Miami Dade College
College-wide CASSC Meeting – JUNE 10, 2008
CURRICULUM REPORT #54

1. ## Natural Science
   ### HSC 2400 – Credit Type
   From: Credit Type 02
   To: Credit Type 01
   Effective Term: 2008-1

APPROVE_____OPPOSE_____ MORE INFORMATION_____

2. ## School of CIS and Engineering Technologies
   ### BAS in Electrical Engineering Technology

**MIAMI DADE COLLEGE
PROPOSAL FOR
BACHELOR OF APPLIED SCIENCE in
ELECTRONICS ENGINEERING TECHNOLOGY
Submitted August 1, 2008**

Executive Summary

Miami Dade College (MDC) offers an Associate in Science (AS) degree in Electronics Engineering Technology (EET) and is proposing to offer a Bachelor of Applied Science degree in Electronics Engineering Technology (BAS EET) in accordance with Florida Statute Section 1007.33. The objective is to address the local workforce need for baccalaureate-level engineers and to provide a smooth articulation for MDC's AS graduates to attain a degree at a local institution that will support higher paying careers. On the statewide level, the Department of Labor occupation profile for Electronics Engineers in Florida projects annual growth to be 21% over the 10-year period 2004 to 2014[1]. The Florida Agency for Workforce Innovation, Labor Market Statistics Center projects the annual growth rate for all engineering occupations at 17.04% from 2007 – 2015.

Miami Dade College's Office of Institutional Research conducted surveys between June 2007 and September 2007 among employers, current students, and alumni to gauge the need for and level of interest in a baccalaureate degree in electronics engineering technology within Miami-Dade County. An initial student survey returned a statistical sampling of 153 respondents, comprised of both Associate in Science and Associate in Arts engineering majors. A second survey, conducted to identify the level of interest among Associate in Science engineering majors, yielded a sample of an additional 37 responses for a total survey sample of 190 subjects. The Employer survey was conducted among six companies who jointly employ over 12,000 in Region 23.

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[1] Career Onestop. *Occupation Profile, Electronics Engineers except Computer, Florida*. sponsored by the US Department of Labor Retrieved January 11, 2008 from http://www.careerinfonet.org/occ_rep.asp?next=occ_rep&Level= optstatus111111111&jobfam= 17&id=1&nodeid=2&soccode=172072&stfips=12&x=52&y=10

- In a sampling of current associate in science electronics engineering technology majors (AS EET), 87% (32) who responded said they intend pursue a baccalaureate degree after completing their associate's degree (**Error! Reference source not found.**). Note: MDC enrolls an average of 300 AS EET majors per year.
- Over 78% (25) of the AS EET student sample said they would enroll at Miami Dade College if it offered a bachelor's degree (**Error! Reference source not found.**).
- Employers who responded to the MDC Employer Survey projected as many as 200 incumbent workers would be interested in enrolling in a BAS EET if offered at Miami Dade College and local employers project a need to hire over 500 engineers with baccalaureate degrees over the next three – five years (**Error! Reference source not found.**).
- In responding to MDC's employer survey (**Error! Reference source not found.**), Florida Power and Light indicated that potentially 200 employees would be interested in participating in a BAS EET program if offered at Miami Dade College, noting that it has not been successful in hiring local BS Engineering graduates who are able to pass FPL's qualification examinations. Miami Dade College, however, has a close partnership with FPL, having recently developed an AS degree in Electrical Power Technology pipeline partnership tailored specifically to FPL's needs and qualification exams. The proposed MDC BAS EET curriculum was developed with direct industry input from FPL and other local employers, and will provide students with the opportunity to acquire the skills and knowledge required by industry for entry-level electronics engineering positions.
- In a survey of combined Associate in Science and Associate in Arts engineering majors conducted in September 2007 (**Error! Reference source not found.**), 58.2% (92) of AA/AS engineering majors answered yes when asked if they would enroll in the BAS in Electronics Engineering Technology if offered at MDC.
- Cost and location were cited as the primary ways in which respondents perceive that MDC excels over other institutions offering similar degrees, with 87.3% (138) of respondents citing cost and 70.9% (112) citing location (**Error! Reference source not found.**).

The proposed MDC BAS EET degree will be unique within Miami-Dade County. Only two upper division institutions in the state have programs that articulate to the Associate of Science in Electronics Engineering Technology: University of Central Florida and Florida A&M. Florida International University (FIU) and University of Miami (UM) do not offer a Bachelor of Applied Science in Electronics Engineering Technology. These institutions offer the Bachelor of Science in Electrical Engineering (BSEE). These degree programs have different C.I.P. codes -- BSEE is 14.1001; BAS EET is (CIP 15.0303) -- and different prerequisites. The Associate in Science in Electronics Engineering Technology does not directly articulate to the Bachelor of Science in Electrical Engineering. Tuition differentials also make the BSEE programs less accessible to the MDC student population. As noted in Table 6, the cost for the proposed BAS EET program at MDC will be approximately $10,966.56[2], compared to the BSEE at FIU at a cost of $14,112[3] and UM at a cost of $122,928.00[4] for Electrical Engineering degrees.

Planning Process

Planning meetings were conducted in May 2007 to discuss the feasibility of offering a BAS EET at Miami Dade College (**Error! Reference source not found.**). The steering committee was

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[2] $81.84 per credit for tuition and fees for 134 credits based on 2007-2008 tuition rates. Source http://www.mdc.edu/tuition/ accessed January 29, 2008

[3] $109.40 per credit for 129 credits Source http://admissions.fiu.edu/costs.htm accessed January 29, 2008

[4] $16,211 per semester for 8 semesters, exclusive of fees. Source http://www6.miami.edu/UMH/CDA/UMH_Main/0,1770,29532-1;44908-2;39181-2;46641-3,00.html accessed January 29, 2008

comprised of the MDC Campus President (Wolfson Campus), Dean of Academic Affairs (Wolfson Campus), Engineering Department faculty members, Director of the School of Computer and Engineering Technologies (SCET), Director of Curriculum Development for SCET, Chair of the Engineering Department, District Director of Academic Programs, and Associate Provost of Institutional Effectiveness.

To gauge the interest for the proposed baccalaureate degree, MDC faculty, administrators, and staff representatives developed and conducted industry, student, and alumni surveys between July 2007 and September 2007, evaluated state and national higher education initiatives, and reviewed local and national labor trends and statistics. MDC conducted an industry and faculty-led curriculum development process to address the continuing need for advanced electronics engineering technology education and training. A focus group of industry representatives was convened to identify workforce requirements and define skill sets and to develop an industry-, workforce-driven curriculum. Participants included representatives from Florida Power and Light, AT&T, Federal Aviation Administration (FAA), Florida Department of Transportation Miami Toll System, Carnival Cruise Lines, and an independent engineering consultant representing small business interests (**Error! Reference source not found.**).

Workforce Needs/Demands

- In a survey of Miami-Dade County small and large companies, conducted by MDC's Institutional Research Department in July 2007, respondents indicated the need to hire between 8 (small companies) and up to 500 (large companies) individuals with baccalaureate degrees for a variety of positions including electronics engineering (mean of 91 positions) over the next 3 – 5 years, which indicates the importance of the baccalaureate education to these employers (**Error! Reference source not found.**).
- Locally, Florida Power and Light projects an interest in enrolling up to 200 employees in a local BAS EET program and a need to hire up to 500 bachelor level engineers over the next three to five years. A sampling of other local employers indicated hiring needs for at least 80 bachelor level engineering positions over the next three years (**Error! Reference source not found.**).
- In surveys of current engineering students conducted between July and September 2007, 58.2% (92) of respondents indicated that they would enroll in the BAS in Electronics Engineering Technology if offered at MDC (**Error! Reference source not found.**).
- In a survey of MDC alumni conducted in July 2007, 35.5% (65) of respondents indicated interest in enrolling in the BAS in Electronics Engineering Technology if offered at MDC (**Error! Reference source not found.**). 62% (39) of the alumni respondents indicated that they are currently employed. Of those who identified their job function, 23% (n=8) specified an electrical or electronic-related job category. Of the respondents who selected "other" 24 out of 27 respondents identified an engineering related job responsibility closely aligned with the objectives of the proposed BAS degree.

