

Table 5-1. Curriculum.

B.S. in Mechanical Engineering

Course (Department, Number, Title) List all courses in the program by term starting with the first term of the first year and ending with the last term of the final year.	Indicate whether course is Required, Elective or a Selected Elective by an R, an E or an SE. ¹	Subject Area (Credit Hours)			Last Two Terms the Course was Offered: Year and, Semester, or Quarter	Maximum Section Enrollment for the Last Two Terms the Course was Offered ²
		Math & Basic Sciences	Engineering Topics; Check if Contains Significant Design (✓)	Other		
First-Year Fall:						
MATH 112: Calculus of Functions of One Variable I		4			F19, SP20	139
PHYS 180: University Physics I		4			F18, F19	277
PHYS 165L: General Physics Laboratory I		2			F18, F19	277
MENG 185: Mechanical Design	E		4✓		F19, SP20	29
One Humanities/Social Science/Writing/Language Elective				4	F19, SP20	
First-Year Spring:						
MATH 115: Calculus of Functions of One Variable II		4			F19, SP20	267
PHYS 181: University Physics II		4			SP19, SP20	230
PHYS 166L: General Physics Laboratory II		2			SP19, SP20	250
ENAS 130: Introduction to Computing for Engineers and Scientists	R	4			F19, SP20	66
One Humanities/Social Science/Writing/Language Elective				4	F19, SP20	
Sophomore Fall:						
ENAS 151: Multivariable Calculus for Engineers		4			F19, SP20	84
MATH 222: Linear Algebra with Applications	R	4			F19, SP20	131
MENG 280: Mechanical Engineering I: Strength and Deformation of Mechanical Elements	R		4		F18, F19	46
MENG 285: Introduction to Materials Science	R		4		F18, F19	42
One Humanities/Social Science/Writing/Language Elective				4	F19, SP20	

Sophomore Spring:						
ENAS 194: Ordinary and Partial Differential Equations with Applications	R	4			F19, SP20	76
MENG 211: Thermodynamics for Mechanical Engineers	R		4		SP19, SP20	37
MENG 286L: Solid Mechanics and Materials Science Laboratory	R		2√		F19, SP20	25
Two Humanities/Social Science/Writing/Language Electives				8	F19, SP20	
Junior Fall:						
EENG 200: Introduction to Electronics	R		4√		F18, F19	61
CHEM 163: Comprehensive University Chemistry I		4			F18, F19	97
MENG 361: Mechanical Engineering II: Fluid Mechanics	R		4		F18, F19	52
MENG 383: Mechanical Engineering III: Dynamics	R		4		SP19, F19	41
One Humanities/Social Science/Writing/Language Elective				4	F19, SP20	
Junior Spring:						
MENG 363L: Fluid Mechanics and Thermodynamics Laboratory	R		4√		SP19, SP20	20
MENG 389: Mechanical Engineering IV: Fluid and Thermal Energy Science	R		4		SP19, SP20	19
MENG 390: Mechatronics Laboratory	R		4√		SP19, SP20	31
One Humanities/Social Science/Writing/Language Elective				4	F19, SP20	
Senior Fall:						
MENG 487L: Mechanical Design: Process and Implementation I	R		2√		F18, F19	22
Two MENG Electives	E		8√		F19, SP20	
Two Humanities/Social Science/Writing/Language Electives				8	F19, SP20	
Senior Spring:						
MENG 488L: Mechanical Design: Process and Implementation II	R		2√		SP19, SP20	22
One MENG Elective	E		4		F19, SP20	
Three Humanities/Social Science/Writing/Language Electives				12	F19, SP20	
TOTALS (in terms of semester credit hours)		40 Hours	58 Hours	48 Hours		
<i>Totals must satisfy minimum credit hours.</i> Minimum Semester Credit Hours		30 Hours	45 Hours			

1. **Required** courses are required of all students in the program, **Elective** courses (often referred to as open or free electives) are optional for students, and **Selected Elective** courses are those for which students must take one or more courses from a specified group.
2. For courses that include multiple elements (lecture, laboratory, recitation, etc.), indicate the maximum enrollment in each element. For Selected Elective courses, indicate the maximum enrollment for each option.

Instructional materials and student work verifying compliance with ABET criteria for the categories indicated above will be required during the campus visit.