Mechanical Engineering (MECH)

Freshman

Fall	Hours	Spring	Hours
MATH 1610 Calculus I	4	MATH 1620 Calculus II	4
ENGL 1100 English Composition I	3	PHYS 1600 Engineering Physics I	4
Core History[1]	3	ENGL 1120 English Composition II	3
CHEM 1030 Fundamentals Chemistry I	3	Core Social Science[1]	3
CHEM 1031 Fundamental Chemistry I Laboratory	1	ENGR 1110 Introduction to Engineering	2
COMP 1230 Introduction to Computing with MATLAB	2		
ENGR 1100 Engineering Orientation	0		
	16		**16**

Sophomore

Fall	Hours	Spring	Hours
PHYS 1610 Engineering Physics II	4	MATH 2660 Topics in Linear Algebra	3
MECH 2020 Manufacturing Technology Lab	**2**	ENGR 2010 Thermodynamics	3
MATH 2630 Calculus III	4	MATL 2100 Introduction to Materials Science	3
MATH 2650 Linear Differential Equations	3	**MECH 2AA0 Mechanical Engineering Progress Assessment I**	**0**
MECH 2130 Mechanical Engineering Statics	**3**	**MECH 2220 Computer-Aided Engineering**	**3**
		MECH 2140 Kinematics and Dynamics	**3**
	16		**15**

Junior

Fall	Hours	Spring	Hours
ELEC 3810 Fundamentals of Electrical Engineering	3	INSY 3600 Engineering Economy	3
MECH 3020 Thermodynamics II	**3**	**MECH 3AA0 Mechanical Engineering Progress Assessment II**	**0**
MECH 3030 Fluid Mechanics	**3**	**MECH 3040 Heat Transfer**	**3**
MECH 3200 Concepts in Mechanical Design	**2**	**MECH 3050 Measurement and Instrumentation**	**3**
MECH 3120 Mechanics of Materials	**3**	**MECH 3140 System Dynamics and Controls**	**3**
MECH 3150 Dynamics Lab	**1**	**MECH 3230 Machine Design**	**3**
		MECH 3160 Mechanics Lab	**1**
	15		**16**

Senior

Fall	Hours	Spring	Hours
Core Literature[2]	3	Core Social Science[1]	3
PHIL 1020 Introduction to Ethics, 1040 Business Ethics, ***or*** 1110 Ethical and Conceptual Foundations of Science (Core Ethics)	3	Core Fine Arts	3
MECH 4240 Comprehensive Design I	**2**	**MECH 4250 Comprehensive Design II**	**2**
Technical Elective	**6**	**Technical Elective**	**3**

	Free Elective	3
	UNIV 4AA0 Achieve the Creed	0
	14	**14**

Total Hours: 122

1 The AU Bulletin lists the University Core Curriculum requirements for students in the College of Engineering. Students must complete a sequence in either Literature or History. In order to complete the degree in 122 credits, because of the Mechanical Engineering specific requirements for the Humanities and Fine Arts courses, it is recommended that a two course History sequence (HIST 1010, HIST 1020, HIST 1017, HIST 1027, HIST 1210, HIST 1220 or HIST 1217 - HIST 1227) be completed in the Social Sciences.

2 Core Literature: ENGL 2200, ENGL 2207, ENGL 2210, ENGL 2217, ENGL 2230, ENGL 2240, ENGL 2250 or ENGL 2260.

Technical Elective - see adviser for approved course listing.