

MECHANICAL ENGINEERING

ASSOCIATE OF SCIENCE IN MANUFACTURING

It is highly recommended that all freshmen engineering students starting fall 2017 purchase laptop computers. Laptop computer specifications are at: <https://www.atu.edu/engineering/specifications.php>.

Mechanical Engineering also offers a two-year program leading to the Associate of Science in Manufacturing. This program is aimed at providing graduates with an understanding of the processes, problems, and overall environment of the manufacturing industry. The program consists primarily of courses common to the first two years of the institution's Bachelor of Science in Mechanical Engineering program including targeted elective classes aimed at providing instruction in manufacturing processes, methods, and statistical analysis.

For a detailed policy regarding transfer credit for the Mechanical Engineering programs, please see the [Department of Mechanical Engineering](#) page.

Curriculum

The matrix below is a sample plan for all coursework required for this program.

Freshman

Fall	Credits
ENGL 1013 Composition I ¹	3
SS 1XXX Social Science Courses ¹	3
MATH 2914 Calculus I	4
CHEM 2124 General Chemistry I and CHEM 2120 General Chemistry I Lab	4
MCEG 1011 Introduction to Mechanical Engineering	1
TECH 1001 Orientation to the University	1
Total Hours	16

Spring	Credits
ENGL 1023 Composition II ¹	3
PHYS 2114 Calculus-Based Physics I and PHYS 2000 Physics Laboratory I	4
MATH 2924 Calculus II	4
MCEG 1002 Engineering Graphics	2
MCEG 2023 Engineering Materials	3
Total Hours	16

Sophomore

Fall	Credits
MCEG 2013 Statics	3
STAT 3153 Applied Statistics	3
SFHS 1XXX Social Sciences/Fine Arts/Humanities/Communication Courses ¹	3

Fall	Credits
FAH 1XXX Fine Arts and Humanities Courses ¹	3
USHG 1XXX U S HISTORY & GOVERNMENT ¹	3
Total Hours	15

Spring	Credits
SS 1XXX Social Science Courses ¹	3
FAH 1XXX Fine Arts and Humanities Courses ¹	3
MCEG 3013 Mechanics of Materials	3
MCEG 3023 Manufacturing Processes	3
MCEG 3612 Manufacturing Laboratory	2
STAT 3183 Statistical Process Control	3
Total Hours	17

¹See appropriate alternatives or substitutions in "General Education Requirements".