and Regulation	3 cr.	Pre-Req MAN 3025, MAN 3301



### **Procurement Management**

**CIP (0652020967)**

Advanced Technical Certificate / Code: C6003 / 18 Credits

**Effective Term: Summer 2022 (2223)**

Supply chain management is an interdisciplinary field that emphasizes cross-functional integration of diverse business functions, facilities, and activities and seeks to manage those activities to enhance a company's competitive advantage. The Advanced Technical Certificate (ATC) in Procurement Management is designed to designed for current and pre-professionals interested in working in purchasing, project management, contracting, and supply chain management.

#### **Required Courses:**

MAN 3562	Purchasing, Inventory and Warehouse Management	3	
MAN 3577	Procurement for Major Projects	3	
MAN 3578	Global Procurement Management	3	
MAN 4570	Purchasing for Industry	3	
MAN 3506	Operations Management	3	Pre-Req: QMB 2100 or STA2023
QMB 2100	Basic Business Statistics		
<b>--OR--</b>			
STA 2023	Statistical Methods	3	Pre-Req: MAT 1033 or MGF 1106



## Project Management

CIP (0652020968)

*Advanced Technical Certificate | Code: C6004 | 18 Credits*

**Effective Term: Summer 2022 (2223)**

Supply chain management is an interdisciplinary field that emphasizes cross-functional integration of diverse business functions, facilities, and activities and seeks to manage those activities to enhance a company's competitive advantage. The *Advanced Technical Certificate* in Project Management will prepare students to plan, coordinate, and execute the supply chain-related projects within an organization. It emphasizes a systematic approach to planning, scheduling, control, design, evaluation, and leadership of projects in an organization.

### **Required Courses:**

MAN 3583	Project Management	3	
MAN 3731	Assessing and Managing Project Risk	3	
MAN 3888	Project Leadership	3	
MAN 4887	Project Planning and Control Systems for Supply Chain Management	3	
MAN 3506	Operations Management	3	Pre-Req QMB 2100 or STA2023
QMB2100	Basic Business Statistics		
<b>--OR--</b>			
STA 2023	Statistical Methods	3	Pre-Req MAT 1033 or MGF 1106

### **Supply Chain Analytics**

**CIP (0652020366)**

*Advanced Technical Certificate | Code: C6005 | 18 Credits*

**Effective Term: Summer 2022 (2223)**

Supply chain management is an interdisciplinary field that emphasizes cross-functional integration of diverse business functions, facilities, and activities and seeks to manage those activities to enhance a company's competitive advantage. The Advanced Technical Certificate in Supply Chain Analytics is designed to provide knowledge of the supply chain while exploring the risks, operations, logistics, economics, regulatory issues, change management, forecasting, resource allocation, production planning, inventory management, customer delivery, after-sales support and service and other functions basic to business.

#### **Required Courses:**

MAN 4523	Production Information Systems	3	
MAN 4719	Challenges in the Digital Supply Chain	3	Pre-Req: MAN 3506, (QMB 2100 or STA 2023)
MAN 4552	Supply Chain Analytics and Decision Making	3	
MAN 4732	Business Intelligence for Supply Chain	3	
MAN 3506	Operations Management	3	Pre-Req: QMB 2100 or STA 2023
QMB 2100	Basic Business Statistics		
<b>--OR--</b>			
STA 2023	Statistical Methods	3	Pre-Req: MAT 1033 or MGF 1106





## Accounting and Budgeting

College Credit Certificate | Code: 65075 | 18 credits

CIP (0552030203)

Effective Term: Fall 2019 (2207)

### Program Description:

The College Credit Certificate in Accounting and Budgeting will prepare students to compute, classify, and record numerical data to keep financial records complete. Students will also be prepared to check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.

### MAJOR COURSE REQUIREMENTS (18.00 Credits)

ACG 1403	Excel for Business	(1 credit)	
ACG 2021	Financial Accounting	(3 credits)	Co-Req: ACG 2021L
ACG 2021L	Financial Accounting Lab	(1 credits)	Co-Req: ACG 2021
ACG 2071	Managerial Accounting	(3 credits)	Pre-Req: ACG 2001 and 2011; or ACG 2021
			Co-Req: ACG 2071L
ACG 2071L	Managerial Accounting Lab	(1 credit)	Pre-Req: ACG 2021 and 2021L
			Co-Req: ACG 2071
ACG 2450	Microcomputers in Accounting	(3 credits)	Pre/Co-Req: ACG 2001 or 2021
TAX 2000	Income Tax	(3 credits)	
TAX 2021	Taxation of Business Organizations	(3 credits)	

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: ACCOUNTING TECHNOLOGY MANAGEMENT (65077)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

## I. GENERAL EDUCATION REQUIREMENTS

### 1. MAJOR COURSE REQUIREMENTS (26.00 credits)

Must take 3.0 credits from the following group.

☐ ACG 2011 - Principles of Accounting 2 (3 credits)

☐ ACG 2021 - Financial Accounting (3 credits)

- - And - -

Must take 1.0 credits from the following group.

☐ ACG 2011L - Principles of Accounting 2 Lab (1 credits)

☐ ACG 2021L - Financial Accounting Lab (1 credits)

- - And - -

Must take 22.0 credits from the following group.

☐ ACG 2071 - Managerial Accounting (3 credits)

☐ MTB 1103 - Business Mathematics (3 credits)

☐ ACG 2071L - Managerial Accounting Lab (1 credits)

☐ OST 2335 - Business Writing (3 credits)

☐ ACG 2450 - Microcomputers in Accounting (1.00 - 3.00 credits)

☐ TAX 2000 - Income Tax (3 credits)

☐ GEB 1011 - Principles of Business (3 credits)

☐ TAX 2010 - Business Taxes & Returns (3 credits)

### 2. MAJOR COURSE ELECTIVES (1.00 credits)

☐ ACG\*

☐ MAR\*

☐ BAN\*

☐ MKA\*

☐ BRC\*

☐ MNA\*

☐ BUL\*

☐ MTB\*

☐ CGS\*

☐ OST\*

☐ CTS\*

☐ PUR\*

☐ ECO\*

☐ QMB\*

☐ FIN\*

☐ REE\*

☐ GEB\*

☐ SBM\*

☐ MAC\*

☐ TAX\*

☐ MAN\*

### 3. COMPUTER COMPETENCY

Test type(s) needed:

☐ CGS 1060

\* End of Program Sheet \*



## **Addiction Studies**

*College Credit Certificate | Code: 65078 | 24 credits*

### **Program Description**

The Human Services program with a specialization in Addiction Studies is designed to prepare students for employment as human services specialists, human services practitioners, chemical dependency practitioners, addiction specialists, mental health and social service practitioners, or to provide supplemental training for persons previously or currently employed in these occupations. The program is also designed to provide most of the general academic and addiction specific requirements of the Certification Board for Addiction Professionals of Florida.

### **MAJOR CORE REQUIREMENTS - 18.00 Credits Required**

- HUS 1302 - Basic Counseling Skills (3 credits)
- HUS 1421 - Assessment and Treatment Planning in Addictions (3 credits)
- HUS 1423 - Group Counseling in Substance Abuse (3 credits)
- HUS 1428 - Addiction Treatment Delivery Systems (3 credits)
- HUS 1440 - Family Issues in Chemical Dependency (3 credits)
- HUS 1475 - Addiction Counseling and the law (3 credits)
- HUS 2303 - Counseling Techniques (3 credits)
- PSB 2442 – The Psychology of Addictions (3 Credits)

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: AIR CARGO MANAGEMENT (66030)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. SCIENCE** (16.00 credits)

- ☐ AVM 1010 - Aviation Industry Operation (3 credits)
- ☐ AVM 1022 - Flight Operations (3 credits)
- ☐ AVM 1062 - Aviation Career Planning (1 credits)

- ☐ AVM 1121 - Hazardous Materials/Dangerous Goods (3 credits)
- ☐ AVM 2120 - Air Cargo (3 credits)
- ☐ AVM 2431 - Customer Service Agent (3 credits)

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: AIRLINE/AVIATION MANAGEMENT (63012)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (16.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> ASC 2320 - Aviation Laws and Regulations (3 credits) | <input type="checkbox"/> AVM 1062 - Aviation Career Planning (1 credits) |
| <input type="checkbox"/> AVM 1010 - Aviation Industry Operation (3 credits)   | <input type="checkbox"/> AVM 2510 - Airline Management (3 credits)       |
| <input type="checkbox"/> AVM 1022 - Flight Operations (3 credits)             | <input type="checkbox"/> AVM 2515 - Airline Marketing (3 credits)        |

\* End of Program Sheet \*



## **Airline Maintenance Procedures and Records Management**

*College Credit Certificate | Code: 63018 | 18 credits*

**CIP 0649010411**

Effective Term: Fall 2019 (2197)

The College Credit Certificate (CCC) in Airline Maintenance Procedures and Records Management will fill a growing need to train personnel in how to organize, review and classify aircraft records to comply with FAA regulations, as well as successfully manage records at aircraft manufacturers, airlines and maintenance repair operators. Students will receive a wide-range of classroom and hands-on training that will provide the student with the education and knowledge to successfully manage the aircraft records department in an aviation company.

### **MAJOR COURSE REQUIREMENTS (18 Credits Required)**

ASC 1610	Aircraft Engines/Structures	3
AVM 1160	Aviation Maintenance Programs and Inspections	3
AVM 1161	Aircraft Performance Measures and Maintenance Requirements	3
AVM 1162	Maintenance Repair and Overhaul (MRO) Interactions with Commercial Airline Operations	3
AVM 1163	Policies and Procedures for Commercial Airlines Maintenance Programs	3
AVM 1964	Logistics and Maintenance Programs for Commercial Airlines	3

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: AIRPORT MANAGEMENT (63017)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (16.00 credits)**

- |   |   |
|---|---|
| <input type="checkbox"/> ASC 2320 - Aviation Laws and Regulations (3 credits) | <input type="checkbox"/> AVM 1440 - Aviation/Airport Security (3 credits)             |
| <input type="checkbox"/> AVM 1010 - Aviation Industry Operation (3 credits)   | <input type="checkbox"/> AVM 2410 - Principles of Airport Management (3 credits)      |
| <input type="checkbox"/> AVM 1062 - Aviation Career Planning (1 credits)      | <input type="checkbox"/> AVM 2450 - Airport Facilities/Financial Planning (3 credits) |

\* End of Program Sheet \*

**Audio Technology****CIP (0650060209)***College Credit Certificate | Code: 61000 | 15 credits***Program Description:**

The Audio Technology College Credit Certificate (CCC) is designed for students who intend to seek employment within the music business industry as an alternative to the strictly traditional Music degree program. The Audio Technology college credit certificate combines a traditional music curriculum with industry-related courses and experiences. The curriculum stresses hands-on equipment use in sound engineering and recording, midi music creation, sound reinforcement methods and technologies, and computer applications.

**MAJOR COURSE REQUIREMENTS (15.00 credits)**

MUM1662	Sound Recording Fundamentals	3 credits
MUM1662L	Sound Recording Fundamentals Lab	1 credit
MUM2600	Sound Recording 1	3 credits
MUM2600L	Sound Recording 1 Lab	1 credit
MUM2601	Sound Recording 2	3 credits
MUM2601L	Sound Recording Lab	1 credit
MUM2623C	MIDI Electronic Music	3 credits



**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: AUTOMATION (68000)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSES FIRST SEMESTER (15.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> ETI 1040 - Introduction to Bioscience Manufacturing (3 credits) | <input type="checkbox"/> ETM 1315C - Applied Pneumatics and Hydraulics (3 credits) |
| <input type="checkbox"/> ETI 1701 - Industrial Safety (3 credits)                        | <input type="checkbox"/> MAC 1105 - College Algebra (3 credits)                    |
| <input type="checkbox"/> ETI 2404 - Advanced Manufacturing Technology (3 credits)        |  |

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: BANKING MANAGEMENT - FINANCIAL SERVICES (65045)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (27.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> BAN 1004 - Principles of Banking (3 credits)                | <input type="checkbox"/> BAN 2501 - Money and Banking (3 credits)     |
| <input type="checkbox"/> BAN 1231 - Introduction to Commercial Lending (3 credits)   | <input type="checkbox"/> BAN 2511 - Marketing for Bankers (3 credits) |
| <input type="checkbox"/> BAN 1800 - Law and Banking (3 credits)                      | <input type="checkbox"/> OST 2335 - Business Writing (3 credits)      |
| <input type="checkbox"/> BAN 2211 - Applied Financial Statement Analysis (3 credits) | <input type="checkbox"/> REE 2200 - Real Estate Finance (3 credits)   |
| <input type="checkbox"/> BAN 2253 - Residential Mortgage Lending (3 credits)         |   |

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: BANKING OPERATIONS - FINANCIAL SERVICES (65044)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (18.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> BAN 1004 - Principles of Banking (3 credits)              | <input type="checkbox"/> BAN 2211 - Applied Financial Statement Analysis (3 credits) |
| <input type="checkbox"/> BAN 1231 - Introduction to Commercial Lending (3 credits) | <input type="checkbox"/> BAN 2511 - Marketing for Bankers (3 credits)                |
| <input type="checkbox"/> BAN 1800 - Law and Banking (3 credits)                    | <input type="checkbox"/> OST 2335 - Business Writing (3 credits)                     |

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: BANKING SPECIALIST - FINANCIAL SERVICES (65043)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (12.00 credits)**

- ☐ BAN 1004 - Principles of Banking (3 credits)
- ☐ BAN 1800 - Law and Banking (3 credits)

- ☐ BAN 2511 - Marketing for Bankers (3 credits)
- ☐ OST 2335 - Business Writing (3 credits)

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: BIOTECHNOLOGY (60002)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSES FIRST SEMESTER (19.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2426 - Biotechnology Methods and Applications 1 (3 credits)           | <input type="checkbox"/> ETI 1040 - Introduction to Bioscience Manufacturing (3 credits) |
| <input type="checkbox"/> BSC 2426L - Biotechnology Methods & Applications 1 Laboratory (2 credits) | <input type="checkbox"/> ETI 1172 - Introduction to Quality Assurance (3 credits)        |
| <input type="checkbox"/> CHM 1045 - General Chemistry and Qualitative Analysis (3 credits)         | <input type="checkbox"/> MAC 1105 - College Algebra (3 credits)                          |
| <input type="checkbox"/> CHM 1045L - General Chemistry and Qualitative Analysis Lab (2 credits)    |  |