Academic Content and Curriculum

The Bachelor of Applied Science in Electronics Engineering Technology (CIP 15.0303) is designed to provide seamless articulation for AS EET graduates. It will also accommodate AS engineering technology majors in computer engineering technology, telecommunications, and biomedical engineering technology, and students entering with an Associate in Arts. As noted in Table 13, it incorporates the lower division technical core and general education courses from the AS EET and provides the upper division level advanced electronics engineering technology skills, with emphasis on the applied, practical application of engineering principles. Industry practitioners defined the job functions, job duties required for positions, and the knowledge,

skills, tools, and equipment required to accomplish the goals. MDC Engineering faculty members further developed and refined the course competencies, learning outcomes, and learning resources.

MDC's BAS EET program will adhere to the requirements stipulated in the *Statewide Articulation Manual,* which stipulates 134 semester hours for the baccalaureate in electronics engineering technology (**Error! Reference source not found.**); *c*onsequently, the BAS EET will exceed the State of Florida's 120 credit hour limit. Students entering with an AS EET will be credited with 68 credits and complete 66 credit hours at the junior/senior level including 48 hours of engineering technology core courses at the senior level institution as mandated by the state for this degree program[5]. MDC plans to seek industry accreditation for the BAS EET program from ABET, Inc., the accreditation board for engineering and technology. Accordingly, it has incorporated ABET requirements into the curriculum to support this objective. It should be noted that ABET requires a ***minimum*** of 124 credit hours for engineering technology programs [1].

Assessment of Current and Anticipated Resources and Budget to Deliver the Program

A preliminary assessment of required resources has been projected with estimated costs (Appendix 14) for the academic years 2008 through 2012 to include: facilities renovations for three classroom/laboratories ($90,000); specialized equipment and tools for the new laboratories, including, electronics, testing equipment, and computers for each classroom/lab ($288,601); additional library resources including subscriptions to IEEE journals, 1800 total new book titles, 200 new non-print books (e-books, CDs, etc.), 50 total new print serials, and one new database ($168,250) plus library support salaries ($23,000). Instructional support requires one additional full-time faculty, two additional part-time faculty, and a laboratory instructional support assistant ($249,432 for instructional support). Other staffing needs include one full-time program manager, a part-time academic advisor/recruiter, and a part-time clerical/administrative assistant ($323,458 other program personnel expenses).

The projected expenditure for academic years 2008 through 2012 is $1,344,984 (average of $336,246 per year). Enrollment projections are based on 24 students (10 FTEs) beginning in January 2010 and increasing to 80 students (54 FTEs) by 2011-12, assuming an annual attrition rate of 25%. Revenue from student fees is projected to be $225,370 for the 4-year start-up period, based on the 2007-2008 state tuition rate of $81.84 per credit hour and assuming 5% annual increases in tuition rates. The estimated FTE funding from the State is projected to be $324,742 based on the State's 2008-2009 funding formula of $3657 per FTE, leaving $794,872 to be funded from other sources. It is estimated that beginning in 2011-12, 12 students will graduate from the program with 100% placement due to the demand, and at projected starting salaries of $58,000 or higher.

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[5] Florida Department of Education (FLDOE) Office of K-20 Articulation, Division of Strategic Initiatives*, Statewide Post-Secondary Articulation Manual, Career Ladder Agreement*, (2005). Retrieved October 1, 2007 from http://www.fldoe.org/articulation/pdf/ AStoBaccalaureate_ Agreemnts.pdf.

Table 10. Curriculum Guide

Program Sheet

Bachelor of Applied Science Electronics Engineering Technology
C.I.P. 15.0303

Total credits required for the degree is 134

This program is designed to prepare students for entry level engineering positions such as Electronics Engineers, Test Engineers, Project Engineers, Electronics Manufacturing Engineers, Electronics Systems Engineers, Electronics Hardware Engineers, Technical Support Engineers, Quality Control Engineers, Reliability Engineers, Field Engineers, Processing Engineers, and Sales Engineers.

Course	Course Title	Credits	Pre-/Co-Requisites
GENERAL EDUCATION: 36 CREDITS REQUIRED			
Communications – 6 Credits Required			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
Oral Communication – 3 Credits Required			
SPC 1026	Fundamentals of Speech Communications (recommended)	3	
Humanities – 6 Credits Required			
PHI 2010	Introduction to Philosophy (recommended)	3	
PHI 2604	Critical Thinking/Ethics (recommended)	3	Pre-Req ENC 1102
Behavioral and Social Science – 6 Credits Required			
CLP 1006	Psychology of Personal Effectiveness (recommended)	3	
ECO 2013	Principles of Economics (Macro) (recommended)	3	

Science – 6 Credits Required – Two Physics Courses (See note below).

NOTE: The FLDOE State Matriculation Career Ladder Agreement requires two physics courses (minimum 6 credit hours). This requirement conflicts with MDC's AA requirement for 3 credits in a natural science and 3 credits in a life science. The Science Discipline has agreed and ALC has approved (6/5/08) pending College CASSC action on this proposal that the MDC Gen Ed AA requirement for a life science may be waived only for declared BAS EET students and that a second physics course may be taken instead.

Course	Course Title	Credits	Pre-/Co-Requisites
PHY 2053	Physics without Calculus	3	Prereq MAC 1114 or MAC 1147; Co-req PHY2053L
PHY 2054	Physics w/o Calculus 2	3	PHY2053; Co-req PHY2054L

Mathematics – 6 Credits Required
*   *Courses exclude labs.*

Course	Course Title	Credits	Pre-/Co-Requisites
MAC 1105	College Algebra	3	Pre-req MAT1033
MAC 2311	Calculus and Analytical Geometry 1 and Trigonometry	5	Pre-req MAC1147

    Note: extra 2 credits assigned to General Education Elective block

General Education Elective – 3 Credits Required
See Advisor for Approved Selections

Course	Course Title	Credits	Pre-/Co-Requisites
PHY2053L	Physics w Calculus Lab	1	Co-req PHY2048

COMMON COURSE PREREQUISITES

MAC2311 Calculus and Analytical Geometry 2		GE	Pre-req MAC2311
MAC2312 Calculus and Analytical Geometry 2		4	Pre-req MAC2311
PHY2053/2053L Physics w/o Calculus 2		GE	Pre-req MAC1114 or
MAC1140;			
Co-req PHY2053L			

LOWER DIVISION Technology Core– 38 Credits Required

CET2114C	Digital Computer Circuit Analysis 1	4	Pre/Co-req MAC1105
CET 2123C	Microprocessors	4	Pre-Req CET2114C,
MAC1147			
EET 1015C	Direct Current Circuits	4	Pre/Co-req MAC1105
EET 1025C	Alternating Current Circuits	4	Pre-req EET1015C; co-req
MAC1147			
EET 1141C	Electronics I	4	Pre-Req EET1025C
EET 2101C	Electronics II	4	Pre-Req EET1141C
EET 2305C	Electronic Communications 1 - Analog	4	Co-req EET2101C
CGS2423	C for Engineers	4	Pre-Req CGS1060
	OR		
COP1220	Introduction to C++ Programming	4	Pre-Req CGS1060
MAC1140	Pre-Calculus Algebra	3	Pre-Req MAC 1105
MAC1114	Trigonometry	3	Pre-Req MAC1105 or
MAC1140			

LOWER DIVISION TECHNICAL ELECTIVES – 8 CREDITS REQUIRED

CET 2142C	Advanced Digital Circuits (recommended)	4	CET2114C
EET 2351C	Electronic Communications 2 - Digital		
	(recommended)	4	Pre-req EET2305C

MAJOR CORE REQUIREMENTS – 48 Credits Required

CET 3126C Advanced Microprocessors	4	Pre-req CET2123C
CET 4190C Applied Digital Signal Processing	4	Pre-req CET3126C,
EET4136		
EET 3158C Linear Integrated Circuits and Devices	4	Pre-req EET2101
EET 3XXX Power Systems	3	Pre-req EET1025C
EET 3716C Advanced System Analysis	4	Pre-req EET2101C, Co-req
MAC2312		
EET 4XXXC Signals and Systems	4	Pre-req MAC2311
EET 4732C Feedback Control Systems	4	Pre-req EET3158C
EET 4165C Senior Design 1	3	Department approval
required		
EET 4166C Senior Design 2	3	Department approval
required		
EST 3543C Programmable Logic Controllers	4	CET2123C
ETI 3671 Technical Economic Analysis	3	MAC1105
ETI 3704 Safety Issues in Electronics Engineering	3	
Technology		
ETI 4480C Applied Robotics	4	Pre-req CET3126C
PHY2054L Physics w/o Calculus Lab	1	Co-req PHY2054

Admission Requirements

Students must have an earned AA or AS degree from a regionally accredited institution or completed a minimum of 60 credit hours with a cumulative grade point average of 2.0 and a minimum grade point average in all lower division engineering technology core courses of 2.5.

