

# Mechanical Engineering

## FIRST TERM

Credit	Class
4	MATH 0221 Calculus I
3	CHEM 0150 (previously Chem 0111) General Chem Eng 1
4	PHYS 0150 Phys for Eng 1
3	ENGR 0017 Intro to Eng Analysis
3	ENGCMP 0005 Composition 1 (or a 650 or better on reading writing portion of SAT)
0	ENGR 0081 Freshman Seminar 1
<b>17</b>	<b>TOTAL</b>

## THIRD TERM

Credit	Class	Pre/Co Req
4	MATH 241 Calculus III	Calc II (C- or better)
3	MATH 1181 Linear Algebra	Calc II
3	ENGR 0022 Materials	Calc II, Phys for Eng 1
3	ENGR 0132 Statics	Phys for Eng 1, <i>Calc II</i>
3	ME 0024 Intro ME Design	Intro Eng Analysis
0	ME 1085 Dept Seminar	
<b>16</b>	<b>TOTAL</b>	

## FIFTH TERM

Credit	Class	Pre/Co Req
3	ME 0071 Fluids	Calc II, <i>Diff Eq</i>
3	ENGR 0152 Rigid Body Dynamics	Calc II, Statics
3	ME 1026 Mechanical Design I	Statics, Mech of Matls, Materials
3	Engineering Elective	
3	WOK (S&C, GH&C, A&CE)	
0	ME 1085 Dept Seminar	
<b>15</b>	<b>TOTAL</b>	

## SEVENTH TERM

Credit	Class	Pre/Co Req
3	ME 1046 Measurements 2	Meas 1
3	ME 1054 Heat & Mass Transf	Intro Thermo, <i>Fluids</i>
3	ME 1095 Professional Practices	<i>Mechanical Design 2</i>
3	Dyn System Elective	
3	WOK (S&C, GH&C, A&CE)	
0	ME 1085 Dept Seminar	
<b>15</b>	<b>TOTAL</b>	

## SECOND TERM

Credit	Class	Pre/Co Req
4	MATH 0231 Calculus II	Calc I (C- or better)
3	CHEM 0151 with Lab (previously Chem 0115) General Chem Eng 2	Chem Eng 1
4	PHYS 0152 Phys for Eng 2	Phys for Eng 1, <i>Calc II</i>
3	ENGR 0018 Intro Eng Computing	Intro to Eng Analy, <i>Calc I</i>
3	WOK (S&C, GH&C, A&CE)	
0	ENGR 0082 Fresh. Seminar 2	
<b>17</b>	<b>TOTAL</b>	

## FOURTH TERM

Credit	Class	Pre/Co Req
3	MATH 1271 Differential Eq's	Calc III
3	ENGR 0142 Mechanics of Mat'ls	Statics, Calc II
3	EE 0031 Linear Circuits	Calc II, Phys for Eng 2
3	ME 0040 Mat'l & Mfging	<i>Materials</i>
3	ME 0052 Intro Thermo	Phys for Eng 1, Chem I, <i>Calc III</i>
3	COMMRE 0052 Public Speaking	
0	ME 1085 Dept Seminar	
<b>18</b>	<b>TOTAL</b>	

## SIXTH TERM

Credit	Class	Pre/Co Req
3	ME 1013 Dynamic Systems	Diff Eq, Intro to Eng Computing, Circuits, Dynamics, <i>Linear Alg</i>
3	ME 1027 Mechanical Design 2	Intro ME Design, Mechanical Design 1
3	ME 1044 Measurements I	Circuits, Diff Eq, <i>Dynamic Systems</i>
3	ME 1053 Applied Thermo	Intro Thermo
3	WOK (S&C, GH&C, A&CE) ← Or ME TECH Elective	
0	ME 1085 Dept Seminar	
<b>15</b>	<b>TOTAL</b>	

## EIGHTH TERM

Credit	Class	Pre/Co Req
3	ME 1099 Senior Project	Prof. Practices
3	ME 1071 Applied Fluids	Fluids
3	ME Tech Elective	
3	ME Tech Elective ← Or WOK	
3	WOK (S&C, GH&C, A&CE)	
0	ME 1085 Dept. Seminar	
<b>15</b>	<b>TOTAL</b>	

Notes: 1) *italic lettering means co-req*

2)\* students have a minimum of 128 credits to graduate.