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: BUILDING CONSTRUCTION SPECIALIST - CCC (66025)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (18.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> ARC 1126C - Architectural Drawing 1 (4 credits)                     | <input type="checkbox"/> BCN 1275 - Building Construction Plans Interpretation 2 (3 credits)  |
| <input type="checkbox"/> ARC 1949 - Co-op Work Experience 1: ARC (3 credits)                 | <input type="checkbox"/> BCT 1770 - Building Construction Estimating Fundamentals (3 credits) |
| <input type="checkbox"/> BCN 1272 - Building Construction Plans Interpretation 1 (3 credits) | <input type="checkbox"/> BCT 1771 - Building Construction Advanced Estimating (3 credits)     |

\* End of Program Sheet \*



## **Business Entrepreneurship Operations – Family-Owned Business**

**CIP (0552070309)**

*College Credit Certificate | Code: 65109 | 18 credits*

Effective Term: Spring 2021 (2213)

The Business Entrepreneurship Operations College Credit Certificate is designed to prepare students for employment in entry-level positions or opening their own business or venture in the following areas: Family-Owned Business, Start-Up Venture, and Social Venture. Students may select one of the 3 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (18 Credits Required)**

GEB 2112	Introduction to Entrepreneurship	3 credits
ENT 2270	Family Business Management	3 credits
MAR 1720	Marketing in a Digital World	3 credits
ACG 2450	Microcomputers in Accounting	3 credits
or		
TAX 2021	Taxation of Business Organizations	3 credits
ENT 2212	Entrepreneurial Leadership	3 credits
BUL 2241	Business Law I	3 credits

**Note: All courses must be met with a grade of “C” or higher.**



## **Business Entrepreneurship Operations – Social Venture**

**CIP (0552070309)**

*College Credit Certificate | Code: 65111 | 18 credits*

Effective Term: Spring 2021 (2213)

The Business Entrepreneurship Operations College Credit Certificate is designed to prepare students for employment in entry-level positions or opening their own business or venture in the following areas: Family-Owned Business, Start-Up Venture, and Social Venture. Students may select one of the 3 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (18 Credits Required)**

ENT 1501	Fundamentals of Changemaking and Social Innovation	3 credits
ENT 2201	Introduction to Lean Start-Up	3 credits
ENT 2502	Starting and Growing a Social Venture	3 credits
ENT 2511	Evaluating Social Impact	3 credits
MAR 1720	Marketing in a Digital World	3 credits
ENT 2421	Funding Your Venture	3 credits

**Note: All courses must be met with a grade of “C” or higher.**





## **Business Entrepreneurship Operations – Start-Up Venture**

**CIP (0552070309)**

*College Credit Certificate | Code: 65110 | 18 credits*

Effective Term: Spring 2021 (2213)

The Business Entrepreneurship Operations College Credit Certificate is designed to prepare students for employment in entry-level positions or opening their own business or venture in the following areas: Family-Owned Business, Start-Up Venture, and Social Venture. Students may select one of the 3 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (18 Credits Required)**

GEB 2112	Introduction to Entrepreneurship	3 credits
ENT 2201	Introduction to Lean Start-Up	3 credits
MAR 1720	Marketing in a Digital World	3 credits
ENT 2421	Funding Your Venture	3 credits
MAR 2704	Marketing Web Analytics	3 credits
ACG 2450	Microcomputers in Accounting	3 credits
or		
TAX 2021	Taxation of Business Organizations	3 credits

**Note: All courses must be met with a grade of “C” or higher.**



## **Business Entrepreneurship Specialist – Family-Owned Business**

*College Credit Certificate | Code: 65098 | 12 credits*

**CIP** (0552070308)

Effective Term: Spring 2020 (2203)

The Business Entrepreneurship Specialist College Credit Certificate is designed to prepare students for employment in entry-level positions or opening their own business or venture in the following areas: Family-Owned Business, Start-Up Venture, and Social Venture. Students may select one of the 3 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (12 Credits Required)**

GEB 2112	Introduction to Entrepreneurship	3 credits
ENT 2270	Family Business Management	3 credits
MAR 1720	Marketing in a Digital World	3 credits
ACG 2450	Microcomputers in Accounting	3 credits
or		
TAX 2021	Taxation of Business Organizations	3 credits

**Note: All courses must be met with a grade of “C” or higher.**



## **Business Entrepreneurship Specialist – Social Venture**

*College Credit Certificate | Code: 65097 | 12 credits*

**CIP** (0552070308)

Effective Term: Spring 2020 (2203)

The Business Entrepreneurship Specialist College Credit Certificate is designed to prepare students for employment in entry-level positions or opening their own business or venture in the following areas: Family-Owned Business, Start-Up Venture, and Social Venture. Students may select one of the 3 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (12 Credits Required)**

ENT 1501	Fundamentals of Changemaking and Social Innovation	3 credits
ENT 2201	Introduction to Lean Start-Up	3 credits
ENT 2502	Starting and Growing a Social Venture	3 credits
ENT 2511	Evaluating Social Impact	3 credits

**Note:** All courses must be met with a grade of “C” or higher.



## **Business Entrepreneurship Specialist – Start-Up Venture**

*College Credit Certificate | Code: 65101 | 12 credits*

**CIP** (0552070308)

Effective Term: Spring 2020 (2203)

The Business Entrepreneurship Specialist College Credit Certificate is designed to prepare students for employment in entry-level positions or opening their own business or venture in the following areas: Family-Owned Business, Start-Up Venture, and Social Venture. Students may select one of the 3 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (12 Credits Required)**

GEB 2112	Introduction to Entrepreneurship	3 credits
ENT 2201	Introduction to Lean Start-Up	3 credits
MAR 1720	Marketing in a Digital World	3 credits
ENT 2421	Funding Your Venture	3 credits

**Note:** All courses must be met with a grade of “C” or higher.



### **Business Industry Operations**

*College Credit Certificate | Code: 65061 | 9 credits*

**CIP** (0652020502)

**Effective Term: Fall 2022 (2227)**

The 9-credit-hour certificate program in Business Industry Operations, includes a series of courses that offer students the technical knowledge and skills needed to prepare for further education and careers in a variety of industries aligned to a student's pathway.

### **MAJOR COURSE REQUIREMENTS (9 Credits Required)**

#### ***Group A – Foundation Courses (6 credits required)***

ENC 1101	English Composition I	3 credits	Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
GEB 1011	Principles of Business	3 credits	

#### ***Group B – Industry Course (3 credits required)***

ACG 1403	Excel for Business	3 credits
CAP 1788	Introduction to Data Analytics	4 credits
ECO 2013	Principles of Economics (Macro)	3 credits
EEC 2002	Operation of an Early Childhood Facility	3 credits
FSE 1000	History of Funeral Service	3 credits
FSE 2202	Funeral Service Business Management	3 credits
GEB 1000	Business Career Strategies	3 credits
GEB 2112	Introduction to Entrepreneurship	3 credits
HFT 1000	Introduction to Hospitality	3 credits
HLP 1081	Fitness and Wellness for Life	3 credits
HOS 1010	Horticulture 1	3 credits
HUN 1201	Essentials of Human Nutrition	3 credits
MAN 2021	Principles of Management	3 credits
MAN 2300	Principles of Management	3 credits
MAR 1011	Principles of Marketing	3 credits
TAX 2000	Income Tax	3 credits
TRA 1154	Introduction to Supply Chain	3 credits

**Note: All courses must be met with a grade of “C” or higher.**



### **Business Intelligence Professional**

*College Credit Certificate | Code: 66038 | 20 credits*

The Business Intelligence Professional College Credit Certificate prepares students for employment manipulating and analyzing massive amounts of data and turning it into useful information and reports. Students are prepared for employment, or continued studies in lower and upper division programs.

#### **PROGRAM REQUIREMENTS (20.00 credits)**

CGS 1540C	Database Concepts Design	(4 credits)
CTS 1437	Microsoft SQL Administration	(4 credits)
CTS 2433	Microsoft SQL Implementation	(4 credits)
CTS 2450	Business Intelligence – Analysis & Data Mining	(4 credits)
CTS 2451	Business Intelligence — Data Integration & Reporting	(4 credits)



## **Business Operations - Business Management**

*College Credit Certificate | Code: 65022 | 18 credits*

*CIP (0552020104)*

The Business Operations College Credit Certificate program is the second in a series of three College Credit Certificate programs designed to prepare students for employment and advancement in the following areas: accounting/budgeting, business/ management, customer service, finance, human resources, international business, marketing, nonprofit, real estate, retail and small business. There is only one College Credit Certificate in Business Operations. Students may select one of the 7 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (18.00 credits)**

GEB 1011	Principles of Business	(3 credits)
MAN 2021	Principles of Management	(3 credits)
MAN 2604	Managing in a Multi-Cultural Environment	(3 credits)
MAR 1011	Principles of Marketing	(3 credits)
MNA 1345	Effective Supervision	(3 credits)
SBM 1000	Small Business Management	(3 credits)



## **Business Operations - Human Resources**

*College Credit Certificate | Code: 65025 | 18 credits*

**CIP (0552020104)**

The Business Operations College Credit Certificate program is the second in a series of three College Credit Certificate programs designed to prepare students for employment and advancement in the following areas: accounting/budgeting, business/ management, customer service, finance, human resources, international business, marketing, nonprofit, real estate, retail and small business. There is only one College Credit Certificate in Business Operations. Students may select one of the 7 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (18.00 credits)**

GEB 1011	Principles of Business	(3 credits)
MAN 2021	Principles of Management	(3 credits)
MAN 2300	Human Resources Management	(3 credits)
MNA 1345	Effective Supervision	(3 credits)
MNA 2120	Human Relations in Business	(3 credits)
MAR 2101	Social Media Marketing	(3 credits)





## **Business Operations - Marketing**

*College Credit Certificate | Code: 65027 | 18 credits*

**CIP (0552020104)**

The Business Operations College Credit Certificate program is the second in a series of three College Credit Certificate programs designed to prepare students for employment and advancement in the following areas: accounting/budgeting, business/ management, customer service, finance, human resources, international business, marketing, nonprofit, real estate, retail and small business. There is only one College Credit Certificate in Business Operations. Students may select one of the 7 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (18.00 credits)**

MAR 1011	Principles of Marketing	(3 credits)
MAR 1720	Marketing in a Digital World	(3 credits)
MAR 2101	Social Media Marketing	(3 credits)
MAR 2150	International Marketing	(3 credits)
MAR 2520	Hispanic Marketing	(3 credits)
MKA 1511	Principles of Advertising and Copywriting	(3 credits)



## **Business Operations - Small Business**

*College Credit Certificate | Code: 65031 | 18 credits*

**CIP (0552020104)**

The Business Operations College Credit Certificate program is the second in a series of three College Credit Certificate programs designed to prepare students for employment and advancement in the following areas: accounting/budgeting, business/ management, customer service, finance, human resources, international business, marketing, nonprofit, real estate, retail and small business. There is only one College Credit Certificate in Business Operations. Students may select one of the 7 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (18.00 credits)**

BUL 2241	Business Law 1	(3 credits)
GEB 1011	Principles of Business	(3 credits)
GEB 2112	Introduction to Entrepreneurship	(3 credits)
MAN 2021	Principles of Management	(3 credits)
MAR 1011	Principles of Marketing	(3 credits)
SBM 1000	Small Business Management	(3 credits)



## **Business Specialist - Business Management**

*College Credit Certificate | Code: 65011 | 12 credits*

**CIP** (0552020103)

The Business Specialist College Credit Certificate program is the first in a series of three College Credit Certificate programs designed to prepare students for employment in entry-level positions in the following areas: accounting/budgeting, business management, finance, human resources, international business, marketing, small business. There is only one College Credit Certificate in Business Specialist. Students may select one of the 7 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (12.00 credits)**

GEB 1011	Principles of Business	(3 credits)
MAN 2021	Principles of Management	(3 credits)
MAR 1011	Principles of Marketing	(3 credits)
SBM 1000	Small Business Management	(3 credits)



## **Business Specialist – General Business**

*College Credit Certificate | Code: 65100 | 12 credits*

Effective Term: Fall 2018 (2187)

**CIP** (0552020103)

The Business Specialist College Credit Certificate is the first in a series of three College Credit Certificate programs designed to prepare students for employment in entry-level positions in the following areas: accounting/budgeting, business management, finance, general business, human resources, international business, marketing, and small business. Students may select one of the 7 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (12 Credits Required)**

#### ***Group A – Foundation Courses (6 credits required)***

ENC 1101      English Composition I      3 credits

GEB 1011      Principles of Business      3 credits

#### ***Group B – Business Course (3 credits required)***

ACG\*      FIN1\*      MAN1\*      MAR1011      PUR\*      TAX\*

BUL\*      FIN2\*      MAN2\*      MAR2150      QMB\*

ECO\*      GEB\*      MAR\*      OST\*      SBM\*

#### ***Group C – Career Area of Interest Course (3 credits required)***

Any transferrable Credit Type 1 or Credit Type 2 course.

**Note:** All courses must be met with a grade of “C” or higher.

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: BUSINESS SPECIALIST - HUMAN RESOURCES (65014)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (12.00 credits)**

- ☐ MAN 2021 - Principles of Management (3 credits)
- ☐ MAN 2300 - Human Resources Management (3 credits)

- ☐ MNA 1345 - Effective Supervision (3 credits)
- ☐ MNA 2120 - Human Relations in Business (3 credits)

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: BUSINESS SPECIALIST - INTERNATIONAL BUSINESS (65015)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (12.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> GEB 1011 - Principles of Business (3 credits)                 | <input type="checkbox"/> MAN 2604 - Managing in a Multi-Cultural Environment (3 cred |
| <input type="checkbox"/> GEB 2350 - Introduction to International Business (3 credits) | <input type="checkbox"/> MAR 2150 - International Marketing (3 credits)              |

\* End of Program Sheet \*



### **Business Specialist - Marketing**

*College Credit Certificate | Code: 65016 | 12 credits*

**CIP** (0552020103)

The Business Specialist College Credit Certificate program is the first in a series of three College Credit Certificate programs designed to prepare students for employment in entry-level positions in the following areas: accounting/budgeting, business management, finance, human resources, international business, marketing, small business. There is only one College Credit Certificate in Business Specialist. Students may select one of the 7 options, but the certificate is awarded only once.