Students must have a minimum of 28 lower division technology courses and must satisfy all course prerequisite requirements before being admitted into upper division level engineering technology core courses.

Students must complete MAC1105 and ENC1101 prior to being admitted into the senior level institution institution.

Students must submit a completed Miami Dade College Admissions Application.

Additional Information:

Students entering with an AS or AAS degree 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

- a minimum of 134 semester hours in specified coursework (refer to the Curriculum Guide in Table 10)
- a minimum cumulative grade point average of 2.0
- a grade point average in the engineering major of at least 2.5
- a minimum of 30 semester hours of 3000-4000 level course work at the senior level institution
- successful completion of a minimum of 48 semester hours of engineering technology core coursework at the senior institution level
- satisfactory completion the general education 36 credit hour requirements
- satisfactory completion of the Gordon Rule requirements
- satisfactory completion of the CLAST or waiver
- 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
- 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 (6 - 8 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.

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.

Curriculum Design

The curriculum is designed to create highly trained, well educated, and employable electronics engineering technology professionals. The curriculum was developed utilizing extensive input from workforce experts, electronics engineering faculty, and college administrators to ensure that students acquire the latest skills and content. An industry focus group was conducted in May 2007 during which a job task analysis was performed and key skill sets, knowledge, and equipment were identified (Appendix 6). Consideration has been given to ensure that the proposed program incorporates a clear scope and sequence of core coursework thereby allowing for a seamless transition. Descriptions for senior level institution technology core courses are available in Appendix 9. The Bachelor of Applied Science degree in Electronics Engineering Technology has been designed with a high degree of flexibility allowing students to enter at various points, including Dual Enrollment (high school 11th grade), freshman or transfer entry or upon completion of an AS, AAS, or AA degree from a regionally accredited institution. A four-year advising plan was developed to provide students an example of the proposed plan of study (Appendix 10).

General Education and Common Prerequisite Courses

The proposed Miami Dade College BAS in Electronics Engineering Technology degree program conforms to all state statutes and rules, including the completion of 36 credits of general education and CLAST, addresses the SACS Accreditation Criteria (3.3.1 and 3.4.1) for student learning assessments, the Florida general education standards (Florida Rule 6A.10.030), and Common Course Prerequisite requirements. The proposed degree incorporates the AS and AA lower division coursework as the foundation of the baccalaureate program and MDC is in

compliance with State of Florida Articulation Agreements and Common Course Pre-Requisite standards regarding transferability. Transcripts from students transferring from out-of-state institutions will be evaluated on an individual basis per established MDC policy. All State of Florida Articulation Agreements will be preserved and State certification guidelines met.

Appendix 8 provides specific information regarding the integration and assessment of Miami Dade College general education skills areas within the proposed senior level institution coursework.

Senior Level Institution Core Courses

The senior level institution core courses (48 semester hours) are structured in a logical, sequential manner with course content increasing in difficulty and complexity. The senior level institution core is designed to provide graduates with the technical and managerial skills necessary to enter careers in design, application, installation, manufacturing, operation and/or maintenance of electrical/electronic(s) systems. In addition, it is designed to assist students in applying electrical/electronic(s) engineering theories and concepts, as well as knowledge and research-based practices in all engineering environments. Graduates will be well prepared for development and implementation of electrical/electronic(s) systems. Graduates are expected to use creative leadership and their advanced knowledge and skills to improve the state of the art in electrical/electronics engineering, as well as promote the highest standards and ethics as applied to the electrical/electronic(s) engineering technology field.

The senior level institution core electrical/electronic(s) engineering courses incorporate the following:

> A. Critical thinking as applied towards solving electrical/electronic(s) engineering problems
> B. Globalization of the engineering profession (including the concepts of culture, cultural competence, community, the impact of engineering and international engineering goals, issues, and concepts)
> C. Knowledge and research-based practice (including basic knowledge and concepts of engineering research steps and processes in quantitative and qualitative research, and how to critique research to determine the usefulness and appropriate application of research findings to improve engineering practice)
> D. Professionalism (including behaviors, legal issues, ethics, values, and accountability and their application in a practical engineering environment).

As noted in Appendix 8, the senior level institution Electronics Engineering Technology coursework integrates the following learning objectives throughout the curriculum:

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Demonstrate knowledge of ethical thinking and its application to issues in society
- Use computer and emerging technologies effectively
- Demonstrate an appreciation for aesthetics and creative activities
- Describe how natural systems function and recognize the impact of humans on the environment.

Assessment of the outcomes will be accomplished by student class presentations, research papers as well as project proposals, designs, implementations, testing, and demonstrations that will be administered throughout the various senior level institution courses. In addition, project management and engineering ethics are discussed within each course as appropriate for the various areas of electrical/electronics engineering technology. The senior level institution core courses are designed to build upon the general education, common prerequisite, and foundation EET courses as well as on the engineers' expertise, prior experience and program electives.

BAS Electric Engineering Technology
New Courses

Course No.	Course Title	Credits	Campus	Eff. Term
ETI 3671	Technical Economic Analysis	3	1,2,3,5,6,7,8	2009-2

Course Description: This course is designed to cover the formulation and application of analytical techniques to reach cost effective solutions to engineering problems. Students will learn time based analysis of selection, replacement, and lease-or-buy decisions including multiple alternatives, uncertainty, and sensitivity analysis, using a problem-solving approach. Prerequisite: MAC1105. (3 hr. lecture)

Course No.	Course Title	Credits	Campus	Eff. Term
CET 3126C	Advanced Microprocessors	4	1,2,3,5,6,7,8	2009-2

Course Description: This is an upper division level course for students majoring in electronics engineering technology that presents an in-depth study of advanced (16-bit and 32-bit) microprocessors as they apply to embedded systems. Students learn standards relating to embedded design, hardware requirements, embedded processors, memory, I/O, and buses and software topics relating to embedded design including device drivers, embedded operating systems, middleware and application Software. Students apply this knowledge to the design, development, and testing of an embedded system. Prerequisite: CET 2123C. Laboratory fee. (2 hr lecture, 4 hr lab)

Course No.	Course Title	Credits	Campus	Eff. Term
CET 4190C	Applied Digital Signal Processing	4	1,2,3,5,6,7,8	2009-2

Course Description: This is an upper division level course for students majoring in electronics engineering technology. Digital signal processing (DSP) is the study of signals in a digital representation and the processing methods of these signals. Students learn digital signal processing and analog signal processing, including how to convert between analog and digital forms, how to measure or filter signals, technologies used for digital signal processing including field-programmable gate arrays (FPGAs), digital signal controllers (mostly for industrial apps such as motor control), and stream processors, among others. Prerequisites: CET 3126C, EET4136C. Laboratory fee. (2 hr. lecture, 4 hr. lab)

Course No.	Course Title	Credits	Campus	Eff. Term
EET 3158C	Linear Integrated Circuits & Devices	4	1,2,3,5,6,7,8	2009-2

Course Description: This is an upper division level course for students majoring in electronics engineering technology designed to provide students with practical skills and knowledge needed for the application of operational amplifiers, comparators, phase-locked loops, timers, regulators, other integrated circuits in electronic systems. Students learn to apply these skills towards the design of amplifiers, active filters, oscillators, differentiators, integrators and other miscellaneous integrated circuit based systems. Prerequisite: EET2101C. Laboratory fee. (2 hr. lecture; 4 hr. lab)

Course No.	Course Title	Credits	Campus	Eff. Term
EET 3541	Power Systems	3	1,2,3,5,6,7,8	2009-2

Course Description: This is an upper division level course for students majoring in electronics engineering technology covering specific issues of electrical power systems. Students learn about power factor, three phase circuits, and transformers. Prerequisite: EET1025C. (3 hr lecture)

Course No.	Course Title	Credits	Campus	Eff. Term
EET 3716C	Advanced Systems Analysis	4	1,2,3,5,6,7,8	2009-2

Course Description: This is an upper division level course for students majoring in electronics engineering technology designed to prepare students to perform electrical circuit systems analysis using Laplace transforms and partial fraction expansion. Students learn theorems, frequency response and bode plots, and their application towards practical systems. Prerequisite: EET2101C. Co-requisite MAC2312. Laboratory fee. (2 hr. lecture, 4 hr. lab)

