Student ID:	Catalog: 2025-2026 Undergraduate Catalog
Student Name:	Program: Advanced Manufacturing Engineering, B.S.
Adviser Name:	Minimum Credits Required:

Advanced Manufacturing Engineering, B.S.

Freshman Year Fall Semester - 15 Hours

Course Name	Credit Hours:	Term Taken	Grade	Gen Ed
CHEM 14101 - College Chemistry I Laboratory	Credit Hours: 1			
CHEM 14103 - College Chemistry I	Credit Hours: 3			
ELTE 12433 - Introduction To Programming ²	Credit Hours: 3			
MATH 24004 - Calculus I	Credit Hours: 4			
MFGE 10001 - Introduction to Advanced Manufacturing ²	Credit Hours: 1	<u>_</u>		
English Composition requirement Credit Hours: 3 ¹				
Freshman Year Spring Semester - 17 Hours				
Course Name	Credit Hours:	Term Taken	Grade	Gen Ed
MATH 25004 - Calculus II	Credit Hours: 4			
MEEG 23003 - Introduction To Materials ²	Credit Hours: 3			
PHYS 20303 - University Physics I	Credit Hours: 3			
PHYS 20331 - University Physics I Laboratory	Credit Hours: 1			
SPCH 10003 - Introduction To Speech Communication	Credit Hours: 3			
English Composition requirement Credit Hours: 3 ¹				1
Sophomore Year Fall Semester - 16 Hours				
Course Name	Credit Hours:	Term Taken	Grade	Gen Ed
ELEG 21043 - Electric Circuits I ²	Credit Hours: 3			
ELEG 21131 - Electric Circuits II Laboratory ²	Credit Hours: 1			1
MATH 29174 - Differential Equations	Credit Hours: 4			
MEEG 20003 - Engineering Statics ²	Credit Hours: 3			
MEEG 20041 - CAD For Engineering ²	Credit Hours: 1			
PHYS 20403 - University Physics II	Credit Hours: 3			
PHYS 20431 - University Physics II Laboratory	Credit Hours: 1			
		12		

Sophomore Year Spring Semester - 15 Hours

Course Name	Credit Hours:	Term Taken	Grade	Gen Ed
ECON 22003 - Principles Of Microeconomics	Credit Hours: 3			
ELEG 29003 - Digital Systems I ²	Credit Hours: 3			
MATH 21003 - Probability And Statistics I	Credit Hours: 3			
MEEG 21003 - Introduction To Machine Analysis ²	Credit Hours: 3			
MFGE 20003 - Geometric Dimensioning and Tolerancing ²	Credit Hours: 3			

Course Name	Credit Hours:	Term Taken	Grade	Gen Ed
AMST 25103 - PLC Applications ²	Credit Hours: 3			
MFGE 31003 - CNC & Manufacturing Processes Planning ²	Credit Hours: 3			
MFGE 32003 - Fluid Power ²	Credit Hours: 3			
MFGE 36003 - Quality Planning and Control ²	Credit Hours: 3			
STAT 35043 - Mathematical Statistics I	Credit Hours: 3			
Junior Year Spring Semester - 15 Hours				
Course Name	Credit Hours:	Term Taken	Grade	Gen Ed
MFGE 33003 - Measurements and Instrumentation ²	Credit Hours: 3			
MFGE 34003 - Robotics Systems and Automation ²	Credit Hours: 3			
MFGE 35003 - Engineering Economics ²	Credit Hours: 3			
MGMT 41343 - Project Management ²	Credit Hours: 3			
• Fine Arts/Humanities/Social Sciences requirement Credit Hours : 3 ¹				
Senior Year Fall Semester - 15 Hours				
Course Name	Credit Hours:	Term Taken	Grade	Gen Ed
MFGE 41003 - Smart Manufacturing ²	Credit Hours: 3			
MFGE 45103 - Senior Design Project I ²	Credit Hours: 3			
• Fine Arts/Humanities/Social Sciences requirement Credit Hours : 3 ¹				
History/Government requirement Credit Hours: 3 ¹				
Upper-level technical elective Credit Hours: 3 ^{2,3}				
Senior Year Spring Semester - 12 Hours				
Course Name	Credit Hours:	Term Taken	Grade	Gen Ed
MFGE 45203 - Senior Design Project II ²	Credit Hours: 3			
MFGE 46003 - Managing the Advanced Manufacturing Enterprise ²	Credit Hours: 3			
• Fine Arts/Humanities/Social Sciences requirement Credit Hours : 3 ¹				
• Upper-level technical elective Credit Hours: 3 ^{2,3}				

120 Total Hours

- 1. General Education Core requirements. See Graduation Requirements section of catalog. Follow requirements with these stipulations: social sciences ECON 22003 is required; select one additional course, excluding ECON 21003.
- 2. These courses are used to determine major GPA, see Graduation Requirements section of this catalog. A cumulative GPA of 2.00 is required in these courses to meet graduation requirements.
- 3. Upper-level technical electives; select six hours from the following courses: CSCE 43233, CSCE 43303, MFGE 37003, MFGE 47003, MFGE 4675V, MGMT 35243, MGMT 35243.

Prior to graduation students must demonstrate competency in financial literacy by satisfactory completion of FINN 15201 - Personal Finance Applications (or an approved substitution) with a grade of C or better, or by a score of 70% or more on a challenge exam for FINN 15201.