Students who do not need to take ENGCMP 0005 (SAT-V greater than 650) will need to take another 3 credits to meet this requirement.

ME Schedule\_Rev\_2\_24\_2022

# Mechanical Engineering

## ENGINEERING ELECTIVES

Course	Pre/Co Req	Typical Term
ENGR 1103 Engineering Economics	Sophomore or beyond	Fall, Spring, Summer
ENGR 1115 Engineering Leadership	Sophomore Status	Fall
CHE 0214 Intro to Chemical Process Design	Gen Chem Eng 2 Calc II, Phys for Eng 1	Spring
CE 1105 Materials of Construction	<i>Mech of Matl's</i>	Spring
CE 1330 Intro to Structural Analysis	CE 0110 (or Engr 0018 and permission)	Fall
CE 1503 Intro to Environmental Engineering	Gen Chem Eng 2	Fall
CE 1610 Engineering & Sustainable Development	Sophomore Status	Spring
CE 1811 Principles of Soil Mechanics	Mech of Matl's	Fall
EE0445 Programming & Intro to Data Structures	Calc I, Intro to Eng Computing	Fall
EE 1552 Signals & Systems	Linear Circuits, Calc II	Fall
ME 1172 CADD/CAE	Intro ME Design	Spring
EE 1673 Control Systems	Calc III, <i>Diff EQ</i> , JME-BSE	Fall
EE 1177 Measurement & Industrial Control	Intro to Eng Comp, Linear Circuits	Spring
EE 1771** Electric Machines	Linear Circuits	Spring Sum

**NOTE:** Courses taken as an Engineering Elective cannot also be counted as a ME Technical Elective or Dynamic Systems Elective.

## DYNAMIC SYSTEMS ELECTIVES

Course	Pre/Co Req	Typical Term
ME 1061 Vehicle Dynamics	Intro to ME Design, Mech Design 2	Fall
ME 1063 Simulation & Modeling in ME Design	ENGR 0152 ME 1013 ME 1027	Fall
EE 1673 Control Systems	Calc III, <i>Diff EQ</i> , JME-BSE	Fall
EE 1177 Measurements and Industrial Controls	Intro to Eng Comp, Linear Circuits	Spring
EE 1771 Electric Machines	Linear Circuits	Spring Sum
CHE 0510 Intro to Computational Fluid Dynamics	ME 0071 Fluids	Spring

**NOTE:** Courses taken as a Dynamic Systems Elective cannot also be counted as an Engineering Elective or ME Technical Elective.

## ME TECHNICAL ELECTIVES

Course	Pre/Co Req	Typical Term
ME 1056 Energy	Applied Thermo	Fall
ME 1059 Heating, Ventilation, & Air Conditioning	Applied Thermo, <i>Heat &amp; Mass Trans</i>	Fall
ME 1066 Fluid Power	ME 1027 Machine Design 2	Spring
ME 1172 CADD/CAE	Intro ME Design	Spring
ME 1173 Finite Element Methods	Intro Eng Comp, Diff Eq, Mech Design I	Spring
CHE 0510 Intro to Computational Fluid Dynamics	ME 0071 Fluids	Spring
EE 1177 Measurement & Industrial Control	Intro to Eng Comp, Linear Circuits	Spring

**NOTE:** Courses taken as a ME Technical Engineering Elective cannot also be counted as an Engineering Elective or Dynamic Systems Elective.

Notes: 1) *italic lettering means co-req*

2)\* students have a minimum of 128 credits to graduate.

Students who do not need to take ENGCOMP 0005 (SAT-V greater than 650) will need to take another 3 credits to meet this requirement.