

Bachelor of Science in Mechanical Engineering -- 128 Credits

JME-BSE (RG 7276)
Effective August 2024

Worlds of Knowledge (RQ 4243)

Aesthetic and Creative Expression				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

Global History & Culture				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

Societies & Civics				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

Each student must take 1 course in each of the following Worlds of Knowledge.
Each student must take two additional "Follow-Up" courses from any of the following Worlds of Knowledge.
The minimum number of courses taken in the Worlds must be 5.
(No electives may be taken from the World of Science & Nature)

Follow-Up Courses				
Subject	Number	Course Title	CR	Satisfied/Term

Freshman Year Curriculum (RG 7276)

Freshman Year Curriculum - 1st Term (RQ 3437)				
Complete the following Courses		CR	Satisfied/Term	
Chem 0150	General Chem Eng 1	3		
Engcmp 0005	Composition 1	3		
Engr 0017	Intro to Eng Analysis	3		
Engr 0081	Freshman Seminar 1	0		
Math 0221	Analytic Geom & Calc 1	4		
Phys 0150	Physics 1	4		
Requirement Satisfied		17		

Freshman Year Curriculum - 2nd Term (RQ 3438)				
Complete the following Courses		CR	Satisfied/Term	
Chem 0151	General Chem Eng 2	3		
Engr 0018	Intro Eng Computing	3		
Engr 0082	Freshman Seminar 2	0		
Math 0231	Analytic Geom & Calc 2	4		
Phys 0152	Physics for Eng 2	4		
Requirement Satisfied		14		

Sophomore Year Curriculum (RG 7276)

Soph Year Curriculum - 3rd Term (RQ 3439)				
Complete the following Courses		CR	Satisfied/Term	
Engr 0022	Materials Structure & Prop	3		
Engr 0132	Statics	3		
Math 0241	Calculus III	4		
Math 1181	Linear Algebra	3		
ME 0024	Intro Mech Engr Design	3		
ME 1085	Dept Seminar	0		
Requirement Satisfied		16		

Soph Year Curriculum - 4th Term (RQ 3440)				
Complete the following Courses		CR	Satisfied/Term	
Commrc 0052	Public Speaking	3		
EE 0031	Linear Circuits	3		
Engr 0142	Mechanics of Materials	3		
Math 1271	Differential Equations	3		
ME 0040	Materials & Manufacturing	3		
ME 0052	Thermodynamics 1	3		
ME 1085	Dept Seminar	0		
Requirement Satisfied		18		

Junior Year Curriculum (RG 7276)

Junior Year Curriculum - 5th Term (RQ 3441)				
Complete the following Courses		CR	Satisfied/Term	
Engr 0152	Rigid Body Dynamics	3		
ME 0071	Fluid Mechanics	3		
ME 1026	Mechanical Design 1	3		
ME 1085	Department Seminar	0		
Requirement Satisfied		9		

Junior Year Curriculum - 6th Term (RQ 3442)				
Complete the following Courses		CR	Satisfied/Term	
ME 1013	Dynamic Systems	3		
ME 1027	Mechanical Design 2	3		
ME 1044	Measurements 1	3		
ME 1085	Dept Seminar	0		
Requirement Satisfied		9		

Senior Year Curriculum (RG 7276)

Senior Year Curriculum - 7th Term (RQ 3443)				
Complete the following Courses		CR	Satisfied/Term	
ME 1046	Measurements 2	3		
ME 1054	Heat & Mass Transfer	3		
ME 1095	Professional Practice	3		
ME 1085	Department Seminar	0		
Requirement Satisfied		9		

Senior Year Curriculum - 8th Term (RQ 3444)				
Complete the following Courses		CR	Satisfied/Term	
ME 1085	Department Seminar	0		
ME 1099	Senior Project	3		
Requirement Satisfied		3		

Electives (RQ 7276)

Engineering Electives (RQL 3778-10)				
Complete one of the following Courses		CR	Satisfied/Term	
CE 1105	Materials of Construction	3		
CE 1330	Intro to Structural Analysis	3		
CE 1503	Intro to Environmental Eng	3		
CE 1610	Eng & Sustainable Develop	3		
CE 1811	Principles of Soil Mechanics	3		
CHE 0214	Intro to Chem Proc Design	3		
EE 0445	Prog & Intro to Data Struct	3		
EE 1552	Signals and Systems	3		
EE 1673	Control Systems	3		
EE 1177	Measurement & Indust Cont	3		
EE 1771	Electric Machines	4		
Engr 1103	Engineering Economics	3		
Engr 1115	Engineering Leadership	3		
Requirement Satisfied		3		

Dynamic Systems Electives (RQL 3778-20)				
Complete one of the following Courses		CR	Satisfied/Term	
CHE 0510	Intro to Comp Fluid Dynamic	3		
EE 1673	Control Systems	3		
EE 1177	Measurements & Indust Con	3		
EE 1771	Electric Machines	4		
ME 1061	Vehicle Dynamics	3		
ME 1063	Simulation and Modeling in ME Design	3		
Requirement Satisfied		3		

Note: Courses taken under Engineering, Dynamic Systems, or ME Technical Electives cannot be counted in other Elective groups

ME Technical Electives (RQL 3778-30)				
Complete Four of the following Courses		CR	Satisfied/Term	
CHE 0510	Intro to Comp Fluid Dynam	3		
CHE 0520	Fuel & Energy Technology	3		
EE 1177	Measurements Indust Cont	3		
ME 1053	Applied Thermodynamics	3		
ME 1056	Energy	3		
ME 1066	Fluid Power	3		
ME 1059	Heating, Vent, & Air Cond	3		
ME 1061	Vehicle Dynamics	3		
ME 1063	Simulation and Modeling in ME Des	3		
ME 1071	Applied Fluids	3		
ME 1172	CADD/CAE	3		
ME 1173	Finite Element Methods	3		
Requirement Satisfied		12		

Revised 10/10/24

IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.