Course No.	Course Title	Credits	Campus	Eff. Term
EET 4136C	Signals and Systems	4	1,2,3,5,6,7,8	2009-2

Course Description: This course is designed to cover the use of Fourier analysis in electrical and electric systems, and introduction to probability theory, linear algebra, and complex variables. Students will learn how to apply convolution, Fourier transforms, Laplace, and z transforms towards electrical signals and systems. Prerequisite: MAC2311. Laboratory fee. (2 hr lecture, 4 hr lab)

Course No.	Course Title	Credits	Campus	Eff. Term
EET 4732C	Feedback Control Systems	4	1,2,3,5,6,7,8	2009-2

Course Description: This is an upper division course designed to introduce students to the analysis of networks and control systems. Students learn about stability and compensation considerations, using root locus, the Nichols chart, and Bode plots; simulation techniques; and how to apply these principles to build and test control systems. Prerequisite: EET3158C. Laboratory fee. (2 hr. lecture; 4 hr. lab)

Course No.	Course Title	Credits	Campus	Eff. Term
EST 3542C	Programmable Logic Controllers	4	1,2,3,5,6,7,8	2009-2

Course Description: This course is designed to provide students with the skills to design, operate, and test PLC systems. Students learn logic fundamentals, programming technologies, integrated circuits, and number systems as applied to PLC technology. Prerequisite: CET2123C. Laboratory fee. (2 hr. lecture; 4 hr. lab)

Course No.	Course Title	Credits	Campus	Eff. Term
ETI 3704	Industrial Issues in Electronics Engineering Tech.	3	1,2,3,5,6,7,8	2009-2

Course Description: This course is designed to teach students principles of safety in typical industrial electronics and manufacturing environments. Students will learn analysis and design of safety programs for industry, with emphasis on the occupational safety and health act (OSHA), the National Electrical Code, and Materials Safety Data Sheets (MSDS). Prerequisite: none. (3 hr. lecture)

Course No.	Course Title	Credits	Campus	Eff. Term
ETI 3704	Safety Issues in Electronics Engineering Tech.	3	1,2,3,5,6,7,8	2009-2

Course Description: This course is designed to teach students principles of safety in typical industrial electronics and manufacturing environments. Students will learn analysis and design of safety programs for industry, with emphasis on the occupational safety and health act (OSHA), the National Electrical Code, and Materials Safety Data Sheets (MSDS). Prerequisite: none. (3 hr. lecture)

Course No.	Course Title	Credits	Campus	Eff. Term
ETI 4480C	Applied Robotics	3	1,2,3,5,6,7,8	2009-2

Course Description: This is an upper division level course designed as an introduction to robotics programming and includes robotic applications for multifunction part manipulation and motion with stepper and servo-motors. Students learn topics related to robotic design including robotic vision, motion planning, sensing and sensors, actuators, navigation systems, mobility, forward and inverse kinematics, and non-holonomic path planning. Laboratory activities provide hands-on application of concepts and theories. Prerequisite: CET3126C. Laboratory fee. (2 hr lecture, 4 hr lab)

APPROVE_____OPPOSE_____ MORE INFORMATION_____

3. School of Education
Changes to BS in Physics and Biology

Change Existing Program

Title: Secondary Science Education – Physics
Program Code: S4103
Number of Credits: From 133 to 120
Effective Term: 2008-1
Campus: 1,2,3,5,6,7,8

Add Courses:	Remove Courses:
AST 1002	BSC2010
EDG 3321	BSC 2010L
EDG 3411	CHM1045L
EEX 3071	CHM 1046
MAP 2302	CHM 1046L
PHY 4424	EDF 3111
RED 3013	EEX 3010
	EDG 3410
	ISC 3012
	PHY 3019
	PHY 3101L
	PHZ 3113
	RED 3352

Change Existing Courses
New Course Description

Course No.	Course Title	Credits	Campus	Eff. Term
PHY 3504C	Thermodynamics & Waves	3	1,2,3,5,6,7,8	2008-1

To
PHY 3504

Course Description: This course is an introduction to mechanical waves and classical thermodynamics. The student will learn the physics of oscillations and mechanical waves and the postulates and results of the kinetic theory of gases, the laws of thermodynamics and their applications to heat engines.

Course No.	Course Title	Credits	Campus	Eff. Term
PHY 4424	Geometrical & Physical Optics	3	1,2,3,5,6,7,8	2008-1

Course Description: This course is an intermediate study of topics in classical optics, as well as a conceptual introduction to modern optics. The student will learn the fundamental principles and applications of classical optics and optical instruments, and will gain an understanding of unfamiliar optical phenomena through inquiry activities.

Add New Courses:

Course No.	Course Title	Credits	Campus	Eff. Term
PHY 3802L	Immediate Physics Laboratory	1	1,2,3,5,6,7,8	2008-1

Course Description: This is a laboratory course consisting of a series of experiments related to intermediate courses in classical mechanics, waves, thermodynamics, electromagnetism and modern physics. The student will learn skills in the design, performance and reporting of physics experiments as well as reinforcing concepts learned in the corresponding physics courses.

Course No.	Course Title	Credits	Campus	Eff. Term
EME 3410	Instructional Tech. in Math/Sci.	2	1,2,3,5,6,7,8	2008-1

Course Description: This course provides teacher with experiences that allow them to use their knowledge of mathematics and science to select technology tools for application in the secondary classroom. Students will learn to apply tools such as spreadsheets, statistical packages, graphing calculators, data collection devises, probeware, virtual manipulatives, virtual labs, simulations, software, and internet resources.

Course No.	Course Title	Credits	Campus	Eff. Term
SCE 3863	Teaching &Learning the Nature of Sci.	3	1,2,3,5,6,7,8	2008-1

Course Description: This course is designed to introduce the pre-service teacher to the philosophical, historical, and sociological views of the nature of science and its role in science education reform. Students will develop instructional materials and strategies focusing on the nature of science. Fifteen contact hours of field experience are required.

Course No.	Course Title	Credits	Campus	Eff. Term
SCE 4943	Science Education Seminar	3	1,2,3,5,6,7,8	2008-1

Course Description: The course provides the preservice educator opportunities to discuss and reflect on their development and mastery of the preprofessional Florida Educator Accomplished Practices during the completion of their internship in a grade 6-12 science setting.

APPROVE_____OPPOSE_____ MORE INFORMATION_____

Miami Dade College

Science Education -Physics
Program Comparison

Current Program 133 Credits	Revised Program 120 Credits
Lower Division (80 credits)	Lower Division (60 credits)
Communication: (6 credits) ENC1101 ENC1102	**Communication: (6 credits)** ENC1101 ENC1102
Oral communication: (3 credits) LIT2480 or SPC1026	**Oral communication: (3 credits)** Oral Communications Requirements
Humanities: (6 Credits) Humanities (Group A) Humanities (Group B)	**Humanities: (6 Credits)** Humanities (Group A) Humanities (Group B)
Social Science: (12 Credits) PSY2012 AMH2010 or AMH2020 DEP2000 Diversity Requirement	**Social Science: (6 Credits)** Social Science (Group A) DEP2000 Recommended Social Science (Group B)
Natural Science: (28 Credits) BSC2010 (**REMOVED**) BSC2010L (**REMOVED**) CHM1045 (**MOVED to B.S.**) CHM1045L (**REMOVED**) CHM1046 (**REMOVED**) CHM1046L (**REMOVED**) GLY1010 PHY2048 PHY2048L PHY2049 PHY2049L	**Natural Science: (16 Credits)** BSC1005 GLY1010 PHY2048 PHY2048L PHY2049 PHY2049L
Mathematics: (9Credits) MAC 2311 MAC2312	**Mathematics: (9 Credits)** MAC 2311 MAC2312
Computer Competency: (4 credits) CGS1060	**Computer Competency: (0-4 credits)** CGS1060 or Exam
Program Pre-requisites: (12 Credits) EDF1005 EDG2701 EME2040 EEX2000	**Program Pre-requisites: (14 Credits)** EDF1005 EDG2701 EME2040 EEX2000 EME3410 (**NEW**)
Electives: (0 Credits)	**Electives: (0 Credits)**

