

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Year 1

Semester 1	Cr	Status	Semester 2	Cr	Status
MA: MATH 1234 - Calculus I*	4		MA: MATH 1248 - Calculus II* <i>MATH 1234</i>	4	
ENGR 1020 - Graphical Communication	2		N2, QD: PHYS 1500 - Physics for Engineers I <i>MATH 1234</i>	4	
N2, QD: CHEM 1400 - General Chemistry I	4		PHYS 1510 - Physics Problem Solving I [Optional]	[1]	
Catamount Core (WIL1): ENGL 1001 - Written Expression	3		ME 1010 - First-Year Design Experience	2	
Catamount Core (D1 Diversity 1)	3		QD: CS 1210 - Computer Programming I	3	
CEMS 1500 - CEMS First Year Seminar [Optional]	[1]		Catamount Core (AH Arts & Humanities)	3	
			ME 1310 - Intro to Robotics and Coding	1	
<i>Total credits</i>	16-17		<i>Total credits</i>	17-18	

Year 2

Semester 1	Cr	Status	Semester 2	Cr	Status
CEE 1100 - Statics <i>MATH 1248; PHYS 1500</i>	3		ME 1120 - Dynamics <i>CEE 1100; MATH 2248</i>	3	
MA: MATH 2248 - Calculus III <i>MATH 1248</i>	4		ME 1140 - Mechanics of Solids <i>CEE 1100</i>	3	
ME 1210 - Thermodynamics* <i>MATH 1248; PHYS 1500; CHEM 1400</i>	3		MA: MATH 2522 - Applied Linear Algebra <i>MATH 1248</i> OR MA: MATH 2544 - Linear Algebra <i>MATH 1248; Pre/Coreq: MATH 2248</i>	3	
N1, QD: PHYS 1550 - Physics for Engineers II <i>PHYS 1500; MATH 1248; Coreq: MATH 2248</i>	3		MATH 3201 - Adv Engineering Mathematics <i>MATH 2248</i>	3	
PHYS 1560 - Physics Problem Solving II [Optional]	[1]		SU: ME 1220 - Applied Thermodynamics <i>ME 1210</i>	3	
ME 1020 - Engineering Shop Experience <i>ENGR 1020</i>	1		ME 1510 - Computational Mech Engr Lab <i>CEE 1100; Coreq: ME 1140</i>	1	
Catamount Core (AH Arts & Humanities)	3				
<i>Total credits</i>	17-18		<i>Total credits</i>	16	

Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
ME 2230 - Fluid Mechanics <i>ME 1120; ME 1140; ME 1210; MATH 3201</i>	3		GC: ME 2240 - Heat and Mass Transfer <i>ME 2230</i>	3	
ME 2120 - System Dynamics <i>ME 1120; Pre/Coreq: MATH 2522 or MATH 2544</i>	3		ME 2310 - Design of Elements <i>ME 1140</i>	3	
WIL2: ME 2231 - Thermo-Fluid Lab (Fall) <i>ME 1120; ME 1140; ME 1210; MATH 3201; Pre/Coreq: ME 2230</i> OR ME 2111 - Materials and Mechanics Lab (Fall) <i>ME 1140; Pre/Coreq: ME 2110</i>	2		WIL2: ME 2112 - Materials and Mechanics Lab (Spring) <i>ME 1140; Pre/Coreq: ME 2110</i> OR ME 2232 - Thermo-Fluid Lab (Spring) <i>ME 1120; ME 1140; ME 1210; MATH 3201; Pre/Coreq: ME 2230</i>	2	
ME 2110 - Materials Engineering <i>ME 1140</i>	3		QD: STAT 2430 - Statistics for Engineering <i>MATH 1234</i>	3	
EE 2145 - Electrical Engr Concepts <i>MATH 1248</i>	4		EE 2845 - Digital Control w/ Embedded Sys, or, Mechatronics <i>EE 2145; CS 1210</i>	4	
<i>Total credits</i>	15		<i>Total credits</i>	15	

Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
ME 4010 - Capstone Design I	3		ME 4020 - Capstone Design II <i>ME 4010</i>	3	
Mechanical Engineering Elective	3		Mechanical Engineering Elective	3	
Mechanical Engineering Elective	3		Mechanical Engineering Elective	3	
Technical Elective	3		Technical Elective	3	
Catamount Core (S1 Social Science)	3		Catamount Core (S1 Social Science)	3	
Catamount Core (Diversity 1 or Diversity 2)	3				
<i>Total credits</i>	18		<i>Total credits</i>	15	

Minimum Total Credits Required for Degree: 129 [132 with Optional Courses]

Prerequisite courses are listed below the course name in italics. Prerequisites listed are only for courses, as relevant to your specific degree program, and may have other registration restrictions. Please refer to the catalogue.

* Grade of C- or higher required

ME 1020, ME 1510, ME 2111, ME 2231 satisfy the CEMS Professional Development Requirement.

Mechanical Engineering Elective: All 3 credit 3000-level ME courses (except ME 3994, ME 3995 and ME 3899). All 3 credit 5000-level ME courses.

Embedded Systems Elective: EE 2845 or Mechatronics.

Technical Elective: Any 2000-level (or higher) courses in BME, CEE, EE, EMGT, ENGR, ME, CS, CSYS, MATH, ASTR, BIOC, BIOL, CHEM, GEOL, MMG, PHYS, & CMPE. Students may not double-count any required courses as technical electives.

Please refer to your degree audit to see course options.

Catamount Core: Students may take courses that fulfill more than one Catamount Core requirement, but they must still take at least 40 unique credits of courses that have been approved to fulfill Catamount Core requirements.

ME students can complete the WIL2 sequence (ME 2111 and ME 2231) in one of two ways:

(1) ME 2111 (Fall 26) – ME 2232 (Spring 27)

(2) ME 2231 (Fall 26) – ME 2112 (Spring 27)

Due to the way that the writing outcomes are taught in this course, students must begin the sequence in fall and finish the sequence in spring to fulfill the WIL2 requirement.