

MECHANICAL ENGINEERING, BACHELOR OF SCIENCE

Dr. John Krohn, Associate Dean
Corley Hall, Room 111-D
(479) 964-0833
jkrohn@atu.edu

Curriculum

Course	Title	Hours	Completed
Freshman			
Fall			
ENGL 1013	Composition I ¹	3	_____
CHEM 2124 & CHEM 2120	General Chemistry I and General Chemistry I Lab	4	_____
FAH 1XXX	Fine Arts and Humanities Courses ¹	3	_____
MATH 2914	Calculus I	4	_____
MCEG 1011	Introduction to Mechanical Engineering	1	_____
TECH 1001	Orientation to the University	1	_____
	Hours	16	
Spring			
ENGL 1023	Composition II ¹	3	_____
MATH 2924	Calculus II	4	_____
MCEG 1002	Engineering Graphics	2	_____
MCEG 2203	Computational Methods in Engineering	3	_____
PHYS 2114 & PHYS 2000	Calculus-Based Physics I and Physics Laboratory I	4	_____
	Hours	16	
Sophomore			
Fall			
Select one of the following:		4	_____
CHEM 2134 & CHEM 2130	General Chemistry II and General Chemistry II Lab		_____
PHYS 2124 & PHYS 2010	Calculus-Based Physics II and Physics Laboratory II		_____
MATH 2934	Calculus III	4	_____
MCEG 2013	Statics	3	_____
MCEG 2023	Engineering Materials	3	_____
	Hours	14	
Spring			
ELEG 2103	Electric Circuits I	3	_____
MATH 3243	Differential Equations I	3	_____
MCEG 2033	Dynamics	3	_____
MCEG 3013	Mechanics of Materials	3	_____
SS 1XXX	Social Science Courses ¹	3	_____
	Hours	15	
Junior			
Fall			
ELEG 2113	Electric Circuits II	3	_____
MCEG 3313	Thermodynamics I	3	_____
MCEG 3413	Fundamentals of Mechanical Design	3	_____

MCEG 3442	Mechanical Laboratory I	2	_____
ENGR Electives ²		3	
Hours		14	
Spring			
ENGR Electives ²		3	
MATH Elective ³		3	
MCEG/ELEG 4202	Engineering Design	2	_____
MCEG 4403	Mechanics of Fluids and Hydraulics	3	_____
MCEG 4423	Machine Component Design	3	_____
Hours		14	
Senior			
Fall			
MCEG/ELEG 3003	System Modeling and Analysis	3	_____
MCEG 4433	Thermodynamics II	3	_____
MCEG 4442	Mechanical Laboratory II	2	_____
MCEG 4491	Mechanical Design Project I	1	_____
Technical Elective ⁴		3	
USHG 1XXX	U.S. History and Government ¹	3	_____
Hours		15	
Spring			
ELEG 4303	Control Systems	3	_____
ENGR Electives ²		3	
ENGR Lab Elective ⁵		2	
FAH 1XXX	Fine Arts and Humanities Courses ¹	3	_____
MCEG 4443	Heat Transfer	3	_____
MCEG 4492	Mechanical Design Project II	2	_____
Hours		16	
Total Hours		120	

¹ See appropriate alternatives or substitutions in "General Education Requirements (<https://catalog.atu.edu/undergraduate/general-education-requirements/>)".

² 3000-level or above ELEG or MCEG course with minimum of three (3) hours at the 4000-level and approval of advisor.

³ Mathematics elective course to be chosen with approval of advisor from list of eligible courses maintained in the departmental office.

⁴ Technical elective course to be chosen with approval of advisor from list of eligible courses maintained in the departmental office.

⁵ 3000-level or above ELEG or MCEG laboratory class.