Upper Division (53credits)	Upper Division (60 credits)
Professional Education Core: (18 credits)	**Professional Education Core: (18 credits)**
EDF3111: Human Development & Learning (**REMOVED**)	EDG3321: General Teaching Skills (**ADDED**)
EDF4430: Measurement Evaluation & Assessment in Education.	EDF4430: Measurement and Assessment in Education
EDG3410: Classroom Management and Communication K-12 (**REMOVED**)	EDG3411: Classroom Management for Regular and Exceptional Students (**ADDED**)
EEX3010: Nature & Needs of Exceptional Students (**REMOVED**)	EEX3071: Teaching Exceptional and Diverse Populations in Inclusive Settings (**ADDED**)
RED3352: Reading in the Content Area (**REMOVED**)	RED3013:Foundations of Reading Instruction (**ADDED**)
TSL4324C:ESOL Strategies for Content Area Teachers	TSL4324C:ESOL Strategies for Content Area Teachers
Physics Content Discipline: (23 credits)	**Physics Content Discipline: (21 credits)**
ISC 3012: History of Science (**REMOVED**)	AST1002: Astronomy (**ADDED**)
	CHM1045: General Chemistry (**MOVED from A.A.**)
PHY3019: Technology in Physics Teaching (**REMOVED**)	
PHY3101: Modern Physics	PHY3101: Modern Physics
PHY3101L: Modern Physics (**REMOVED**)	
PHY3504C: Thermodynamics and Waves	PHY3504: Thermodynamics and Waves
PHY4220: Classical Mechanics	PHY4220: Classical Mechanics
	PHY4424: Optics (**ADDED**)
	PHY3802L: Intermediate Physics Lab –Inquiry (**NEW**)
PHZ3113: Mathematical Physics (**REMOVED**)	MAP2302: Differential Equations (**ADDED**)
Science Education Content Discipline: (6 credits)	**Science Education Content Discipline: (9 credits)**
SCE4362: Methods of Teaching Science 1	SCE4362: Methods of Teaching Science
SCE4363: Methods of Teaching Science 2	SCE4363: Advanced Topics in Science Education Practicum
	SCE 3863: Teaching and Learning the Nature of Science (**NEW**)
Internship: (12 credits)	**Internship: (12 credits)**
SCE4945:Student Teaching/Science Education Internship and Seminar	SCE4945:Student Teaching/Science Education Internship
	SCE4943: Science Education Seminar (**NEW**)

Change Existing Program
Title: Secondary Science Education – Biology
Program Code: S4100
Number of Credits: From 126 to 120
Effective Term: 2008-1
Campus: 1,2,3,5,6,7,8

Add Courses:	Remove Courses:
PSC 1515	BOT 3015
EDG 3321	BOT 3015L
EDG 3411	EDG 3111
EEX 3071	EDG 3410
RED 3013	EEX 3010
MCB 2010	GLY 1010
MCB 2010L	PCB 4676
BSC 2020	RED 3352
	ZOO 3021
	ZOO 3021L

Change Existing Courses
New Course Description

Course No.	Course Title	Credits	Campus	Eff. Term
BCH 3023	Introductory Biochemistry	3	6	2008-1

Course Description: This course surveys the fundamental components of biochemistry. In this course, students will learn concepts such as the structure and function of amino acids, proteins, carbohydrates, lipids, and nucleic acids, together with discussions of oxidative metabolism and regulation.

Course No.	Course Title	Credits	Campus	Eff. Term
BCH 3023L	Introductory Biochemistry Lab	2	6	2008-1

Course Description: This laboratory course complements the lecture co-requisite BCH 3023, which involves the study of the fundamental components of biochemistry. In this laboratory course students will learn and will be provided with hands-on experiences with the concepts addressed in the lecture course.

Course No.	Course Title	Credits	Campus	Eff. Term
MCB 2010	Microbiology	3	1, 2, 3,5,4,6	2008-1

Course Description: This course introduces basic principles of morphology, physiology, biochemistry and genetics of microorganisms. The students will learn representative types of microorganisms including bacteria, algae, protozoa and viruses and the roles of various microorganisms in health and disease, modes of transmission and the effects of their activities in our biosphere. Students are strongly recommended to take the laboratory component MCB 2010L.

Course No.	Course Title	Credits	Campus	Eff. Term
MCB 2010L	Microbiology Laboratory	2	1, 2, 3,5,4,6	2008-1

Course Description: This Laboratory course to accompany MCB-2010 complements lecture topics. Students will learn and have direct experience with fundamental techniques for observation, isolation, cultivation, counting, identification, and control of microbes.

Course No.	Course Title	Credits	Campus	Eff. Term
PCB 3043	Fundamentals of Ecology	3	6	2008-1

Course Description: This is a foundations course in ecology. In this course, students will learn the basic principles of ecology at organismal, population, community, and ecosystem levels, including consideration of Florida's ecosystems and human impact on those systems.#####

Course No.	Course Title	Credits	Campus	Eff. Term
PCB 3060	Principles of Genetics	3	6	2008-1

Course Description: This course is an introduction to the mechanisms of transmission of hereditary information. Students will learn the classical Mendelian principles of heredity, deviation of Mendelian principles, genetic analysis, linkage and mapping, genetics of populations, gene regulation, mutation, the genetic basis of cancer and other genetic disorders will also be studied.

Add New Courses:

Course No.	Course Title	Credits	Campus	Eff. Term
EME 3410	Instructional Tech. in Math/Sci.	2	1,2,3,5,6,7,8	2008-1

Course Description: This course provides teacher with experiences that allow them to use their knowledge of mathematics and science to select technology tools for application in the secondary classroom. Students will learn to apply tools such as spreadsheets, statistical packages, graphing calculators, data collection devises, probeware, virtual manipulatives, virtual labs, simulations, software, and internet resources.

Course No.	Course Title	Credits	Campus	Eff. Term
SCE 3863	Teaching & Learning the Nature of Sci.	3	1,2,3,5,6,7,8	2008-1

Course Description: This course is designed to introduce the pre-service teacher to the philosophical, historical, and sociological views of the nature of science and its role in science education reform. Students will develop instructional materials and strategies focusing on the nature of science. Fifteen contact hours of field experience are required.

Course No.	Course Title	Credits	Campus	Eff. Term
SCE 4943	Science Education Seminar	3	1,2,3,5,6,7,8	2008-1

Course Description: The course provides the preservice educator opportunities to discuss and reflect on their development and mastery of the preprofessional Florida Educator Accomplished Practices during the completion of their internship in a grade 6-12 science setting.
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APPROVE_____OPPOSE_____ MORE INFORMATION_____

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Miami Dade College

Science Education -Biology
Program Comparison

Current Program 125 Credits	Revised Program 120 Credits
Lower Division (67 credits)	Lower Division (60 credits)
Communication: (6 credits) ENC1101 ENC1102	**Communication: (6 credits)** ENC1101 ENC1102
Oral communication: (3 credits) LIT2480 or SPC1026	**Oral communication: (3 credits)** Oral Communications Requirements
Humanities: (6 Credits) Humanities (Group A) Humanities (Group B)	**Humanities: (6 Credits)** Humanities (Group A) Humanities (Group B)
Social Science: (12 Credits) PSY2012 AMH2010 or AMH2020 DEP2000 Diversity Requirement	**Social Science: (6 Credits)** Social Science (Group A) DEP2000 Recommended Social Science (Group B)
Natural Science: (27 Credits) BSC2010 BSC2010L BSC2011 BSC2011L CHM1045 CHM1045L CHM1046 CHM1046L CHM2200 (**MOVED to B.S. Requirement**) CHM2200L(**MOVED to B.S. Requirement**) GLY1010 (**REMOVED**)	**Natural Science: (19 Credits)** BSC2010 BSC2010L BSC2011 BSC2011L CHM1045 CHM1045L CHM1046 CHM1046L PSC1515(**ADDED**)
Mathematics: (9Credits) MAC1105 or above (6 credits) MTG2204	**Mathematics: (6 Credits)** MAC1105 or above (6 credits)
Computer Competency: (4 credits) CGS1060	**Computer Competency: (0-4 credits)** CGS1060 or Exam
Program Pre-requisites: (12 Credits) EDF1005 EDG2701 EME2040 EEX2000	**Program Pre-requisites: (14 Credits)** EDF1005 EDG2701 EME2040 EEX2000 EME3410 (**NEW**)
Electives: (0 Credits)	**Electives: (0 Credits)**