#### **MAJOR COURSE REQUIREMENTS (12.00 credits)**

MAR 1011	Principles of Marketing	(3 credits)
MAR 1720	Marketing in a Digital World	(3 credits)
MAR 2101	Social Media Marketing	(3 credits)
MKA 1511	Principles of Advertising and Copywriting	(3 credits)



### **Business Specialist - Small Business**

*College Credit Certificate | Code: 65020 | 12 credits*

**CIP (0552020103)**

The Business Specialist College Credit Certificate program is the first in a series of three College Credit Certificate programs designed to prepare students for employment in entry-level positions in the following areas: accounting/budgeting, business management, finance, human resources, international business, marketing, small business. There is only one College Credit Certificate in Business Specialist. Students may select one of the 7 options, but the certificate is awarded only once.

#### **MAJOR COURSE REQUIREMENTS (12.00 credits)**

GEB 1011	Principles of Business	(3 credits)
GEB 2112	Introduction to Entrepreneurship	(3 credits)
MAN 2021	Principles of Management	(3 credits)
SBM 1000	Small Business Management	(3 credits)





### **Business Specialist - General Business**

College Credit Certificate | Code: 65100 | 12 credits

CIP (0552020103)

Effective Term: Fall 2022 (2227)

The Business Specialist College Credit Certificate is the first in a series of three College Credit Certificate programs designed to prepare students for employment in entry-level positions in the following areas: accounting/budgeting, business management, finance, general business, human resources, international business, marketing, and small business. Students may select one of the 8 options, but the certificate is awarded only once.

### **MAJOR COURSE REQUIREMENTS (12 Credits Required)**

#### ***Group A – Foundation Courses (6 credits required)***

ENC 1101	English Composition I	3 credits	Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
GEB 1011	Principles of Business	3 credits	

#### ***Group B – Business Course (3 credits required)***

ECO 2013	Principles of Macroeconomics	3 credits
----------	------------------------------	-----------

#### ***Group C – Career Area of Interest Course (3 credits required)***

FIN 2051	International Financial Management	3 credits
GEB 2112	Introduction to Entrepreneurship	3 credits
GEB 2350	Introduction to International Business	3 credits
MAN 2021	Principles of Management	3 credits
MAN 2300	Human Resource Management	3 credits
MAN 2604	Managing in a Multi-Cultural Environment	3 credits
MAR 1011	Principles of Marketing	3 credits
MAR 1720	Marketing in a Digital World	3 credits
MAR 2101	Social Media Marketing	3 credits
MAR 2150	International Marketing	3 credits
MAR 2520	Hispanic Marketing	3 credits
MKA 1511	Principles of Advertising and Copywriting	3 credits
MNA 1345	Effective Supervision	3 credits
MNA 2120	Human Relations in Business	3 credits
SBM 1000	Small Business Management	3 credits

**Note: All courses must be met with a grade of “C” or higher.**

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: CHEF'S APPRENTICE (65059)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (12.00 credits)**

- ☐ FSS 1200 - Culinary Terminology and Procedures (3 credits)  
☐ FSS 1202L - Food Production 1 (3 credits)

- ☐ FSS 1204L - Food Production 2 (3 credits)  
☐ FSS 2248C - Garde Manger (3 credits)

\* End of Program Sheet \*

**Cisco Certified Network Associate (CCNA)****CIP (0511100114)**

College Credit Certificate | Code: 66050 | 16 credits

Effective Term: Spring 2021 (2213)

**Program Description:**

The Cisco Network Associate College Credit Certificate program is designed to provide an opportunity to establish a foundation in the field of Cisco network design and implementation, leading to certification as a Cisco Certified Network Associate (CCNA).

**MAJOR COURSE REQUIREMENTS**

Course ID	Course Title	Credits	Pre/Co-Requisites
CTS 1134	Networking Technologies	4	
CTS 1650	CCNA 1: Cisco Fundamentals	4	
CTS 1651	CCNA 2: Routing and Switching	4	CTS 1650
CTS 2652	CCNA 3: Advanced Routing and Switching	4	CTS 1651



## Commercial Transport Pilot

College Credit Certificate | Code: 68012 | 24 credits

CIP 0649010202

The College Credit Certificate (CCC) in Commercial Transport Pilot indicates the student has successfully passed the Federal Aviation Administration (FAA) exams to earn the Commercial Pilot Certificate and act as pilot-in-command for compensation or hire, as well as carry persons or property for compensation or hire, as outlined in Federal Aviation Regulations (FARs) Part 61.133.

Course	Course Title	Credits	Corequisites/Prerequisites
<b><u>MAJOR COURSE REQUIREMENTS</u></b>			
ASC 1210	Aviation Meteorology	3	
ATF1100L	Private Pilot Flight Accelerated *	3	ATT1100
ATT1100	Private Pilot Theory	3	ASC1210
ATT2120	Instrument Pilot Theory	4	PPL
ATF2305L	Instrument Pilot Flight Accelerated	3	FAA Private Pilot Certificate; ATT2120
ATT2110	Commercial Pilot Theory	3	ASC1210; ATF1100; ATT 1100; PPL
ATF2210L	Commercial Pilot Flight Accelerated	3	Instrument Rating
ATT2133	Multi Engine Pilot Theory	2	

*\*This course is not eligible for Veteran's Affairs Benefits.*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: COMPUTER AIDED DESIGN ASSISTANT (66070)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (14.00 credits)**

- ☐ ARC 1115 - Architectural Communications 1 (2 credits)
- ☐ ARC 1126

- ☐ ARC 2171 - Computer Aided Drafting 1 (4 credits)
- ☐ ARC 2172 - Computer Aided Drafting 2 (4 credits)

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: COMPUTER AIDED DESIGN OPERATOR (66071)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (22.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> ARC 1115 - Architectural Communications 1 (2 credits)            | <input type="checkbox"/> ARC 2171 - Computer Aided Drafting 1 (4 credits)              |
| <input type="checkbox"/> ARC 1126   | <input type="checkbox"/> ARC 2172 - Computer Aided Drafting 2 (4 credits)              |
| <input type="checkbox"/> ARC 2056 - Computer Aided Architectural Presentation (4 credits) | <input type="checkbox"/> ARC 2461 - Architectural Materials and Construction 1 (4 cred |

\* End of Program Sheet \*



## **COMPUTER PROGRAMMER - BUSINESS APPLICATIONS**

**(CIP 0511020200)**

*College Credit Certificate | Code: 66045 | 36 credits*

Effective Term: Fall 2020 (2207)

The College Credit Certificate program in Computer Programmer - Business Applications is designed to provide an opportunity to establish a basic foundation in computer programming for employment in scientific, commercial, industrial and government data processing applications. Graduates are prepared for positions as entry-level programmers, programmer specialists, and software developers for both applications and systems software.

### **MAJOR COURSE REQUIREMENTS – 16 Credit Hours**

CGS 1060C - Introduction to Computer Technology & Applications	(4 credits)
CGS 1540C - Database Concepts and Design	(4 credits)
COP 1334 - Introduction to C++ Programming	(4 credits)
COP 2800 - Java Programming	(4 credits)

### **PROGRAM CONCENTRATION CORE – 8 Credit Hours**

ACG 2021 - Financial Accounting	(3 credits)
ACG 2021L - Financial Accounting Lab	(1 credit)
COP 1332 - Introduction to Visual Basic Programming	(4 credits)

### **PROGRAM ELECTIVES – 12 Credit Hours**

*Choose 12 credits from the following options:*

CGS 2091 - Professional Ethics and Social Issues in CS	(4 credits)
CIS 2331 - Systems Analysis, Design & Implementation	(5 credits)
COP 1047C - Python Programming	(4 credits)
COP 2333 - Advanced Programming Concepts using Visual Basic	(4 credits)
COP 2335 - Object Oriented Programming using C++	(4 credits)
COP 2805 - Advanced Java Programming	(4 credits)
COP 2842 - Developing Websites using PHP/MYSQL	(4 credits)
CTS 1800 - Introduction to Web Development	(4 credits)

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: COMPUTER PROGRAMMER - MOBILE APPLICATIONS DEVELOPMENT**  
**(66036)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. PROGRAM REQUIREMENTS (16.00 credits)**

- ☐ CGS 1060
- ☐ CGS 1540

- ☐ COP 1334 - Introduction to C++ Programming (4 credits)
- ☐ COP 2800 - Java Programming (4 credits)

**2. MAJOR COURSE REQUIREMENTS (16.00 credits)**

- ☐ COP 2660 - Android Application Development 1 (4 credits)
- ☐ COP 2662 - Android Application Development 2 (4 credits)

- ☐ COP 2654 - iPhone Application Development 1 (4 credits)
- ☐ COP 2658 - iPhone Application Development 2 (4 credits)

**3. MAJOR COURSE ELECTIVES (4.00 credits)**

- ☐ CGS 2091 - Professional Ethics and Social Issues in CS (4 credits)
- ☐ COP 2335 - Object Oriented Programming using C++ (4 credits)
- ☐ COP 2805

\* End of Program Sheet \*



**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: COMPUTER SPECIALIST (66033)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (27.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> EET 1015C - Direct Current Circuits (4 credits)                         | <input type="checkbox"/> CET 1487C - Network+ (3 credits)                         |
| <input type="checkbox"/> EET 1082 - Introduction to Electronics (3 credits)                      | <input type="checkbox"/> CET 1110C - Digital Circuits (4 credits)                 |
| <input type="checkbox"/> CET 1171 - Introduction to Computer Service and Maintenance (3 credits) | <input type="checkbox"/> CET 2123C - Microprocessors (4 credits)                  |
| <input type="checkbox"/> CET 1178C - A+ Computer Hardware Service (3 credits)                    | <input type="checkbox"/> CET 2588C - Server + Service and Maintenance (3 credits) |

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: CRIME SCENE TECHNICIAN (66072)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (9.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> SPC 1017 - Fundamentals of Speech Communication (3 credits) | <input type="checkbox"/> BSC 1084 - Functional Human Anatomy (3 credits) |
| <input type="checkbox"/> CLP 1006 - Psychology of Personal Effectiveness (3 credits) |  |

The following course(s) are not allowed for credit in this area.  
All Labs

**2. PROGRAM CORE REQUIRED (19.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> CCJ 1020 - Introduction to Criminal Justice (3 credits)   | <input type="checkbox"/> CJE 1640 - Crime Scene Technology 1 (3 credits) |
| <input type="checkbox"/> CCJ 1191 - Human Behavior in Criminal Justice (3 credits) | <input type="checkbox"/> CJE 2600 - Criminal Investigation (3 credits)   |
| <input type="checkbox"/> CHS 1522C - Forensic Science 1 (4 credits)                | <input type="checkbox"/> CJE 2671 - Basic Fingerprinting (3 credits)     |

The following course(s) are not allowed for credit in this area.  
All Labs

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: CULINARY ARTS MANAGEMENT OPERATIONS (65060)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (18.00 credits)**

- |   |   |
|---|---|
| <input type="checkbox"/> FSS 1200 - Culinary Terminology and Procedures (3 credits) | <input type="checkbox"/> FSS 1246C - Basic Baking (3 credits)           |
| <input type="checkbox"/> FSS 1202L - Food Production 1 (3 credits)                  | <input type="checkbox"/> FSS 2242C - International Cuisines (3 credits) |
| <input type="checkbox"/> FSS 1204L - Food Production 2 (3 credits)                  | <input type="checkbox"/> FSS 2248C - Garde Manger (3 credits)           |

\* End of Program Sheet \*



## Digital Forensics

CIP (0511100119)

College Credit Certificate | Code: 66055 | 24 Credits

### Program Description:

The College Credit Certificate (CCC) in Digital Forensics will prepare graduates with the education and skills needed to fulfill roles and positions in the Information Security industry. The coursework will include education and applied technical skills in the criminal justice and information security fields.

### **MAJOR COURSE REQUIREMENTS (24 credits)**

CGS 1700	Introduction to Operating Systems	(4 credits)
CTS 1134	Networking Technologies	(4 credits)
CTS 1120	Cybersecurity Fundamentals	(4 credits)
CET 2880C	Digital Forensics	(4 credits)
CJE 1680	Introduction to Computer Crimes	(3 credits)
CJL 2062	Constitutional Law & Legal Procedure	(3 credits)
CIS 2900	Directed Information Technology Study	(2 credits)
<b>---Or---</b>		
CIS 1949	Co-Op Work Experience	(2 credits)

**Digital Marketing Specialist (CCC)**

*College Credit Certificate | Code: 65096 | 12 credits*

***Effective Term: Spring 2020 (2203)***

**Program Description:**

The Digital Marketing Specialist Certificate is designed to prepare students to build and execute a digital marketing plan using digital tools to design, distribute, promote, and price a product or service. Graduates will understand how to connect with consumers using multiple digital platforms to create effective targeted promotional campaigns.

**MAJOR COURSE REQUIREMENTS (12.00 credits)**

MAR 1011	Principles of Marketing	(3 credits)
MAR 1720	Marketing in a Digital World	(3 credits)
MAR 2101	Social Media Marketing	(3 credits)
MAR 2704	Marketing Web Analytics	(3 credits)

**Digital Marketing Strategy (CCC)****CIP (0252070103)***College Credit Certificate | Code: 65102 | 18 credits*

Effective Term: Fall 2019 (2197)

**Program Description:**

The Digital Marketing Strategy College Credit Certificate is designed to prepare students to design, implement, manage and analyze digital marketing strategies and campaigns. Graduates will understand how to connect with consumers using multiple digital platforms to create effective customer-focused promotional campaigns.

