## Mechanical Engineering B.S.M.E.

4- Year Plan of Study

## **Notes**

The Plan of Study is a static review of the degree. Connect with your major advisor for a personalized path toward graduation.

## **Potential Entry Level Job Titles:**

Aeronautics, Aerospace and Propulsion Engineer  $\circ$  Automotive, Fuel Cells and Transportation Engineer  $\circ$  Propulsion Systems, Electronic Systems, Power Generation Engineer  $\circ$  Heating, Ventilation, and Air Conditioning Engineer  $\circ$  Structures and Machinery Design Engineer  $\circ$  Micro and Nano Materials, Semiconductors Engineer

## **Potential Entry Level Salary Range:**

\$50,000 - \$128,000

Semester 1 - Fall		
Crit	Course/Requirement	Credits
7	CHM 2045 - General Chemistry I	3
	CHM 2045L - General Chemistry I Lab	1
7	EGN 3000 - Foundations of Engineering	0
	EGN 3000L - Foundations of Engineering Lab	3
	ENC 1101 - Composition I	3
7	MAC 2311 - Calculus I	4

Semester 2 - Spring		
Crit	Course/Requirement	Credits
	ENC 1102 - Composition II	3
7	MAC 2312 - Calculus II	4
7	PHY 2048 - General Physics I	3
	PHY 2048L - General Physics I Laboratory	1
	Gen-Ed State Humanities (SGEH)	3

Semester 3 - Summer		
Crit	Course/Requirement	Credits
	Consider pursuing an Education Abroad, Internship, Community	0
	Engagement, or Research Experience in the Summer term.	U

Semester 4 - Fall		
Crit	Course/Requirement	Credits
	ECO 2023 <b>OR</b> EGN 2615 <b>OR</b> FIN 2100	3
7	EGN 3311 - Statics	3
7	MAC 2313 - Calculus III	4
7	PHY 2049 - General Physics II	3
	PHY 2049L - General Physics II Laboratory	1
	Apply for Progression to Upper Division	0

	Semester 5 - Spring		
Crit	Course/Requirement	Credits	
	AMH 2010 <b>OR</b> AMH 2020 <b>OR</b> POS 2041 (SCIV/SGES)	3	
7	EGN 3321 - Dynamics	3	
7	EGN 3343 - Thermodynamics I	3	
7	EML 3500 - Mechanics of Solids	3	
7	MAP 2302 - Differential Equations	3	

Semester 6 - Summer		
Crit	Course/Requirement	Credits
	EGN 3365 - Materials Engineering I	3
7	EML 3022 - Computer Aided Design & Engr	3
7	EML 3035 - Programming Concepts Mech Engr	3

Semester 7 - Fall		
Crit	Course/Requirement	Credits
7	EGN 2440 <b>OR</b> STA 2023	3
7	EML 3041 - Computational Methods	3
<b>V</b>	EML 3262 - Kinematics/Dynamics-Machinery	3
<b>V</b>	EML 3701 - Fluid Systems	3
<b>4</b>	EML 4325 - Mech Manufactuing Processes	3
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Semester 8 - Spring		
Crit	Course/Requirement	Credits
7	EGN 3373 <b>OR</b> EML 3390	3
7	EML 3303 - Mechanical Engineering Lab I	3
	EML 4123 - Heat Transfer	3
7	EML 4501 - Machine Design	3
	Gen-Ed USF Humanities (UGEH)	3

	Semester 9 - Summer	
Crit	Course/Requirement	Credits
	Semester 10 - Fall	
Crit	Course/Requirement	Credits
	EML 4220 - Vibrations	3
	EML 4302 - Mechanical Engineering Lab II	3
	EML 4312 - Mechanical Controls	3
7	EML 4550 - Capstone Design I	3
	Semester 11 - Spring	
Crit	Course/Requirement	Credits
	EGN 4930 - Special Topics in Engineering	0
	EML 4551 - Capstone Design II	3
	Major Elective	3
	Major Elective	3
	Major Elective	3
	Apply for Graduation	0