Upper Division (58 credits)	Upper Division (60 credits)
Professional Education Core: (18 credits)	**Professional Education Core: (18 credits)**
EDF3111: Human Development & Learning (**REMOVED**)	EDG3321: General Teaching Skills (**ADDED**)
EDF4430: Measurement Evaluation & Assessment in Education.	EDF4430: Measurement and Assessment in Education
EDG3410: Classroom Management and Communication K-12 (**REMOVED**)	EDG3411: Classroom Management for Regular and Exceptional Students (**ADDED**)
EEX3010: Nature & Needs of Exceptional Students (**REMOVED**)	EEX3071: Teaching Exceptional and Diverse Populations in Inclusive Settings (**ADDED**)
RED3352: Reading in the Content Area (**REMOVED**)	RED3013: Foundations of Reading Instruction (**ADDED**)
TSL4324C: ESOL Strategies for Content Area Teachers	TSL4324C: ESOL Strategies for Content Area Teachers
Biology Content Discipline: (22 credits)	**Biology Content Discipline: (18 credits)**
BOT3015: Survey of Plant Diversity (**REMOVED**)	
BOT 3015L: Survey of Plant Diversity Lab (**REMOVED**)	
BCH3023: Intro. to Biochemistry	BCH3023: Intro to Biochemistry
BCH3023: Intro to Biochemistry Lab	BCH3023L: Intro to Biochemistry Lab
	CHM2200: Survey of Organic (**MOVED from A.A.**)
	CHM2200L: Survey of Organic Lab (**MOVED from A.A.**)
	MCB2010: Microbiology (**ADDED**)
	MCB 2010L: Microbology Lab (**ADDED**)
PCB 3043: Fundamentals of Ecology	PCB 3043: Fundamentals of Ecology
PCB 3060: Principles of Genetics	PCB 3060: Principles of Genetics
PCB 4676: Evolution (**REMOVED**)	
ZOO3021: Survey of Animal Diversity (**REMOVED**)	
ZOO3021L: Survey of Animal Diversity Lab (**REMOVED**)	BSC2020: Human Biology (**ADDED**)
Science Education Discipline: (6 credits)	**Science Education Discipline: (9 credits)**
SCE4362: Methods of Teaching Science 1	SCE4362: Methods of Teaching Science
SCE4363: Methods of Teaching Science 2	SCE4363: Advanced Topics in Science Education Practicum
	SCE 3863: Teaching and Learning the Nature of Science (**NEW**)
Internship: (12 credits)	**Internship: (12 credits)**
SCE4945: Student Teaching/Science Education Internship and Seminar	SCE4945: Student Teaching/Science Education Internship
	SCE4943: Science Education Seminar (**NEW**)

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4. School of Justice
   Course Management Systems Requirements from Florida Department of Law Enforcement
   Traditional Correctional BRT Program (County and State)

Change Existing Program (County)
From: Correctional Officer
To: Traditional Correctional BRT Program County
Program Code: 57020
Number of Credits: From 597 to 568
Effective Term: 2007-3
Campus: 1
Delete Courses
CJD 0747
CJK 0050
CJK 0095

Add New Courses:

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0051	CMS Criminal Justice Defensive Tactics	2.666	1	2007-3

Course Description: Students will learn how to physically defend themselves, physically control persons under arrest, and know what level of force is appropriate under differing circumstances. Additionally, a physical conditioning program is part of this course. For School of Justice students only.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0280	CMS Criminal Justice Officer Physical Fitness Training	1.333	1	2007-3

Course Description: Students will learn the benefits of maintaining physical fitness to include nutrition and diet. Students will learn of the effects of stress and how to deal with it; how to build up muscular and cardiovascular endurance and perform the exercises as required. For School of Justice students only.

Change Existing Courses:
Course Number: CJD 0741
Course Title: Emergency Preparedness (County)
Number of Credits: From VAR to 0.86
Clock Hours/Week: From VAR to 26
Effective Term: 2007-3
Campus: 1

Course Number: CJD 0741
Course Title: Emergency Preparedness (State)
Number of Credits: From VAR to 0.866
Clock Hours/Week: From VAR to 26
Effective Term: 2007-3
Campus: 1

APPROVE_____OPPOSE_____ MORE INFORMATION_____

This is the OLD program sheet for CO

VOCATIONAL CREDIT CERTIFICATE
PROGRAM OF STUDY: <u>CORRECTIONAL OFFICER - COUNTY (57020)</u>
EFFECTIVE TERM: <u>Summer 2007 (2007-3)</u>

I. GENERAL EDUCATION REQUIREMENTS

1. COMPLETION POINT - A (597.00 hours)

CJD 0478 - Correctional Officer Basic Defensive Driver Training (0.53credits)

CJD 0741 - Emergency Preparedness (0.3 vocational credits)

CJD 0747 - State Exam Review for Correctional Officer Certification (0.70 credits) – **DELETE**

CJD 0750 - Interpersonal Skills 2 (1.7 vocational credits)

CJD 0752 - Correctional Operations (2.1 vocational credits)

CJD 0770 - Criminal Justice Legal 1 (1.5 vocational credits)

CJD 0771 - Criminal Justice Legal 2 (0.7 vocational credit)

CJD 0772 - Criminal Justice Communications (1.4 vocational credits)

CJD 0773 - Interpersonal Skills 1 (2.1 vocational credits)

CJK 0031 - First Aid for Criminal Justice Officers (1.33 credits)

CJK 0040 - Firearms (2.93-3.47 credits)

CJK 0050 - Criminal Justice Defensive Tactics (3.33 credits) – **DELETE**

CJK 0095 - Criminal Justice Special Topics (0.67 credits) - **DELETE**

* End of Program Sheet *

This is what the new program sheet should look like!

VOCATIONAL CREDIT CERTIFICATE
PROGRAM OF STUDY: <u>CORRECTIONAL OFFICER - COUNTY (57020)</u>
EFFECTIVE TERM: <u>Summer 2007 (2007-3)</u>

I. GENERAL EDUCATION REQUIREMENTS

1. COMPLETION POINT - A (**564.6 Contact Hours, 18.82 Credit**)
Test type(s) needed:

CJD 0770 – Criminal Justice Legal 1 (1.5 vocational credits)

CJD 0771 – Criminal Justice Legal 2 (0.7 vocational credit)

CJD 0772 – Criminal Justice Communications (1.4 vocational credits)

CJD 0773 – Interpersonal Skills 1 (2.06 vocational credits)

CJD 0750 – Interpersonal Skills 2 (1.66 vocational credits)

CJK 0051 – CMS Criminal Justice Defensive Tactics (2.66 credits) - **ADD**

CJK 0040 – CMS Criminal Justice Firearms (2.66 credits)

CJK 0031 – CMS First Aid for Criminal Justice Officers (1.33 credits)

CJD 0741 – Emergency Preparedness (0.86 vocational credits)

CJD 0752 – Correctional Operations (2.13 vocational credits)

CJK 0280 – CMS Criminal Justice Officer Physical Fitness Training (1.33 credits) - **ADD**

CJD 0478 - Correctional Officer Basic Defensive Driver Training (0.53 credits)

* End of Program Sheet *

Change Existing Program (State)
From: Correctional Officer
To: Traditional Correctional BRT Program State
Program Code: 57021
Number of Credits: From 595 to 552
Effective Term: 2007-3
Campus: 1
Delete Courses
CJD 0747
CJK 0050
CJK 0095

Add New Courses:

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0051	CMS Criminal Justice Defensive Tactics	2.666	1	2007-3

Course Description: Students will learn how to physically defend themselves, physically control persons under arrest, and know what level of force is appropriate under differing circumstances. Additionally, a physical conditioning program is part of this course. For School of Justice students only.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0280	CMS Criminal Justice Officer Physical Fitness Training	1.333	1	2007-3

Course Description: Students will learn the benefits of maintaining physical fitness to include nutrition and diet. Students will learn of the effects of stress and how to deal with it; how to build up muscular and cardiovascular endurance and perform the exercises as required. For School of Justice students only.

APPROVE_____OPPOSE_____ MORE INFORMATION_____

This is the OLD program sheet for CO.