**MAJOR COURSE REQUIREMENTS (18.00 credits)**

MAR 1011	Principles of Marketing	(3 credits)
MAR 1720	Marketing in a Digital World	(3 credits)
MAR 2101	Social Media Marketing	(3 credits)
MAR 2704	Marketing Web Analytics	(3 credits)
MAR 2703	Marketing Content, Branding and Strategy	(3 credits)
MAR 2952	Digital Marketing Capstone	(3 credits)

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: EARLY CHILDHOOD EDUCATION - ADMINISTRATOR (60004)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (12.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> EEC 2002 - Operation of an Early Childhood Facility (3 credits)               | <input type="checkbox"/> EEC 2523 - Programming & Management for Early Childhood Administrators (3 credits) |
| <input type="checkbox"/> EEC 2520 - Early Childhood Organization leadership and management (3 credits) | <input type="checkbox"/> EEC 2527 - Legal & Financial Issue in Child Care (3 credits)                       |

\* End of Program Sheet \*

**Early Childhood Education - Child Development Early Intervention Specialization**

College Credit Certificate | Code: 60007 | 36 credits

Effective Term: Spring 2020 (2203)

CIP (0419070904)

**Program Description:**

This is a College Credit Certificate (CCC) in Early Childhood Education (ECE) with a specialization in Child Development Early Intervention. The purpose of this program is to prepare students as early childhood educators who can identify learning differences in young children and meet their educational needs.

**Major Course Requirements – 36 Credits**
**Group A: Infant/Toddler Specialization (12 credits)**

EEC 1001	Introduction to Early Childhood Infant Toddler Education	(3 credits)
EEC 1522	Infant-Toddler Environments	(3 credits)
EEC 2201	Developing Curriculum for Infants and Toddlers	(3 credits)
EEC 2407	Facilitating Social Development	(3 credits)

--- OR ---

**Group B: Preschool Specialization (12 credits)**

EEC 1000	Introduction to Early Childhood Education	(3 credits)
EEC 1200	Early Childhood Curriculum I	(3 credits)
EEC 1311	Early Childhood Curriculum II	(3 credits)
EEC 2202	Program Development in Early Childhood Education	(3 credits)

--- AND ---

**Group C: Inclusion Specialization (12 credits)**

EEC 1752	Knowing and Understanding All Young Children	(3 credits)
EEC 1753	Observing and Assessing All Young Children	(3 credits)
EEC 1713	Helping All Young Children Become Independent Learners	(3 credits)
EEC 1308	Classrooms for All Young Children	(3 credits)

---AND---

**General Education Courses (12 credits)**

AMH 2020	History of the United States since 1877	(3 credits)	
ANT 2410	Introduction to Cultural Anthropology	(3 credits)	
ARH 1000	Art Appreciation	(3 credits)	
ARH 2740	Cinema Appreciation	(3 credits)	
BSC 1005	General Education Biology	(3 credits)	
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	(3 credits)	
CLP 1006	Psychology of Personal Effectiveness	(3 credits)	
DAN 2100	Dance Appreciation	(3 credits)	
DEP 2000	Human Growth & Development	(3 credits)	
ENC 1101	English Composition 1	(3 credits)	
ENC 1102	English Composition 2	(3 credits)	Pre-Req ENC 1101
HUM 1020	Humanities	(3 credits)	
HUN 1201	Essentials of Nutrition	(3 credits)	
ISS 1120	The Social Environment	(3 credits)	
ISS 1161	Individual in Society	(3 credits)	
LIT 2120	Survey of World Literature	(3 credits)	Pre-Req ENC 1102
LIT 2480	Issues in Literature & Culture	(3 credits)	Pre-Req ENC 1102
MAC 1105	College Algebra	(3 credits)	Pre-Req MAT 1033
MGF 1106	Mathematics for Liberal Arts 1	(3 credits)	Pre-Req MGF 1107
MGF 1107	Mathematics for Liberal Arts 2	(3 credits)	
MUL 1010	Music Appreciation	(3 credits)	
MUL 2380	Jazz & Popular Music in America	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	
PHI 2604	Critical Thinking/Ethics	(3 credits)	Pre-Req ENC 1102
PSC 1515	Energy in the Natural Environment	(3 credits)	
PSY 2012	Introduction to Psychology	(3 credits)	
SPC 1017	Fundamentals of Speech Communications	(3 credits)	
SYG 2000	Introduction to Sociology	(3 credits)	
THE 2000	Theatre Appreciation	(3 credits)	





**Early Childhood Education - Early Childhood Education Inclusion Specialization**

*College Credit Certificate | Code: 60006 | 12 credits*

*CIP (0413121000)*

***Effective Term: Spring 2020 (2203)***

**Program Description:**

This is a College Credit Certificate in Early Childhood Education with a specialization in Early Childhood Inclusion. This is an introductory CCC for care practitioners who need training in addition to their initial credentials, i.e., Florida Child Care Professional Certificate (FCCPC) or the National Child Development Associate (N-CDA) credential in order to provide high quality early childhood education for all children.

**Major Course Requirements – 12 Credits**

EEC1752	Knowing and Understanding All Young Children	(3 credits)
EEC1753	Observing and Assessing All Young Children	(3 credits)
EEC1713	Helping All Young Children Become Independent Learners	(3 credits)
EEC1308	Classrooms for All Young Children	(3 credits)



### **Early Childhood Education – Preschool**

**(CIP 0419070908)**

College Credit Certificate | Code: 60003 | 12 credits

Effective Term: Fall 2020 (2207)

This is a College Credit Certificate in early childhood education with a Preschool specialization. The purpose of this program is to prepare students as early childhood education caregivers with a preschool specialization or to provide supplementary training for persons previously or currently employed in these occupations. This CCC will allow its holder to apply for a National Child Development Associate credential enabling this student to pursue work as a childcare provider nationally or continue their education.

#### **Course Requirements (12 credits)**

EEC 1000	Introduction to Early Childhood Education	(3 credits)
EEC 1200	Early Childhood Curriculum 1	(3 credits)
EEC 1311	Early Childhood Curriculum 2	(3 credits)
EEC 2407	Facilitating Social Development	(3 credits)

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: EDUCATOR PREPARATION INSTITUTE (69000)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSES FIRST SEMESTER (9.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> EPI 0001 - Classroom Management (3 credits)     | <input type="checkbox"/> EPI 0003 - Technology (3 credits)                        |
| <input type="checkbox"/> EPI 0002 - Instructional Strategies (3 credits) | <input type="checkbox"/> EDG 3443 - Classroom and Behavior Management (3 credits) |

**2. MAJOR COURSES SECOND SEMESTER (6.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> EPI 0004 - The Teaching & Learning Process (3 credits) | <input type="checkbox"/> EPI 0010 - Foundations of Research-Based Practices in Reading (3 credits) |
|---|--|

**3. MAJOR COURSES THIRD SEMESTER (6.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> EPI 0020 - Professional Foundations (1 credits) | <input type="checkbox"/> EPI 0940 - Field Experience II (2 credits) |
| <input type="checkbox"/> EPI 0030 - Diversity (2 credits)                | <input type="checkbox"/> EPI 0945 - Field Experience I (1 credits)  |

\* End of Program Sheet \*



## **Emergency Medical Technician**

*College Credit Certificate - Health Sciences | Code: 63013 | 12 credits*

The Emergency Medical Technician – Basic College Credit Certificate is a one-semester program, which prepares students to function in the hospital and pre-hospital environment. Graduates of this program can perform clinical data collection, patient assessment and provide immediate care and safe relocation of the acutely ill. Satisfactory completion of this program will qualify the graduate to sit for the State and/or National EMT Certification Examination. This program is approved by the State of Florida, Department of Health and Rehabilitative Services.

### **MAJOR COURSE ELECTIVES (2.00 credits)**

EMS 1059	1st Responder Emergency Care	(1 credits)
EMS 1059L	1st Responder Emergency Care Laboratory	(1 credits)
---or---		
EMS 9995	First Responder	(2 credits)

### **MAJOR COURSE REQUIREMENTS (10.00 credits)**

EMS 1119	Emergency Medical Technician	(4 credits)
EMS 1119L	Emergency Medical Technician Lab and Clinic	(3 credits)
EMS 1431	EMT Hospital/Field Experience	(3 credits)



### **Endoscopic Technician**

*College Credit Certificate | Code: 63030 | 24 credits*

**CIP** (0351099902)

**Effective Term:** Summer 2023 (2235)

The College Credit Certificate in Endoscopy Technician is designed to educate and prepare graduates with skills required for entry-level employment as a member of the healthcare team. In addition, students will acquire extensive knowledge of legal and ethical responsibilities, anatomy, physiology, pathophysiology, microbiology, aseptic techniques, patient care procedures, patient safety, and use and care of equipment and supplies.

#### **MAJOR CORE REQUIREMENTS (24.00 credits)**

HIM 2472	Medical Terminology	(3 credits)	
STS 1304L	Operating Room Techniques Laboratory	(3 credits)	
STS 1307	Surgical Equipment and Instrumentation	(3 credits)	
STS 1323	Surgical Procedures I	(3 credits)	
STS 1925C	Endoscopy Technician Theory 1 and Lab	(3 credits)	
STS 1926C	Endoscopy Technician Theory 2 and Lab	(3 credits)	Prerequisite: STS 1925C
STS 2179	Surgical Biomedical Fundamentals	(3 credits)	
STS 2944	Surgical Clinical I	(3 credits)	



**Engineering Technology Support Specialist**  
*College Credit Certificate | Code: 66052 | 18 credits*

**CIP (0615000007)**

**Program Description:**

This program offers a sequence of courses that provides students with the relevant technical knowledge and skills needed to prepare for further education and careers in the manufacturing career cluster.

**MAJOR COURSE REQUIREMENTS (18.00 credits)**

EET 1082	Introduction to Electronics	(3 credits)
ETD 1340	AutoCAD	(3 credits)
ETI 1152C	Measurement and Instrumentation	(3 credits)
ETI 1172	Introduction to Quality Assurance	(3 credits)
ETI 1701	Industrial Safety	(3 credits)
ETI 2404	Advanced Manufacturing Technology	(3 credits)



### **Enterprise Cloud Computing**

**CIP (0511100116)**

College Credit Certificate | Code: 66058 | 24 credits  
Effective Term: Summer 2021 (2215)

The Enterprise Cloud Computing Credit Certificate program is designed to provide an opportunity to establish foundation in architect scalable, highly available application solutions that leverage cloud computing services utilizing best practices focusing on cloud security, cost, and reliability. Graduates will utilize core design patterns and infrastructure expertise to implement solutions to deploy and maintain workloads and applications.

Course ID	Course Title	Credits	Pre/Co-Requisites
<b><u>MAJOR CORE REQUIREMENTS (24 credits)</u></b>			
CGS 1540C	Database Concepts Design	(4 credits)	
CTS 1111	Linux +	(4 credits)	
CTS 1120	Fundamentals of Networking Security	(4 credits)	
CTS 1134	Networking Technologies	(4 credits)	
CTS 1145	Cloud Essentials	(4 credits)	
CTS 2375C	Cloud Infrastructure and Services	(4 credits)	Pre-req CTS 1145



## **Film Production Fundamentals**

*College Credit Certificate | Code: 61001 | 24 credits*

**CIP (0650060203)**

### **Program Description:**

The Film Production Fundamentals College Credit Certificate (CCC) is designed to prepare students for entry-level employment in the motion picture industry. Students will understand the fundamentals in the following skills: lighting, grip, camera, audio recording, and editing.

### **MAJOR COURSE REQUIREMENTS (24.00 credits)**

CGS1060	Basic Computing	4	
FIL1100	Screenwriting 1	3	
FIL1420C	Film Production 1: Introduction to the Filmmaking Process	4	Co-Req FIL2552C
FIL1431C	Film Production 2: Cinematography And Sound	4	Pre-Req FIL1420C Co-Req FIL2553C
FIL2552C	Editing Level 1: Introduction to Editing	3	
FIL2553C	Editing Level 2: Intermediate Editing and Visual Effects	3	Pre-Req FIL2552C
VIC1000	Visual Communications	3	



**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: FLORIDA FUNERAL DIRECTOR (63024)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (31.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> BUL 2131 - Legal Environment (3 credits)                | <input type="checkbox"/> FSE 2200 - Funeral Service Accounting (3 credits)            |
| <input type="checkbox"/> ENC 1101 - English Composition 1 (3 credits)            | <input type="checkbox"/> FSE 2201 - Funeral Home Operations (3 credits)               |
| <input type="checkbox"/> FSE 1000 - Introduction to Funeral Services (3 credits) | <input type="checkbox"/> FSE 2202 - Funeral Service Business Management (3 credits)   |
| <input type="checkbox"/> FSE 1080 - Funeral Law (3 credits)                      | <input type="checkbox"/> FSE 2932 - Funeral Science Professional Review 2 (1 credits) |
| <input type="checkbox"/> FSE 2060 - Funeral Directing (3 credits)                | <input type="checkbox"/> PHI 2604 - Critical Thinking/Ethics (3 credits)              |
| <input type="checkbox"/> FSE 2061 - Thanatology (3 credits)                      |   |

The following course(s) are not allowed for credit in this area.  
All Labs

\* End of Program Sheet \*



## **Food & Beverage Management**

**CIP (0252090503)**

*College Credit Certificate | Code: 65051 | 30 credits*

### **Program Description:**

The Food Service Management College Credit Certificate program is designed to prepare students with a theoretical and practical foundation for a successful career in the food and beverage industry. Students enrolled in this program are prepared for positions such as Catering/Banquet Manager, Food & Beverage Manager, Restaurant Manager and Bar/Lounge Manager. Credits earned can be applied to an Associate in Science degree in Hospitality Management, which is fully transferable to public universities within the State of Florida.

### **Program Core – 18 credits**

HFT1000	Introduction to Hospitality	3.00 credits
HFT1212	Safety and Sanitation	3.00 credits
HFT1841	Dining Room Service	3.00 credits
HFT1852	Menu and Facilities Planning	3.00 credits
HFT2261	Restaurant Management	3.00 credits
HFT2800	Food and Beverage Management	3.00 credits

### **Electives – 12 credits**

FSS1100	Foodservice purchasing	3.00 credits
FSS1200	Culinary Terminology and Procedures	3.00 credits
FSS1202L	Food Production 1	3.00 credits
HFT1210	Human Resources	3.00 credits
HFT1454	Food and Beverage Cost Controls	3.00 credits
HFT1631	Risk Management and Security	3.00 credits
HFT2241	Leadership and Quality Assurance Management	3.00 credits
HFT2421	Managerial Accounting for Hospitality	3.00 credits
HFT2449	E-Business for the Hospitality Industry	3.00 credits
HFT2949	Co-op Work-study Internships 2	3.00 credits



## **Food and Beverage Operations**

**CIP (0252090508)**

*College Credit Certificate | Code: 65058 | 18 credits*

### **Program Description:**

The Food and Beverage Operations College Credit Certificate is designed to prepare students with an in-depth and practical foundation in management for a successful career in the food and beverage industry. Students enrolled in this certificate are prepared for positions such as Shift Supervisor, Restaurant Supervisor, or Bar/Lounge Supervisor. Credits earned can be applied to an Associate in Science degree in Hospitality Management, which is fully transferable to public universities within the state of Florida.

