

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
GENERAL EDUCATION REQUIREMENTS (15 credits hours)				
ENC-1101	English Composition I	3	None	None
SPC-1017	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
CORE COURSES (41 credits hours)				
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	Introduction 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-1040L	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-1015C	MTB-1322
EET-1141C	Electronics I	4	EET-1025C	None
EST-2542C	Programmable Logic Controllers 1	3	EET-1141C	None
Capstone Course Requirement (4 Credits)				
BSC-2943L	Bioscience Internship	3 - 6	Requires Department Approval	
OR				
EGN-1949	Co-op Work Experience	1 - 4	Requires Department Approval	

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

- **CGS 1060**-Introduction to Microcomputer Usage (4 credits). By the 16th college level credit (excluding ESL, ENS, EAP, and college preparatory courses), a student must take and pass the Computer Competency Test or by the 31st 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.
- **MAC 1105** - College Algebra (3 credits). While there is no pre-requisite for College Algebra, students not demonstrating proficiency on the College Placement Test may be required to enroll in MAT 1033 prior to enrolling in MAC 1105.

For more information about the Biotechnology program, please contact:

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