VOCATIONAL CREDIT CERTIFICATE
PROGRAM OF STUDY: <u>CORRECTIONAL OFFICER - STATE (57021)</u>
EFFECTIVE TERM: <u>Summer 2007 (2007-3)</u>

I. GENERAL EDUCATION REQUIREMENTS

1. COMPLETION POINT - A (595.00 hours)
Test type(s) needed:

CJD 0741 - Emergency Preparedness (0.3 vocational credits)

CJD 0747 - State Exam Review for Correctional Officer Certification
      (0.70 credits)- **DELETE**

CJD 0750 - Interpersonal Skills 2 (1.7 vocational credits)

CJD 0752 - Correctional Operations (2.1 vocational credits)

CJD 0770 - Criminal Justice Legal 1 (1.5 vocational credits)

CJD 0771 - Criminal Justice Legal 2 (0.7 vocational credit)

CJD 0772 - Criminal Justice Communications (1.4 vocational credits)

CJD 0773 - Interpersonal Skills 1 (2.1 vocational credits)

CJK 0031 - First Aid for Criminal Justice Officers (1.33 credits)

CJK 0040 - Firearms (2.93-3.47 credits)

CJK 0050 - Criminal Justice Defensive Tactics (3.33 credits)- **DELETE**

CJK 0095 - Criminal Justice Special Topics (0.67 credits) - **DELETE**

* End of Program Sheet *

This is what the new program sheet should look like!

VOCATIONAL CREDIT CERTIFICATE
PROGRAM OF STUDY: <u>CORRECTIONAL OFFICER - STATE (57021)</u>
EFFECTIVE TERM: <u>Summer 2007 (2007-3)</u>

I. GENERAL EDUCATION REQUIREMENTS

1. COMPLETION POINT - A (**551.1 Contact Hours, 18.37 Credits**)
Test type(s) needed:

CJD 0770 – Criminal Justice Legal 1 (1.5 vocational credits)

CJD 0771 – Criminal Justice Legal 2 (0.7 vocational credit)

CJD 0772 – Criminal Justice Communications (1.4 vocational credits)

CJD 0773 – Interpersonal Skills 1 (2.1 vocational credits)

CJD 0750 – Interpersonal Skills 2 (1.7 vocational credits)

CJK 0051 – CMS Criminal Justice Defensive Tactics (2.66 credits) - **ADD**

CJK 0040 – CMS Criminal Justice Firearms (2.66 credits)

CJK 0031 – CMS First Aid for Criminal Justice Officers (1.33 credits)

CJD 0741 – Emergency Preparedness (0.86 vocational credits)

CJD 0752 – Correctional Operations (2.13 vocational credits)

CJK 0280 – CMS Criminal Justice Officer Physical Fitness Training (1.33 credits) - **ADD**

* End of Program Sheet *

Change Existing Program
From: Crossover - CORR-OFC TO LE OFC
To: Traditional CO to CMS LE BRT Cross-Over Program
Program Code: 57016
Number of Credits: From 301.80 to 457
Effective Term: 2007-3
Campus: 1
Delete Courses
CJD 0723
CJD 0730
CJD 0731
CJD 0732
CJD 0734
CJD 0781
CJD 0210

Add New Courses:

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0212	Cross-Over CO to LE CMS High-Liability	0.266	1	2007-3

Course Description: Basic recruit students will learn the required Firearms High-Liability Proficiency Skills using a handgun (revolver or semi-automatic pistol for both daylight and night) and a long gun (shotgun or semiautomatic rifle/carbine), pursuant to Rule 11B-35.0024, F.A.C.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0221	Correctional Cross-Over to LE Introduction and Legal	1.566	1	2007-3

Course Description: The students will learn and understand the importance of ethics, values, and professionalism, both in their personal lives and in their role as law enforcement officers.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0222	Correctional Cross-Over to LE Communications	1.86	1	2007-3

Course Description: Students will learn to take statements from victims, witnesses, and suspects; write clear concise and accurate incident and arrest reports; and will engage in note taking skills such as grammar, spelling and proper sentence structure. For School of Justice students only.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0223	Correctional Cross-Over to LE Human Issues	1.06	1	2007-3

Course Description: This course provides the student with a basic understanding of human relations with an emphasis on the student's ability as a Police Officer to influence others in a positive manner using interpretation skills. The student will learn the important role that interpersonal skills play in the relationship between the police and community. For School of Justice students only.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0422	Dart-Firing Stun Gun	0.266	1	2007-3

Course Description: Students will learn how a dart-firing stun gun works, what effects a dart-firing stun gun has on the human body, and the necessary medical considerations for individuals exposed to a dart-firing stun gun. This course satisfies the statutory requirements of F.S. 943.1717(2) for an officer to use a dart-firing stun gun in Florida.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0061	Patrol I	1.933	1	2007-3

Course Description: Students will learn problem solving, officer safety and survival, patrolling the assigned area and patrol functions. This course is the patrol I section of the Florida department of law enforcement, criminal justice standards and training commission new basic law enforcement recruit training program. CMS BRT Program, version 2008.04.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0062	Patrol II	1.33	1	2007-3

Course Description: Students will learn about incident command, crowd control, criminal street gangs and extremist groups. Students will learn about Hazmat and Weapons of Mass Destruction. This is a vocational course in the patrol II section of the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission new Basic Law Enforcement recruit Training program. CMS BRT PROGRAM, VERSION 2008.04.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0071	Criminal Investigations	1.866	1	2007-3

Course Description: The students will learn what is required when doing searches and location of physical evidence, along with the reproduction and identification collection, preservation and transporting of evidence to the crime laboratory. The students learn the basic understanding of the investigation of various crimes encountered by a street officer in their initial involvement of a crime scene. In addition, the fundamentals of interviewing, interrogation and statement taking will be addressed. For School of Justice students only.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0076	Crime Scene Investigations	0.800	1	2007-3

Course Description: The students will learn the causes and effects of domestic violence; common facts and misconceptions about suicide and risks procedures for prevention and intervention and office's' responsibilities; identifying signs of adult, elder and child abuse and the proper procedure for reporting each. Students will learn the methods and skills for conducting an initial investigation, a death investigation, Sudden Infant Death Syndrome (SIDS) investigations, procedures for crime scene management; evidence collection and handling; developing information; and preparing an investigation report and characteristics and situations an officer may encounter.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0081	Traffic Stops	1.60	1	2007-3

Course Description: Students will learn the methods and skills for stopping a vehicle for a violation or other lawful reason including infractions, types of criminal violations, abandoned vehicle handling, procedures for making a felony stop and legal issues regarding traffic stops. For School of Justice Students only.

				Eff.
Course No.	**Course Title**	**Credits**	**Campus**	**Term**
CJK 0086	Traffic Crash Investigations	1.066	1	2007-3

Course Description: The student will learn traffic crash investigations; knowledge of common violations resulting in crashes; information gathering skills; identification and handling of evidence; photographing evidence; crash scene management; determining cause of accident; and completion of crash reports and driver exchange forms and returning the scene to normal.

Change Existing Course:
Course Number: CJK 0020
Course Title: Law Enforcement Vehicle Operations
To: CMS Law Enforcement Vehicle Operations
Number of Credits: 1.600
Effective Term: 2007-3
Campus: 1

APPROVE_____OPPOSE_____   MORE   INFORMATION_____

This is the old program sheet for Cross over.

VOCATIONAL CREDIT CERTIFICATE
PROGRAM OF STUDY: <u>CROSSOVER - CORR OFC TO LE OFC (57016)</u>
EFFECTIVE TERM: <u>Summer 2007 (2007-3)</u>

I. GENERAL EDUCATION REQUIREMENTS

1. COMPLETION POINT - A (301.80 hours)

CJD 0210 - State Exam Review for Police Officer Certification (.7 vocational credits) – **DELETE**

CJD 0723 - Vehicle Operations (1.1 vocational credits) – **DELETE**

CJD 0730 - Law Enforcement Legal 3 (1.1 vocational credits) – **DELETE**

CJD 0731 - Law Enforcement Patrol (2.1 vocational credits) – **DELETE**

CJD 0732 - Law Enforcement Traffic (1.5 vocational credits) – **DELETE**

CJD 0734 - Law Enforcement Investigations (2.1 vocational credits) – **DELETE**

CJD 0781 - Cross-Over Corrections to Law Enforcement (1.60 credits) – **DELETE**

* End of Program Sheet *

This is what the new program sheet should look like!