### **Program Core – 18 credits**

HFT1000	Introduction to Hospitality	3.00 credits
HFT1212	Safety and Sanitation	3.00 credits
HFT1454	Food and Beverage Cost Controls	3.00 credits
HFT2241	Leadership and Quality Assurance Management	3.00 credits
HFT2800	Food and Beverage Management	3.00 credits

**---AND---**

HFT1852	Menu and Facilities Planning	3.00 credits
---------	------------------------------	--------------

**---OR---**

HFT2261	Restaurant Management	3.00 credits
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**Food and Beverage Specialist****CIP (0252090507)***College Credit Certificate | Code: 65057 | 12 credits***Program Description:**

The Food and Beverage Specialist College Credit Certificate is designed to prepare students with a theoretical and practical foundation for a successful career in the food and beverage industry. Students enrolled in this certificate are prepared for positions such as Restaurant Server, Room Service Attendant, or Banquet Set-Up Staff. Credits earned can be applied to an Associate in Science degree in Hospitality Management, which is fully transferable to public universities within the state of Florida.

**Program Core – 12 credits**

HFT1000	Introduction to Hospitality	3.00 credits
HFT1212	Safety and Sanitation	3.00 credits
HFT1454	Food and Beverage Cost Controls	3.00 credits

**---AND---**

HFT2449	E-Business for the Hospitality Industry	3.00 credits
---------	---	--------------

**---OR---**

HFT2949	Co-op Work-study Internships 2	3.00 credits
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## **GEOGRAPHIC INFORMATION SYSTEMS TECHNOLOGY**

**(CIP 0545070213)**

*College Credit Certificate | Code: 66080 | 21 credits*

Effective Term: Fall 2020 (2207)

### **Program Description:**

Geographic Information Systems (GIS) is a technological field that promotes cooperation within and across organizations by enabling the integration of several information platforms to facilitate mapping, analysis and planning strategies. The College Credit Certificate program in Geographic Information Systems Technology prepares students with professional and technical training in geographic information systems (GIS). Graduates of the CCC acquire a skill-set that equips them to create, modify and enhance GIS for analysis, prediction, decision making and planning in a variety of fields.

<b>Course</b>	<b>Course Title</b>	<b>Credits</b>	<b>Pre-/Co-Requisites</b>
CGS 1540C	Database Concepts Design	4	
*CIS 2900	Directed Study IT	1	
GIS 1040	Introduction to GIS Technology	4	
GIS 2045	Intermediate GIS Technology	4	Pre-Req GIS1040 Introduction to GIS Technology
GIS 2046	Advanced GIS Technology	4	Pre-Req GIS2045 Intermediate GIS Technology
GIS 2047	Applications of GIS Technology	4	Pre-Req GIS2045 Intermediate GIS Technology

\*Enrollment in this course requires successful completion of certain program course work and departmental approval.

**Note:** All program courses require a grade of "C" or higher.

**Graphic Design Support**

*College Credit Certificate | Code: 61002 | 15 credits*

**CIP (0611080302)**

**Program Description:**

The Graphic Design Support College Credit Certificate (CCC) is designed to prepare students for initial employment as a graphic design assistant, graphic production artist, or to provide supplemental training for persons previously or currently employed in these occupations.

**MAJOR COURSE REQUIREMENTS (15.00 credits)**

GRA1111C	Graphic Design 1	4 credits
GRA1280C	Digital Imaging Fundamentals	4 credits
GRA1750	Introduction to Graphic Internet Technology	3 credits
GRA2117C	Computer Assisted Graphic Design	4 credits

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: HEALTHCARE INFORMATICS SPECIALIST (63029)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (6.00 credits)**

☐ HIM 2472 - Medical Terminology (3 credits)

☐ SPC 1017 - Fundamentals of Speech Communication (3 credit

**2. MAJOR COURSES FIRST SEMESTER (11.00 credits)**

☐ HIM 1000 - Introduction to Health Information Technology (2 credits)

☐ HIM 1800 - Professional Practice Experience 1 (2 credits)

☐ HIM 1110 - Health Information Technology and Data Collection (2 credits)

☐ HIM 2012 - Legal Aspects of Health Care (2 credits)

☐ HIM 1110L - Health Information Management Data Collection lab (3 credits)

**3. MAJOR COURSES SECOND SEMESTER (7.00 credits)**

☐ HIM 2211C - Health Information Technologies (2 credits)

☐ HIM 2652C - Electronic Health Record (3 credits)

☐ HIM 2400C - Diversified Non-Hospital Health Records (2 credits)

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: HELP DESK SUPPORT TECHNICIAN (66037)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (16.00 credits)**

- |   |   |
|---|---|
| <input type="checkbox"/> CGS 1060   | <input type="checkbox"/> CTS 1131 - A+ Computer Essentials & Support (4 credits)        |
| <input type="checkbox"/> CGS 1560 - A+ Computer Operating Systems (4 credits) | <input type="checkbox"/> CTS 2153 - Supporting Windows Users & Applications (4 credits) |

\* End of Program Sheet \*



**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: HOMELAND SECURITY (66074)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (15.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> CCJ 1191 - Human Behavior in Criminal Justice (3 credits)                 | <input type="checkbox"/> DSC 2242 - Transportation and Border Security (3 credits)            |
| <input type="checkbox"/> CJL 2062 - Constitutional Law and Legal Procedure or Evidence (3 credits) | <input type="checkbox"/> DSC 2590 - Intelligence Analysis and Security Management (3 credits) |
| <input type="checkbox"/> DSC 1006 - Introduction to Homeland Security (3 credits)                  |   |

The following course(s) are not allowed for credit in this area.  
All Labs

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: HORTICULTURE PROFESSIONAL (63025)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (18.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> HOS 1010 - Horticulture 1 (3 credits)           | <input type="checkbox"/> ORH 1510 - Landscape Plant Identification 1 (3 credits) |
| <input type="checkbox"/> IPM 2112 - Principles of Entomology (3 credits) | <input type="checkbox"/> ORH 2949 - Landscape Technology Internship (3 credits)  |
| <input type="checkbox"/> ORH 1251 - Nursery Practices 1 (3 credits)      | <input type="checkbox"/> SBM 1000 - Small Business Management (3 credits)        |

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: HORTICULTURE SPECIALIST (63026)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (12.00 credits)**

☐ HOS 1010 - Horticulture 1 (3 credits)

☐ IPM 2112 - Principles of Entomology (3 credits)

☐ ORH 1251 - Nursery Practices 1 (3 credits)

☐ ORH 1510 - Landscape Plant Identification 1 (3 credits)

\* End of Program Sheet \*



### **Infant/Toddler Specialization**

**(CIP 0419070907)**

*College Credit Certificate | Code: 67014 | 12 credits*

Effective Term: Fall 2020 (2207)

This program is designed to prepare students as early childhood education caregivers with an infant/toddler specialization or provide supplementary training for persons previously or currently employed in these occupations. Students will learn essential components of quality care and education including, but not limited to early childhood education, guidance techniques, establishing and maintaining a safe and healthy learning environment, rules and regulations, family interactions, nutrition, child growth and development and professional responsibilities. Employment opportunities include in home or center based programs for infants/toddlers.

### **Course Requirements (12 credits)**

EEC 1000	Introduction to Early Childhood Education	(3 credits)
EEC 1522	Infant and Toddler Environments	(3 credits)
EEC 2201	Developing Curriculum for Infants and Toddlers	(3 credits)
EEC 2407	Facilitating Social Development	(3 credits)



## Information Technology Support

(CIP 0511010311)

College Credit Certificate | Code: 66044 | 28 credits

Effective Term: Spring 2022 (2223)

The Information Technology Support College Credit Certificate is designed to provide an opportunity to establish a basic foundation in IT roles. Training in this program include computer repair and installation, troubleshooting operating systems, understanding the foundations of networking technologies, and providing excellence in customer service. Graduates are also prepared for CompTIA A+, Network+, and Project+ industry certifications.

### Major Course Requirements

Course ID	Course Title	Credits	Pre/Co-Requisites
CGS 1060C	Intro to Computer Technology and App	(4 credits)	
CGS 1560	A+ Computer Operating Systems	(4 credits)	
CTS 1131	A+ Computer Essentials & Support	(4 credits)	
CTS 1328	Supporting Microsoft Clients	(4 credits)	CGS 1060C recommended or equivalent experience or skills
CTS 1134	Networking Technologies	(4 credits)	
CTS 2148C	IT Project Management	(4 credits)	
CTS 2153	Supporting Windows Users & Apps.	(4 credits)	Pre-req CTS 1328



### **Intelligence Studies**

**CIP (0743040300)**

*College Credit Certificate | Code: 66075 | 16 credits*

**Effective Term: Summer 2022 (2225)**

In this College Credit Certificate (CCC) in Intelligence Studies, students will learn what intelligence is and how it is used retroactively and proactively against computer crimes, homeland security critical issues and natural disasters. Students will also review the history of intelligence as practiced in the United States.

### **MAJOR CORE REQUIREMENTS – 16 Credits Required**

CET 2880C	Digital Forensics	(4 credits)	
DSC 1002	Domestic & International Terrorism	(3 credits)	
DSC 1590	Introduction to Intelligence Studies	(3 credits)	
DSC 2501	Effective Communication Skills for Security Professionals	(3 credits)	Pre-req.: ENC 1101
DSC 2590	Intelligence Analysis & Security Management	(3 credits)	

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: INTERMODAL FREIGHT TRANSPORTATION (68011)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. PROGRAM REQUIREMENTS (18.00 credits)**

- |   |   |
|---|---|
| <input type="checkbox"/> AVM 2120 - Air Cargo (3 credits)                               | <input type="checkbox"/> TRA 1430 - Introduction to Port Freight Operations (3 credits)                     |
| <input type="checkbox"/> TRA 1410 - Introduction to Rail Freight Operations (3 credits) | <input type="checkbox"/> TRA 2010 - Introduction to Transportation and Logistics (3 credits)                |
| <input type="checkbox"/> TRA 1420 - Introduction to Trucking Operations (3 credits)     | <input type="checkbox"/> TRA 2402 - Intermodal Transportation Operations and Project Management (3 credits) |

The following course(s) are not allowed for credit in this area.  
All Labs

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: INTERNATIONAL FREIGHT TRANSPORTATION (68010)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. PROGRAM REQUIREMENTS** (15.00 credits)

- |  |  |
|--|--|
| <input type="checkbox"/> DSC 2242 - Transportation and Border Security (3 credits)           | <input type="checkbox"/> TRA 2321 - Transportation Public Policy, Law, and Regulations     |
| <input type="checkbox"/> TRA 1154 - Introduction to Supply Chain Management (3 credits)      | <input type="checkbox"/> credits)  |
| <input type="checkbox"/> TRA 2010 - Introduction to Transportation and Logistics (3 credits) | <input type="checkbox"/> TRA 2702 - International Logistics and Transportation (3 credits) |

The following course(s) are not allowed for credit in this area.  
All Labs

\* End of Program Sheet \*





## **INTERNET OF THINGS (IoT) APPLICATIONS**

**CIP (0511020110)**

*College Credit Certificate | Code: 66057 | 24 credits*

### **Program Description:**

The Internet of Things Applications College Credit Certificate prepares students with multidisciplinary workforce skills and provides an accelerated credential that is useful for immediate employment and career experience. Graduates of the CCC in the IoT Applications acquire a skill-set that leads to producing connected devices by developing applications that can run on microcontroller development boards, simulating the functioning of the devices, and building physical prototypes. Upon completion of the program, the student will have learned how to program in the dominant programming languages used in IoT, completed projects that they can include in their portfolio, and configured different single board computers.

### **PROGRAM REQUIREMENTS (24.00 credits)**

		<b>Credits</b>	<b>Requisite (s)</b>
CGS 1060C	Introduction to Computer Technology Applications	4	
COP 1334C	Introduction to C++ Programming	4	
CEN 2212C	Introduction to Programming the IoT	4	Pre-Req: COP1334
CET 2186C	Design and Prototyping of Connected Devices	4	Pre-Req: COP1334
CEN 2211	C/C++ Programming for Embedded Devices	4	Pre-Req: COP1334
CTS 2466C	IoT development with C#	4	Pre-Req: CEN2211

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: LEAN MANUFACTURING (68001)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSES FIRST SEMESTER (12.00 credits)**

- ☐ ETI 1172 - Introduction to Quality Assurance (3 credits)
- ☐ ETI 1622 - Concepts of Lean and Six Sigma (3 credits)

- ☐ ETI 1644 - Advanced Manufacturing Supply Chain (3 credits)
- ☐ ETI 2404 - Advanced Manufacturing Technology (3 credits)

\* End of Program Sheet \*



## **Logistics and Transportation Specialist**

*College Credit Certificate | Code: 63019 | 18 credits*

Effective Term: Fall 2019 (2197)

**CIP** (0652020901)

The Logistics and Transportation Specialist College Credit Certificate (CCC) will prepare students for further education and employment in the Transportation, Distribution and Logistics career cluster. The program content is broad-based to reflect the cross-functional relationships prevalent in supply chain management. Students are exposed to related business practices such as standard operating procedures, negotiation techniques, planning, organizing, and accounting concepts, purchasing, sustainability, warehousing, project management, quality control, import/export, and asset management theory. Emphasis is placed on understanding the planning, acquisition, flow, and distribution of goods and services while managing the complexity of operational linkages in a fast-paced global supply chain.

