

**Associate in Science Degree (AS) - 60 credits**

The AS in Advanced Manufacturing will provide students with the opportunity to acquire the knowledge and skill sets necessary for careers in manufacturing with an emphasis in industrial device and pharmaceutical manufacturing. The program prepares students for employment such as a Manufacturing Engineering Technician or Production Technician in manufacturing settings.

Course	Course Title	Credits	Pre-requisites	Co-requisites
<b>GENERAL EDUCATION REQUIREMENTS (15 credits hours)</b>				
ENC-1101	English Composition 1	3	None	None
SPC-1026	Fundamentals of Speech Comm.	3	None	None
PHI-2604	Critical Thinking & Ethics	3	ENC-1101	None
CLP-1006	Psychology of Personal Effectiveness	3	None	None
MAC-1105	College Algebra	3	MAT 1033 or CPT	None
<b>CORE COURSES (41 credits hours)</b>				
ETI-1622	Concepts of Lean and Six Sigma	3	None	None
ETI-1644	Advanced Manufacturing Supply Chain	3	None	None
ETI-1701	Industrial Safety	3	None	None
ETI-1181	Intro to Quality Assurance	3	None	None
ETI-2403	Advanced Manufacturing Technology	3	None	None
ETM-1315C	Applied Pneumatics & Hydraulics	3	MAC-1105	None
ETI-1040	Intro to Bioscience Manufacturing	3	None	None
ETI-1040 L	Intro to Bioscience Manufacturing Lab	2	None	ETI-1040
MTB-1322	Technical Mathematics 2	3	MAC-1105	None
EET-1015C	Direct Current Circuit	4	MAC-1105	None
EET-1025C	Alter. Current Circuit	4	EET-1015	MTB-1322
EET-1141C	Electronics 1	4	EET-1025C	None
EST-2542C	Programmable Logic Controllers 1	3	EET-1141C	None
<b>Capstone Course Requirement (4 Credits)</b>				
BSC-2943L	Bioscience Internship	4	Requires Department Approval	
<b>OR</b>				
ENG-1949	Co-op Work Experience	4	Requires Department Approval	

**GENERAL EDUCATION REQUIREMENTS (18 credits). For additional advising information, students should refer to the MDC General Education advising information of their advisor.**

- **CGS 1060**-Introduction to Microcomputer Usage (4 credits). By the 16<sup>th</sup> college level credit (excluding ESL, ENS, EAP, and college preparatory courses), a student must take and pass the Computer Competency Test or by the 31<sup>st</sup> college level credit (excluding ESL, ENS, EAP, and college preparatory courses), a student must pass CGS1060, an equivalent continuing education or vocational credit course or retest with a passing score on the Computer Competency Test.

**For more information about the Biotechnology Program Crime Scene Technology, please contact:**

**Program Support Specialist**

Lisa P. Morrison-Milton  
(305) 237-1598-North  
(305) 237-3175-Wolfson  
[lmilton@mdc.edu](mailto:lmilton@mdc.edu)