VOCATIONAL CREDIT CERTIFICATE
PROGRAM OF STUDY: CROSSOVER - CORR OFC TO LE OFC (57016)
EFFECTIVE TERM: Summer 2007 (2007-3)

I. GENERAL EDUCATION REQUIREMENTS

1. COMPLETION POINT - A (455.4 Contact Hours, 15.18 Credits)

CJK 0221 - Correctional Cross-Over to Law Enforcement Introduction and Legal
      (1.56 vocational credits) - **ADD**

CJK 0222 - Correctional Cross-Over to Law Enforcement Communications
      (1.86 vocational credits) - **ADD**

CJK 0223 - Correctional Cross-Over to Law Enforcement Human Issues
      (1.06 vocational credits) - **ADD**

CJK 0061 – Patrol I (1.93 vocational credits) - **ADD**

CJK 0062 – Patrol II (1.33 vocational credits) - **ADD**

CJK 0076 – Crime Scene Investigations (0.8 vocational credits) - **ADD**

CJK 0071 – Criminal Investigations (1.86 vocational credits) - **ADD**

CJK 0081 – Traffic Stops (1.6 vocational credits) - **ADD**

CJK 0086 – Traffic Crash Investigations (1.06 credits) - **ADD**

CJK 0020 – CMS Law Enforcement Vehicle Operations
      (1.6 vocational credits) – **ADD**

CJK 0422 – Dart-Firing Stun Gun (0.26 vocational credits) - **ADD**

CJK 0212 – Cross-over CO to LE CMS High-liability (0.26 vocational credits) - **ADD**

* End of Program Sheet *

Change Existing Program
From: Law Enforcement Officer
To: Florida CMS Law Enforcement BRT Program
Program Code: 57022
Number of Credits: From 760 to 770.00 (Pub) 768.3 (Actual)
Effective Term: 2007-3
Campus: 1

Delete Courses:		Add Courses:	
CJK 0006	CJK 0075	CJK 0061	CJK 0040
CJK 0010	CJK 0080	CJK 0062	CJK 0051
CJK 0015	CJK 0085	CJK 0071	CJK 0422
CJK 0050	CJK 0090	CJK 0081	CJK 0096
CJK 0060	CJK 0095	CJK 0086	
CJK 0070			

Add New Courses:

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0007	Introduction to Law Enforcement	0.36	1	2007-3

Course Description: This is an introduction to law and the students will learn the basics of law, ethics, professionalism, working with the community, the history of the Criminal Justice System in Florida and the Criminal Justice Standards and Training Commission.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0008	Legal	2.3	1	2007-3

Course Description: This is an introduction to law and the students will learn the basics of law, ethics, professionalism, working with the community, the history of the Criminal Justice System in Florida and the Criminal Justice Standards and Training Commission.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0017	Communications	2.53	1	2007-3

Course Description: In this course the students will learn to take statements from victims, witnesses, and suspects; write clear concise and accurate incident and arrest reports; and will engage in note taking skills such as grammar, spelling and proper sentence structure. For School of Justice students only.

Course No.	Course Title	Credits	Campus	Eff. Term
CJK 0011	Human Issues	1.33	1	2007-3

Course Description: This course provides the student with a basic understanding of human relations with an emphasis on the student's ability as a Police Officer to influence others in a positive manner using interpretation skills. The student will learn the important role interpersonal skills play in the relationship between the police and community. For School of Justice students only.

Course No.	Course Title	Credits	Campus	**Eff. Term**
CJK 0096	Criminal Justice Officer Physical Fitness Training	2.0	1	2007-3

Course Description: This course is the officer physical fitness section of the Florida department of law enforcement, criminal justice standards and training commission new basic law enforcement recruit training program. CMS BRT PROGRAM, version 2008.

APPROVE_____OPPOSE_____ MORE INFORMATION_____

Change Existing Course:
Course Number: CJK 0031
Course Title: First Aid for Criminal Justice Officers
To: CMS First Aid For Criminal Justice Officers
Number of Credits: 1.333
Effective Term: 2007-3
Campus: 1

Course Number: CJK 0040
Course Title: Firearms
To: CMS First Aid For Criminal Justice Firearms - County
Number of Credits: From 2.67-2.93 to 2.666
Effective Term: 2007-3
Campus: 1

Course Number: CJK 0040
Course Title: Firearms
To: CMS First Aid For Criminal Justice Firearms - Agency
Number of Credits: From VAR to 2.666
Effective Term: 2007-3
Campus: 1

Course Number: CJK 0040
Course Title: Firearms
To: CMS First Aid For Criminal Justice Firearms - Independence
Number of Credits: From 2.67-2.93 to 2.666
Effective Term: 2007-3
Campus: 1

Course Number: CJK 0040
Course Title: Firearms
To: CMS First Aid For Criminal Justice Firearms - State
Number of Credits: From VAR to 2.666
Effective Term: 2007-3
Campus: 1

APPROVE_____OPPOSE_____ MORE INFORMATION_____

This is the OLD program sheet for LE

VOCATIONAL CREDIT CERTIFICATE
PROGRAM OF STUDY: <u>LAW ENFORCEMENT OFFICER (57022)</u>
EFFECTIVE TERM: <u>Summer 2007 (2007-3)</u>

I. GENERAL EDUCATION REQUIREMENTS

1. COMPLETION POINT - A (760.00 hours)

CJK 0006 - Criminal Justice Introduction and Law (2.23 credits)- **DELETE**

CJK 0010 - Human Issues (1.67 credits)- **DELETE**

CJK 0015 - Communications (2.57 credits)- **DELETE**

CJK 0020 - Law Enforcement Vehicle Operations (1.60 credits)

CJK 0031 - First Aid for Criminal Justice Officers (1.33 credits)

CJK 0040 - Firearms (2.93-3.47 credits)

CJK 0050 - Criminal Justice Defensive Tactics (3.33 credits)- **DELETE**

CJK 0060 - Patrol (1.90 credits) – **DELETE**

CJK 0070 - Investigations (1.77 credits)- **DELETE**

CJK 0075 - Investigating Offenses (1.33 credits)- **DELETE**

CJK 0080 - Traffic Stops (2.07 credits)- **DELETE**

CJK 0085 - Traffic Crash Investigations (1.07 credits)- **DELETE**

CJK 0090 - Tactical Applications (1.80 credits)- **DELETE**

CJK 0095 - Criminal Justice Special Topics (0.67 credits)

* End of Program Sheet *

This is what the new program sheet should look like!

VOCATIONAL CREDIT CERTIFICATE
PROGRAM OF STUDY: <u>LAW ENFORCEMENT OFFICER (57022)</u>
EFFECTIVE TERM: <u>Summer 2007 (2007-3)</u>

I. GENERAL EDUCATION REQUIREMENTS

1. COMPLETION POINT - A (**768.30 Contact Hours, 25.61 Credits**)

CJK 0007 - Introduction to Law Enforcement (0.36 credits) – **ADD**

CJK 0008 - Legal (2.3 credits)- **ADD**

CJK 0017 - Communications (2.53 credits)- **ADD**

CJK 0011 – Human Issues (1.33 credits)- **ADD**

CJK 0061 – Patrol I (1.93 credits)- **ADD**

CJK 0062 – Patrol II (1.33 credits)- **ADD**

CJK 0076 – Crime Scene Investigations (0.8 credits)- **ADD**

CJK 0422 – Dart-Firing Stun Gun (0.26 credits)

CJK 0071 – Criminal Investigations (1.86 credits)- **ADD**

CJK 0081 – Traffic Stops (1.6 credits)- **ADD**

CJK 0086 – Traffic Crash Investigations (1.06 credits)- **ADD**

CJK 0020 – CMS Law Enforcement Vehicle Operations (1.6 credits)- **ADD**

CJK 0031 – CMS First Aid for Criminal Justice Officers (1.33 credits)

CJK 0040 – CMS Criminal Justice Firearms (2.66 credits)

CJK 0051 – CMS Criminal Justice Defensive Tactics (2.66 credits)

CJK 0096 – Criminal Justice Officer Physical Fitness Training (2.0 credits) – **ADD**

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* End of Program Sheet *

5. School of Nursing

Practical Nursing Courses – User Fees

Change: $ 65.00

To: $ 170.00

Effective Term: 2008-1

Campus: 4

PRN 0003C Practical Nursing 1 – Fundamental

PRN 0202C Practical Nursing 2 Medical – Surgical

PRN 0203C Practical Nursing 3 Medical – Surgical

PRN 0120C Practical Nursing 4 Maternal – Child Health

PRN 0933C Practical Nursing 5 – Transition to Graduation

APPROVE_____OPPOSE_____ MORE INFORMATION_____