### **MAJOR COURSE REQUIREMENTS (18 Credits Required)**

#### **Group A (15 credits)**

TRA1154	Introduction to Supply Chain Management	3
TRA2010	Introduction to Transportation and Logistics	3
TRA2156	Operations Management for Transportation	3
TRA2402	Intermodal Transportation Operations and Project Management	3
TRA2702	International Logistics and Transportation	3

---AND---

#### **Group B (3 credits)**

TRA 1410	Introduction to Rail Freight Operations	3
TRA 1420	Introduction to Trucking Operations	3
TRA 1430	Introduction to Port Freight Operations	3



## **Mechatronics**

*College Credit Certificate | Code: 66053 | 30 credits*

**CIP** (0615000013)

This program offers students instruction in maintenance techniques, computer aided drafting/design skills, technical communications, maintenance and operation of various industrial components, quality control and testing, material handling protocols, and proper usage of tools and instrumentation.

### **MAJOR COURSE REQUIREMENTS (30.00 credits)**

CET 1110C	Digital Circuits	(4 credits)
COP 2270	"C" for Engineers	(4 credits)
EET 1015C	Direct Current Circuits	(4 credits)
EGN 2200	Computer Applications in Engineering	(3 credits)
ETI 1152C	Mechanical Measurement and Instrumentation	(3 credits)
ETI 1701	Industrial Safety	(3 credits)
ETI 2404	Advanced Manufacturing Technology	(3 credits)
ETM 1315C	Applied Pneumatics and Hydraulics	(3 credits)
ETS 2542C	Programmable Logic Controllers	(3 credits)



# **Medical Coder/Biller**

*College Credit Certificate | Code: 63020 | 37 credits*

**CIP** (0351071404)

**Effective Term: Spring 2023 (2233)**

The Medical Coder/Biller program prepares individuals for employment as Medical Coder/Billers. The student will learn to translate diagnoses and procedures into numerical designation (coding) using the International Classification of Diseases (ICD-9-CM) and Current Procedural Terminology (CPT-4). The program involves coding, classifying and indexing diagnoses and procedures for purposes of standardization, retrieval and statistical analysis. The student will also be trained to prepare and file medical insurance claim forms for reimbursement. Electronic claims transmission is included. There is special emphasis on ethical and legal responsibilities, data quality, financial reimbursement, Diagnosis Related Groups (DRGs) and Ambulatory Patient Classification (APCs).

## **MAJOR CORE REQUIREMENTS (37 credits)**

BSC 2085	Human Anatomy and Physiology 1	3 credits	Corequisite: BSC 2085L
BSC 2085L	Human Anatomy and Physiology 1 Laboratory	1 credit	Corequisite: BSC 2085
BSC 2086	Human Anatomy & Physiology 2	3 credits	Prerequisite: BSC 2085; Corequisite: BSC 2086L
BSC 2086L	Human Anatomy & Physiology 2 Laboratory	1 credits	Prerequisites: BSC 2085, BSC 2085L; Corequisite: BSC 2086L
HIM 1000	Introduction to Health Information Management	2 credits	
HIM 1110	Health Record Technology & Data Collection	2 credits	Prerequisites: HIM 1000, HIM 2472; Corequisite: HIM 1110L
HIM 1110L	Health Record Technology & Data Collection Laboratory	3 credits	Prerequisites: HIM 1000, HIM 2472; Corequisite: HIM 1110
HIM 1300	Health Care Facility and Delivery System	2 credits	
HIM 2211C	Health Information Technologies	2 credits	Prerequisites: HIM 1110, HIM 1110L, HIM 1800
HIM 2222	ICD Coding Systems	2 credits	Prerequisites: BSC 2085, BSC 2085L and HIM 2472; Corequisite: HIM 2222L
HIM 2222L	ICD Coding Systems Laboratory	3 credits	Prerequisites: BSC 2085, BSC 2085L and HIM 2472; Corequisite: HIM 2222
HIM 2234	Advanced Coding & Reimbursement Systems	2 credits	Prerequisites: HIM 2222, HIM 2222L; Corequisite: HIM 2234L
HIM 2234L	Advanced Coding & Reimbursement Systems Laboratory	1 credit	Prerequisites: HIM 2222, HIM 2222L Corequisite: HIM 2234
HIM 2253C	Current Procedural Terminology/CPT-4	2 credits	Prerequisites: BSC 2085, BSC 2085L and HIM 2472
HIM 2433	Pathophysiology and Pharmacology	3 credits	Prerequisites: BSC 2085, BSC 2085L, HIM 2472
HIM 2472	Medical Terminology	3 credits	Prerequisite: Departmental Permission
HIM 2813	Professional Practice Experience	2 credits	Prerequisites: HIM 2222, HIM 2222L, HIM 2234, HIM 2234L, HIM 2253C

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: MICROCOMPUTER REPAIRER/INSTALLER (66032)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (15.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> EET 1082 - Introduction to Electronics (3 credits)                      | <input type="checkbox"/> CET 2588C - Server + Service and Maintenance (3 credits) |
| <input type="checkbox"/> CET 1171 - Introduction to Computer Service and Maintenance (3 credits) | <input type="checkbox"/> CET 1487C - Network+ (3 credits)                         |
| <input type="checkbox"/> CET 1178C - A+ Computer Hardware Service (3 credits)                    |   |

\* End of Program Sheet \*



## **Network Security**

*College Credit Certificate / Code: 66059 / 20 credits*

**CIP (0511100118)**

***Effective Term: Spring 2020 (2203)***

### **Program Description:**

The College Credit Certificate (CCC) in Network Security will prepare graduates with the education and skills needed to fulfill roles and positions in the Information Security industry. The coursework will include education and applied technical skills in the networking and information security fields.

### **MAJOR COURSE REQUIREMENTS (20 credits)**

<b>Course ID</b>	<b>Course Title</b>	<b>Credits</b>	<b>Pre/Co-Requisites</b>
CTS 1134	Networking Technologies	(4 credits)	
CTS 1120	Cybersecurity Fundamentals	(4 credits)	
CTS2314	Network defense and countermeasures	(4 credits)	Pre-reqs. CTS 1120 and CTS1134
CIS 2350	Cybersecurity Analyst (CySA+)	(4 credits)	Pre-reqs. CTS 1120 and CTS1134
CTS 1111	Linux +	(4 credits)	Pre-reqs. CGS1060 or comp exp.

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: NETWORK SERVER ADMINISTRATION - MICROSOFT (66035)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (24.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> CTS 1134 - Networking Technologies (4 credits)                 | <input type="checkbox"/> CTS 2303 - Configuring Windows Servers (4 credits)          |
| <input type="checkbox"/> CTS 1328 - Supporting Microsoft Clients (4 credits)            | <input type="checkbox"/> CTS 2306 - Administering Windows Servers (4 credits)        |
| <input type="checkbox"/> CTS 2153 - Supporting Windows Users & Applications (4 credits) | <input type="checkbox"/> CTS 2334 - Configuring Advanced Windows Servers (4 credits) |

The following course(s) are not allowed for credit in this area.  
All Labs

\* End of Program Sheet \*



**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: NETWORK SYSTEMS DEVELOPER (66034)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (41.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> EET 1015C - Direct Current Circuits (4 credits)                         | <input type="checkbox"/> CET 1110C - Digital Circuits (4 credits)                 |
| <input type="checkbox"/> EET 1082 - Introduction to Electronics (3 credits)                      | <input type="checkbox"/> CET 2123C - Microprocessors (4 credits)                  |
| <input type="checkbox"/> EET 2351C - Digital and Data Communications (4 credits)                 | <input type="checkbox"/> CET 2113C - Advanced Digital Circuits (4 credits)        |
| <input type="checkbox"/> CET 1171 - Introduction to Computer Service and Maintenance (3 credits) | <input type="checkbox"/> CET 2588C - Server + Service and Maintenance (3 credits) |
| <input type="checkbox"/> CET 1178C - A+ Computer Hardware Service (3 credits)                    | <input type="checkbox"/> MAC 1105 - College Algebra (3 credits)                   |
| <input type="checkbox"/> CET 1487C - Network+ (3 credits)  | <input type="checkbox"/> MTB 1322 - Technical Mathematics 2 (3 credits)           |

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: ORACLE CERTIFIED DATABASE ADMINISTRATOR (66048)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSE REQUIREMENTS (16.00 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> CTS 2440 - Introduction to Oracle: SQL and PL/SQL (4 credits)         | <input type="checkbox"/> CTS 2442 - Intermediate Oracle Database Administration (4 credits) |
| <input type="checkbox"/> CTS 2441 - Introduction to Oracle Database Administration (4 credits) | <input type="checkbox"/> CTS 2444 - Oracle Database Performance Tuning (4 credits)          |

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: PARAMEDIC (63027)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSES FIRST SEMESTER (15.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> EMS 2601 - Paramedic Lecture 1 (8 credits)     | <input type="checkbox"/> EMS 2664 - PARAMEDIC CLINIC 1 (3 credits) |
| <input type="checkbox"/> EMS 2601L - Paramedic Laboratory 1 (4 credits) |  |

**2. MAJOR COURSES SECOND SEMESTER (15.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> EMS 2602 - Paramedic Lecture 2 (8 credits)     | <input type="checkbox"/> EMS 2665 - Paramedic Clinic 2 (3 credits) |
| <input type="checkbox"/> EMS 2602L - Paramedic Laboratory 2 (4 credits) |  |

**3. MAJOR COURSES THIRD SEMESTER (8.00 credits)**

- ☐ EMS 2659 - EMS-Field Internship and Conference (8 credits)

**4. SCIENCE (4.00 credits)**

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2085 - Human Anatomy and Physiology 1 (3 credits) | <input type="checkbox"/> BSC 2085L - Human Anatomy and Physiology 1 Laboratory (1 credits) |
|--|--|

\* End of Program Sheet \*

**COLLEGE CREDIT CERTIFICATE**  
**PROGRAM OF STUDY: PASSENGER SERVICE AGENT (66028)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. MAJOR COURSES FIRST SEMESTER (16.00 credits)**

- |   |  |
|---|--|
| <input type="checkbox"/> AVM 1022 - Flight Operations (3 credits)         | <input type="checkbox"/> AVM 1520 - Airline Reservations (3 credits)   |
| <input type="checkbox"/> AVM 1062 - Aviation Career Planning (1 credits)  | <input type="checkbox"/> AVM 1521 - Airline Ticketing (3 credits)      |
| <input type="checkbox"/> AVM 1440 - Aviation/Airport Security (3 credits) | <input type="checkbox"/> AVM 2431 - Customer Service Agent (3 credits) |

\* End of Program Sheet \*



### **Rapid Prototyping Specialist**

*College Credit Certificate | Code: 66054 | 12 credits*

**CIP (0615000012)**

#### **Program Description:**

This program provides students with the technical skills proficiency and competency-based applied learning that contributes to the academic and career knowledge for students entering the advanced manufacturing industry.

#### **MAJOR COURSE REQUIREMENTS (12.00 credits)**

ETD 1340	AutoCAD	(3 credits)
ETI 2404	Advanced Manufacturing Processes	(3 credits)
EGN 2200	Computer Applications in Engineering	(3 credits)
ETS 2632C	Computer Integrated Manufacturing	(3 credits)



## **Rooms Division Management**

**CIP (0252090402)**

*College Credit Certificate | Code: 65048 | 30 credits*

### **Program Description:**

The Rooms Division Management College Credit Certificate program is designed to prepare students with a theoretical and practical foundation for a successful career in the hotel sales and marketing industry. Students enrolled in this certificate are prepared for positions such as Front Desk Manager, and Guest Relations Manager. Credits earned can be applied to an Associate in Applied Science degree in Hospitality and Tourism Management.

### **Program Core – 15 credits**

HFT1000	Introduction to Hospitality	3.00 credits
HFT1210	Human Resources	3.00 credits
HFT1631	Risk Management and Security	3.00 credits
HFT2421	Managerial Accounting for Hospitality	3.00 credits
HFT2449	E-Business for the Hospitality Industry	3.00 credits

### **Electives – 15 credits**

HFT1220	Supervisory Development	3.00 credits
HFT1300	Executive Housekeeping	3.00 credits
HFT2223	Training Skills and Development	3.00 credits
HFT2241	Leadership and Quality Assurance Management	3.00 credits
HFT2410	Front Office Procedures and Lodging Operations	4.00 credits
HFT2501	Hospitality Sales	3.00 credits
HFT2750	Event and Meeting Management	3.00 credits
HFT2949	Co-op Work-study Internships 2	3.00 credits



## **Rooms Division Operations**

**CIP (0252090406)**

*College Credit Certificate | Code: 65056 | 19 credits*

### **Program Description:**

The Rooms Divisions Operations College Credit Certificate is designed to prepare students with a theoretical and practical foundation for a successful career in the lodging industry. Students enrolled in this certificate are prepared for positions such as Front Desk Supervisor or Guest Relations Supervisor. Credits earned can be applied to an Associate in Science degree in Hospitality Management, which is fully transferable to public universities within the state of Florida.

### **Program Core – 19 credits**

HFT1000	Introduction to Hospitality	3.00 credits
HFT1210	Human Resources	3.00 credits
HFT1300	Executive Housekeeping	3.00 credits
HFT2410	Front Office Procedures and Lodging Operations	4.00 credits
HFT2449	E-Business for the Hospitality Industry	3.00 credits

**---AND---**

HFT1631	Risk Management and Security	3.00 credits
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**---OR---**

HFT1949	Co-op Work-study Internships I	3.00 credits
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**---OR---**

HFT2241	Leadership and Quality Assurance Management	3.00 credits
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**---OR---**

HFT2750	Event and Meeting Management	3.00 credits
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**Rooms Division Specialist****CIP (0252090405)***College Credit Certificate | Code: 65055 | 13 credits***Program Description:**

The Rooms Divisions Specialist College Credit Certificate is designed to prepare students with a theoretical and practical foundation for a successful career in the lodging industry. Students enrolled in this certificate are prepared for positions such as Front Desk Agent, Guest Relations Agent, or Reservation Clerk. Credits earned can be applied to an Associate in Science degree in Hospitality Management, which is fully transferable to public universities within the state of Florida.

**Program Core – 13 credits**

HFT1000	Introduction to Hospitality	3.00 credits
HFT1300	Executive Housekeeping	3.00 credits
HFT2410	Front Office Procedures and Lodging Operations	4.00 credits

**---AND---**

HFT1631	Risk Management and Security	3.00 credits
---------	------------------------------	--------------

**---OR---**

HFT1949	Co-op Work-study Internships I	3.00 credits
---------	--------------------------------	--------------

**---OR---**

HFT2241	Leadership and Quality Assurance Management	3.00 credits
---------	---	--------------





## **Tax Specialist**

*College Credit Certificate / Code: 65076 / 12 credits*

**CIP** (0552030204)

### **Program Description:**

The College Credit Certificate in Tax Specialist will prepare students to fill out the necessary forms for their clients or for the businesses in which they work. In addition, students will learn how to reduce taxable income and discover the current income tax regulations and their impact on individuals, couples, families, and business owners. In addition, students will gain a working knowledge about business income, tax credits, itemized deductions, LLCs and S Corps, retirement plans, and home businesses.

### **MAJOR COURSE REQUIREMENTS (12.00 Credits)**

TAX 2000	Income Tax	(3 credits)
TAX 2002	Taxation Practices and Procedures	(3 credits)
TAX 2021	Taxation of Business Organizations	(3 credits)
TAX 2401	Tax of Estates, Gifts and Trusts	(3 credits)

**Television Studio Production****CIP (0610010513)***College Credit Certificate | Code: 61003 | 12 credits***Program Description:**

The Television Studio College Credit Certificate (CCC) is designed for students who intend to seek employment in radio, television and production companies, as well as allied fields such as in-house educational and industrial studios. The curriculum stresses hands-on equipment use in TV laboratories. Students will have access to high-end cameras, editing suites and video graphics animation facilities and will complete portfolio-quality productions.

**MAJOR COURSE REQUIREMENTS (12.00 credits)**

RTV1241C	Television Studio Production 1	4 credits	
RTV1242C	Television Studio Production 2	4 credits	Pre-Req RTV1241C
RTV2245C	Electronic Field Production 1	4 credits	Pre-Req RTV1241C



## Virtual and Augmented Reality Technologies

College Credit Certificate | Code: 66060 | 19 credits

CIP (0550041118)

### Program Description:

The program will teach students the fundamentals of Virtual and Augmented Reality. Students will learn basic concepts, history and tools commonly used for stereoscopic image acquisition and immersive technologies. Students will also learn the origins of Virtual Reality (VR) and its current role in the industry, its applications and opportunities and how to generate and manipulate VR imagery.

Course	Course Title	Credits	Pre/Co-Requisites
<b><u>MAJOR COURSE REQUIREMENTS (19.00 credits)</u></b>			
CGS 1060C	Introduction to Computer Technology & Applications	4	
DIG 1772C	Introduction to Virtual and Augmented Reality Technologies	3	Pre-Req: CGS 1060C
DIG 1729C	Game Engines	4	Pre-Req: CGS 1060C
DIG 2776C	Virtual Reality Platform Development	4	Pre-Req: DIG 1729C, DIG 1772C
DIG 2777C	Augmented Reality Platform Development	4	Pre-Req: DIG 1729C, DIG 1772C



**Advanced Automotive Service Technology – Tesla Technician**  
*Career Technical Certificate | Code: 51000 | 800 Hours/26.6 Credits*  
**Effective Term: Spring 2203**

CIP (0647060413)

**Program Description:**

The Advanced Automotive Service Technology – Tesla Technician Career Technical Certificate prepares students to become entry-level technicians to the TESLA Motors technology. The coursework includes safety when working in or around high voltage, maintenance, regeneration braking, inverter power transfer, battery technologies, battery management systems, High-Voltage Bus & Charging, Pack Connector & Penthouse controls, and Autonomous technology. Electric vehicle applications and their integrated systems from TESLA Motors will be used to discuss physics of battery storage and material composition and High-Voltage generation systems. This program is suitable for student's already working in the battery electric vehicle/Hybrid vehicle and energy technology field. This program is a requirement for TESLA Motors Technician. Technicians successfully completing this training can enter gainful employment as a Level I, Level II, or Level III technician, Mobile Service Technician or a Field Service Technician.

**PROGRAM REQUIREMENTS (800 Hours/26.5 Credits)**

AER 0605	Tesla Electronic System Technician	400 Hours/13.33 Credits
AER 0606	Tesla Maintenance Technician	400 Hours/13.33 Credits



## Aircraft Structural Assembly and Fabrication Apprenticeship

Career Technical Certificate | Code: 59005 | 4296 Hours

CIP 0847060900

Effective Term: Fall 2019 (2197)

The Career Technical Certificate (CTC) in ***Aircraft Structural Assembly and Fabrication Apprenticeship*** will prepare the student to perform scheduled and non-scheduled maintenance and repairs on aircraft. The student will assist aviation maintenance technicians in commercial jet modifications, minor and major maintenance checks and corrosion control and preventions, and line services for a wide array of commercial and military aircraft.

Course	Course Title	Hours	Prerequisites
<b><u>MAJOR COURSE REQUIREMENTS</u></b>			
AMT 0044	Tools, Materials, and Processes 1	40 hours	
AMT 0045	Tools, Materials, and Processes 2	40 hours	
AMT 0046	Aircraft Materials, Hardware & Processes	68 hours	AMT 0044/0045
AMT 0047	Applying the Design Process	53 hours	AMT 0044/0045
AMT 0269	Aircraft Electrical Systems & Quality Control	64 hours	AMT 0044/0045
AMT 0219	Aircraft Hydraulics & Aviation Mathematics	19 hours	AMT 0044/0045
AMT 0509	Composites and Capstone Project	12 hours	AMT 0044, 0045, 0046, 0047, 0269, 0219
AMT 0949	On the Job Training (OJT) Part 1	666.67 hours	
AMT 0949C	On the Job Training (OJT) Part 2	666.67 hours	
AMT 0950	On the Job Training (OJT) Part 3	666.67 hours	
AMT 0950C	On the Job Training (OJT) Part 4	666.67 hours	
AMT 0960	On the Job Training (OJT) Part 5	666.67hours	
AMT 0960C	On the Job Training (OJT) Part 6	666.67 hours	

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: BUSINESS COMPUTER PROGRAMMING (55023)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (150.00 hours)**

Test type(s) needed:

- |   |  |
|---|--|
| <input type="checkbox"/> CTS 0050 - Introduction to Microcomputers (2.50 credits) | <input type="checkbox"/> SLS 0341 - Employability Skills (1 credits) |
| <input type="checkbox"/> CTS 0053 - Word Processing (1.50 credits)                |  |

**2. COMPLETION POINT - B (300.00 hours)**

Test type(s) needed:

- |  |   |
|--|---|
| <input type="checkbox"/> CTS 0048  | <input type="checkbox"/> GEB 0036                                       |
| <input type="checkbox"/> CGS 0566 - Microcomputer Operating Systems (DOS) (2.50 credits) | <input type="checkbox"/> MTB 0102 - Business Mathematics (2.50 credits) |

**3. COMPLETION POINT - C (300.00 hours)**

Test type(s) needed:

- |  |  |
|--|--|
| <input type="checkbox"/> ACO 0101 - Accounting 1 (2.50 credits)                    | <input type="checkbox"/> CTS 0045  |
| <input type="checkbox"/> CTS 0035 - Introduction to the "C" Program (2.50 credits) | <input type="checkbox"/> CTS 0065 - Database and Applications & Programming (2.50 credits) |

**4. COMPLETION POINT - D (300.00 hours)**

Test type(s) needed:

- |  |   |
|--|---|
| <input type="checkbox"/> CTS 0081 - Supporting Windows Professional (2.50 credits) | <input type="checkbox"/> CTS 0036 - Advanced "C" Programming (2.50 credits) |
| <input type="checkbox"/> CTS 0080 - Supporting Windows Server (2.50 credits)       | <input type="checkbox"/> CTS 0066   |

**5. COMPLETION POINT - E (150.00 hours)**

Test type(s) needed:

- |  |                                   |
|--|-----------------------------------|
| <input type="checkbox"/> CGS 0306 - Information Systems Development (2.50 credits) | <input type="checkbox"/> CGV 0350 |
|--|-----------------------------------|

\* End of Program Sheet \*

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: CORRECTIONAL OFFICER - STATE (57021)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (420.00 hours)**

Test type(s) needed:

- |  |  |
|--|--|
| <input type="checkbox"/> CJK 0031 - CMS First Aid For Criminal Justice Officers (1.33 credits) | <input type="checkbox"/> CJK 0315 - Facility and Equipment (0.26 credits)                  |
| <input type="checkbox"/> CJK 0051 - CMS Criminal Justice Defensive Tactics (2.66 credits)      | <input type="checkbox"/> CJK 0320 - Intake and Release (0.60 credits)                      |
| <input type="checkbox"/> CJK 0040 - CMS Criminal Justice Firearms (2.66 credits)               | <input type="checkbox"/> CJK 0325 - Supervising in a Correctional Facility (1.33 credits)  |
| <input type="checkbox"/> CJK 0300 - Introduction to Corrections (1.06 credits)                 | <input type="checkbox"/> CJK 0330 - Supervising Special Populations (0.66 credits)         |
| <input type="checkbox"/> CJK 0305 - CJSTC Communications (1.33 credits)                        | <input type="checkbox"/> CJK 0335 - Responding to Incidents and Emergencies (0.53 credits) |
| <input type="checkbox"/> CJK 0310 - Officer Safety (0.53 credits)                              | <input type="checkbox"/> CJK 0340 - Officer Wellness and Physical Abilities (1 credits)    |

\* End of Program Sheet \*



**Fire Fighter/ Emergency Medical Technician- Combined**  
*Career Technical Certificate | Code: 58000 | 750 Hours/25 Credits*

**CIP (0743020312)**

**Program Description:**

The Combined Fire Fighter/Emergency Medical Technician (EMT) certificate will prepare graduates with the technical skills needed fulfill roles and positions in the fire service and Emergency Medical Services (EMS) industry. The coursework will include applied technical skills in both firefighting and emergency medical services. The combined Fire Fighter/Emergency Medical Technician (EMT) certificate is for School of Justice students only.

**MAJOR COURSE REQUIREMENTS (750 Hours/25 Credits)**

EMS0110	Emergency Medical Technician	300 Hours/10 Credits
FFP0021	Fire Fighter Minimum Standards	450 Hours/15 Credits





### **Firefighter Minimum Standards**

*Career Technical Certificate | Code: 57004 | 492 contact hours/16.4 credits*

**CIP (0743020304)**

**Effective Term: Fall 2022 (2227)**

This program offers a broad foundation of knowledge and skills to prepare the student for employment as a frontline, entry-level firefighter. The program content includes, but is not limited to, orientation to the fire service, fire alarms and communication, vehicles, apparatus and equipment, fire behavior, portable extinguishers, fire streams, fundamentals of extinguishment, ladders, hoses, tools and equipment, forcible entry, salvage, overhaul, ventilation, rescue, protective breathing equipment, first responder emergency medical techniques, water supplies, principles of in-service inspections, safety, controlled burning, and employability skills. Students who successfully complete the program will be required to pass a written and practical exam to obtain certification as a Firefighter 2 from the Florida Bureau of Fire Standards and Training. Students must be a minimum of 18 years old to participate. Fire Academy Students Only. (492 contact hours)

### **MAJOR COURSE REQUIREMENTS (492 Hours/16.40 Credits)**

FFP 0021

Firefighter Minimum Standards

492 contact hours/16.4 credits



### **Florida Law Enforcement Academy**

Career Technical Certificate | Code: 57022 | 25.66 credits

**CIP (0743010700)**

Effective Term: Spring 2022 (2223)

The Florida Law Enforcement Academy program prepares students for certification as Police Officers in the State of Florida. All criminal justice standards and training, Department of Education, and local standards will be met. Graduates are eligible for employment with any law enforcement agency in the state upon graduation from the program and successful completion of the State Certification Exam. Topics include law, human issues, patrol, traffic, investigations and communications and more. There is an emphasis on practical applications and competency-based performance. This program is offered at the School of Justice. Students seeking entrance into the MDC School of Justice basic recruit training programs for a career in law enforcement are required to pass a physical screening, physical agility, Voice Stress Analysis Test, psychological test, fingerprinting and background check and the Florida Basic Abilities Test (FBAT). For more information, please contact the School of Justice, Assessment Center and/or visit the Assessment Center web site, <https://www.mdc.edu/justice/assessment-center.aspx>.

<b>Course number</b>	<b>Course Title</b>	<b>Credit</b>
CJK 0002	- Introduction to Law Enforcement	(0.40 credits)
CJK 0016	- Communications	(0.80 credits)
CJK 0018	- Legal	(2.13 credits)
CJK 0019	- Interviewing and Report Writing	(1.87 credits)
CJK 0020	- Law Enforcement Vehicle Operations	(1.60 credits)
CJK 0021	- Serving Your Community	(1.13 credits)
CJK 0031	- First Aid for Criminal Justice Officers	(1.33 credits)
CJK 0040	- Criminal Justice Firearms	(2.67 credits)
CJK 0051	- Criminal Justice Defensive Tactics	(2.67 credits)
CJK 0063	- Fundamentals of Patrol	(1.33 credits)
CJK 0072	- Crimes Against Persons	(1.60 credits)
CJK 0073	- Crimes Involving Property and Society	(0.40 credits)
CJK 0079	- Crime Scene Follow-up Investigations	(1.13 credits)
CJK 0093	- Critical Incidents	(1.47 credits)
CJK 0096	- Criminal Justice Officer Physical Fitness Training	(2.00 credits)
CJK 0400	- Traffic Incidents	(0.40 credits)
CJK 0401	- Traffic Stops	(0.80 credits)
CJK 0402	- Traffic Crash Investigations	(1.00 credits)
CJK 0403	- DUI Traffic Stops	(0.80 credits)
CJK 0421	- CEW/Dart-Firing Stun Gun	(0.13 credits)

#### **ADDITIONAL INFORMATION:**

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements rests with the student.

\* End of Program Sheet \*

**Licensed Practical Nurse (LPN)**

Career Technical Certificate | Code: 53020 | 1350 Hours / 45 Credits

**CIP (0351390101)**
**Effective Term: Fall 2022 (2227)**

This one-year planned certificate program prepares a safe and effective practitioner for the beginning levels of patient care. The practical nurse functions to the level of their educational preparation and under the direct supervision of a registered nurse, mid-level provider, or licensed physician. The curriculum prepares the graduate to challenge the state board examination for practical nurse licensure. The program is approved by the Florida Board of Nursing (FBN). Graduates are eligible to apply to write the National Council Licensing Examination for Registered Nurses (NCLEX-PN). Selection is based on scores on pre-admission testing and completion of required prerequisite courses. See the School of Nursing Information website for more specific details about admission requirements. Pre-Admission tests – Applicants must take the Test of Adult Basic Education (TABE) and Test of Essential Academic Skills (TEAS).

Test of Adult Basic Education (TABE)	Computation (Mathematics)	11
	Communications (Reading Language Arts)	11
Test of Essential Academic Skills (TEAS)	Composite Score	58

**MAJOR COURSE REQUIREMENTS – 1350 Hours | 45 Credits**
**Discipline Courses First Semester (345 Hours | 11.50 Credits Required)**
**(Offered Fall & Spring)**

PRN 0005C	Fundamentals of Nursing	150 hours   5 credits
PRN 0021C	Anatomy and Physiology and Medical Terminology 1	105 hours   3.5 credits
PRN 0035C	Pharmacology	90 hours   3 credits

**Discipline Courses Second Semester (405 Hours | 13.5 Credits Required)**

PRN 0210C	Adult Health I	300 hours   10 credits	Prerequisites: PRN 0005C, PRN 0021C, PRN 0035C
PRN 0082C	Anatomy and Physiology and Medical Terminology 2	105 hours   3.5 credits	Prerequisites: PRN 0005C, PRN 0021C, PRN 0035C

**Discipline Courses Third Semester (600 Hours | 20 Credits Required)**

PRN 0211C	Adult Health II	300 hours   10 credits	Prerequisite: PRN 0210C, PRN 0082C
PRN 0006C	Professional Role Transition	150 hours   5 credits	Prerequisite: PRN 0210C, PRN 0082C
PRN 0130C	Special Populations	150 hours   5 credits	Prerequisite: PRN 0210C, PRN 0082C

**Additional Information:**

Due to the limited number of students that can progress to discipline courses in the School of Nursing Licensed Practical Nursing Program, it is important that students be properly informed. For information, advisement, application forms and deadline dates, interested students should contact the New Student Center, Medical Campus.

Minimum GPA of 2.0 is required and a TABE Score of Computation (Mathematics): 11 and Communications (Reading Language Arts): 11.

Licensing requirement for the Florida Board of Nursing must be met please review at <https://floridasnursing.gov/licensing/licensed-practical-nurse-registered-nurse-by-examination/>.

Students should check their academic requirement report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami-Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements stated in your academic requirement report rests with the student

**Semester 1**

Course ID	Course Title	Credits	Pre/Co-requisites
PRN 0005C	Fundamentals of Nursing	150 hours   5 credits	
PRN 0021C	Anatomy and Physiology and Medical Terminology 1	105 hours   3.5 credits	
PRN 0035C	Pharmacology	90 hours   3 credits	
<b>Semester Hours / Credits</b>		<b>345 hours   11.50 credits</b>	

**Semester 2**

Course ID	Course Title	Credits	Pre/Co-requisites
PRN 0210C	Adult Health I	300 hours   10 credits	Prerequisite: PRN 0005C, PRN 0021C, PRN 0035C
PRN 0082C	Anatomy and Physiology and Medical Terminology 2	105 hours   3.5 credits	Prerequisite: PRN 0005C, PRN 0021C, PRN 0035C
<b>Semester Credits</b>		<b>405 hours   13.50 credits</b>	

**Semester 3**

Course ID	Course Title	Credits	Pre/Co-requisites
PRN 0211C	Adult Health II	300 hours   10 credits	Prerequisite: PRN 0210C, PRN 0082C
PRN 0006C	Professional Role Transition	150 hours   5 credits	Prerequisite: PRN 0210C, PRN 0082C
PRN 0130C	Special Populations	150 hours   5 credits	Prerequisite: PRN 0210C, PRN 0082C
<b>Semester Credits</b>		<b>600 hours   20 credits</b>	
<b>Program Total</b>		<b>1350 hours   45 credits</b>	

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: MASSAGE THERAPY - ACCELERATED (53030)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (750.00 hours)**

- |   |   |
|---|---|
| <input type="checkbox"/> MSS 0215 - History and Standards for Massage Therapy (1 credits)   | <input type="checkbox"/> MSS 0281 - Allied Modalities (3.50 credits)              |
| <input type="checkbox"/> MSS 0250 - Introduction to Massage Therapy (1 credits)             | <input type="checkbox"/> MSS 0995 - Massage Therapy - Accelerated (13.50 credits) |
| <input type="checkbox"/> MSS 0250L - Introduction to Massage Therapy Laboratory (6 credits) |   |

\* End of Program Sheet \*

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: MASSAGE THERAPY - GENERIC (53029)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (90.00 hours)**

- ☐ HSC 0003 - Introduction to Health Care (3 credits)

**2. COMPLETION POINT - B (660.00 hours)**

- |   |   |
|---|---|
| <input type="checkbox"/> MSS 0156 - Anatomy and Physiology for Massage Therapy (2.50 credits)             | <input type="checkbox"/> MSS 0281 - Allied Modalities (3.50 credits)                  |
| <input type="checkbox"/> MSS 0156L - Anatomy and Physiology for Massage Therapy Laboratory (2.50 credits) | <input type="checkbox"/> MSS 0300 - Hydrotherapy Modalities (1 credits)               |
| <input type="checkbox"/> MSS 0215 - History and Standards for Massage Therapy (1 credits)                 | <input type="checkbox"/> MSS 0300L - Hydrotherapy Modalities Laboratory (1.50 credit) |
| <input type="checkbox"/> MSS 0250 - Introduction to Massage Therapy (1 credits)                           | <input type="checkbox"/> MSS 0803C - Massage Therapy Clinical Practicum (3 credits)   |
| <input type="checkbox"/> MSS 0250L - Introduction to Massage Therapy Laboratory (6 credits)               |   |

\* End of Program Sheet \*

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: MASSAGE THERAPY - TRANSITIONAL (53031)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (750.00 hours)**

- |   |   |
|---|---|
| <input type="checkbox"/> MSS 0215 - History and Standards for Massage Therapy (1 credits)   | <input type="checkbox"/> MSS 0300 - Hydrotherapy Modalities (1 credits)               |
| <input type="checkbox"/> MSS 0250 - Introduction to Massage Therapy (1 credits)             | <input type="checkbox"/> MSS 0300L - Hydrotherapy Modalities Laboratory (1.50 credit) |
| <input type="checkbox"/> MSS 0250L - Introduction to Massage Therapy Laboratory (6 credits) | <input type="checkbox"/> MSS 0803C - Massage Therapy Clinical Practicum (3 credits)   |
| <input type="checkbox"/> MSS 0281 - Allied Modalities (3.50 credits)                        | <input type="checkbox"/> MSS 0996 - Massage Therapy - Transitional (8 credits)        |

\* End of Program Sheet \*

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: MEDICAL ASSISTING (53027)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (90.00 hours)**

- ☐ HSC 0003 - Introduction to Health Care (3 credits)

**2. COMPLETION POINT - B (90.00 hours)**

- ☐ MEA 0322 - Office Management and Professional Issues for the Medical Assistant (3 credits)

**3. COMPLETION POINT - C (120.00 hours)**

- ☐ MEA 0254 - Physician Office Laboratory Procedures (2 credits)      ☐ MEA 0254L - Physician Office Laboratory Procedure Application (2 credits)

**4. COMPLETION POINT - D (60.00 hours)**

- ☐ MEA 0540 - Electrocardiography/Emergency Procedures (2 credits)

**5. COMPLETION POINT - E (939.00 hours)**

- |   |   |
|---|---|
| <input type="checkbox"/> MEA 0204 - Theoretical Aspects of Clinical Skills (1 credits)            | <input type="checkbox"/> MEA 0334C - Medical Coding/Insurance Billing with Collection: credits)     |
| <input type="checkbox"/> MEA 0204L - Application of Clinical Skills (2 credits)                   | <input type="checkbox"/> MEA 0343 - Computers in the Medical Office (3 credits)                     |
| <input type="checkbox"/> MEA 0234 - Pathophysiology & Disease for Medical Assistants (4 credits)  | <input type="checkbox"/> MEA 0802 - Clinical Externship for the Medical Assistant (3 credits)       |
| <input type="checkbox"/> MEA 0231 - Anatomy and Physiology and Medical Terminology (2.30 credits) | <input type="checkbox"/> MEA 0810 - Administrative Externship for the Medical Assistant (3 credits) |
| <input type="checkbox"/> MEA 0258 - Radiology for the Medical Assistant (3 credits)               | <input type="checkbox"/> MEA 0832 - Diagnostic Externship in Medical Assistant (3 credits)          |
| <input type="checkbox"/> MEA 0242 - Pharmacology for the Medical Assistant (3 credits)            |   |

\* End of Program Sheet \*



**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: MEDICAL CODER BILLER (53028)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (90.00 hours)**

- ☐ HIM 0009 - Introduction to Health Information Technology (3 credits)

**2. COMPLETION POINT - B (1019.00 hours)**

Must take 345.00 contact hrs from the following group.

- |   |   |
|---|---|
| <input type="checkbox"/> HIM 0001 - Introduction to Health Information Management (4 credits) | <input type="checkbox"/> HIM 0228C - ICD Coding Systems (5 credits) |
| <input type="checkbox"/> HIM 0473 - Medical Terminology (2.50 credits)                        |   |

- - - And - - -

Must take 380.00 contact hrs from the following group.

- |  |   |
|--|---|
| <input type="checkbox"/> HIM 0650 - eHealth Care Delivery Systems (3.66 credits)                             | <input type="checkbox"/> HIM 0250C - Ambulatory Care Coding Systems (2 credits) |
| <input type="checkbox"/> HIM 0450 - Human Anatomy & Physiology for Health Information Management (2 credits) | <input type="checkbox"/> HIM 0290C - Advanced Coding Systems (3 credits)        |
| <input type="checkbox"/> HIM 0434 - Basic Principles of Disease (2 credits)                                  |   |

- - - And - - -

Must take 294.00 contact hrs from the following group.

- |  |   |
|--|---|
| <input type="checkbox"/> HIM 0274C - Health Care Billing and Reimbursement (4 credits) | <input type="checkbox"/> HIM 0817 - Professional Practice Experience (3.80 credits) |
| <input type="checkbox"/> HIM 0280C - Physician Coding (2 credits)                      |   |

\* End of Program Sheet \*

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: PC SUPPORT SERVICES (55022)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (150.00 hours)**

Test type(s) needed:

- |   |  |
|---|--|
| <input type="checkbox"/> CTS 0050 - Introduction to Microcomputers (2.50 credits) | <input type="checkbox"/> SLS 0341 - Employability Skills (1 credits) |
| <input type="checkbox"/> CTS 0053 - Word Processing (1.50 credits)                |  |

**2. COMPLETION POINT - B (300.00 hours)**

Test type(s) needed:

- |   |   |
|---|---|
| <input type="checkbox"/> EEV 0554 - Networking Essentials (2.50 credits)                | <input type="checkbox"/> GEB 0036                                       |
| <input type="checkbox"/> EEV 0561 - Microcomputer Maintenance & Repair 1 (2.50 credits) | <input type="checkbox"/> MTB 0102 - Business Mathematics (2.50 credits) |

**3. COMPLETION POINT - C (300.00 hours)**

Test type(s) needed:

- |  |  |
|--|--|
| <input type="checkbox"/> CTS 0081 - Supporting Windows Professional (2.50 credits) | <input type="checkbox"/> CGS 0566 - Microcomputer Operating Systems (DOS) (2.50 credits) |
| <input type="checkbox"/> CTS 0080 - Supporting Windows Server (2.50 credits)       | <input type="checkbox"/> EEV 0562 - Microcomputer Maintenance & Repair 2 (2.50 credits)  |

**4. COMPLETION POINT - D (150.00 hours)**

Test type(s) needed:

- |  |  |
|--|--|
| <input type="checkbox"/> CTS 0091 - Implementing a Network Infrastructure (2.50 credits) | <input type="checkbox"/> CTS 0093 - Implementing Directory Services (2.50 credits) |
|--|--|

\* End of Program Sheet \*

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: PHARMACY TECHNICIAN (53025)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (90.00 hours)**

- ☐ HSC 0003 - Introduction to Health Care (3 credits)

**2. COMPLETION POINT - B (960.00 hours)**

- ☐ PTN 0003 - Introduction to Pharmacy Practice & Medical Terminology (3 credits)  
☐ PTN 0004 - Pharmacy Practitioner Applications (3 credits)  
☐ PTN 0006 - Pharmacy Calculations (3 credits)

- ☐ PTN 0021 - Drug Classifications (3 credits)  
☐ PTN 0041 - Pharmacy Technician Hospital Field Experience (10 credits)  
☐ PTN 0049 - Pharmacy Technician Retail Store Field Experience (10 credits)

\* End of Program Sheet \*

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: PHLEBOTOMY TECHNICIAN (53024)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (90.00 hours)**

☐ HSC 0003 - Introduction to Health Care (3 credits)

**2. COMPLETION POINT - B (75.00 hours)**

☐ MLT 0041 - Phlebotomy Theory (0.50 credits)

☐ MLT 0061 - Practical Aspects of Phlebotomy (0.50 credits)

☐ MLT 0048 - Phlebotomy Practicum (1.50 credits)

\* End of Program Sheet \*

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: PRIVATE INVESTIGATOR INTERN (57023)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A** (40.00 hours)

☐ SCY 0051 - Private Investigator Intern Course A (0.80 credits)

☐ SCY 0052 - Private Investigator Intern Course B (0.53 credits)

\* End of Program Sheet \*

**CAREER TECHNICAL CERTIFICATE**  
**PROGRAM OF STUDY: PRIVATE SECURITY OFFICER (57006)**  
**EFFECTIVE TERM: Fall 2017 (2017-1)**

**I. GENERAL EDUCATION REQUIREMENTS**

**1. COMPLETION POINT - A (40.00 hours)**

☐ SCY 0501 - Basic Security Guard Training (1.33 credits)

**2. COMPLETION POINT - B (28.20 hours)**

☐ CJT 0801 - Private Security Guard Training 2: Class "G" License (0.94 credits)

\* End of Program Sheet \*