



Suggested Curriculum Guide for BS Engineering

Freshman (1st Semester) 16 hrs

GSD 101- Foundations in Learning	3
⁶ MAT 234 (<i>fulfills Gen. Ed. 2</i>)- Calculus I	4
MFE 150- Intro. to Manufacturing & Engineering Design	3
Gen. Ed. 1A (<i>ENG 101</i>)	3
Gen. Ed. 3A (<i>Arts</i>)	3

Sophomore (1st Semester) 17 hrs

AEM 201- Metallic Material Processes	3
MAT 353- Differential Equations	3
PHY 202- University Physics II	5
Gen. Ed. 1C (<i>Comm.</i>)	3
ECO 230- Fundamentals of Microeconomics	3

Junior (1st Semester) 15 hrs

MFE 202- Intro. to Quality	3
PHY 360- Engineering Dynamics	3
STA 340- Applied Regression Analysis	3
† Concentration Elective	3
PHY 375- Engineering Thermodynamics	3

Senior (1st Semester) 12 hrs

MFE 407- Fundamentals of Project Management	3
MFE 498- Senior Capstone Project I	3
Gen. Ed. 3B (<i>Humanities</i>) Course 1	3
Gen. Ed. 5A (<i>History</i>)	3

Freshman (2nd Semester) 15 hrs

MAT 244- Calculus II	4
⁶ PHY 201 (<i>fulfills Gen. Ed. 4</i>)- University Physics I	5
MFE 195- Computer Aided Design	3
Gen. Ed 1B (<i>ENG 102</i>)	3

Sophomore (2nd Semester) 17 hrs

AEM 301- Non-Metallic Material Processes	3
PHY 221- Statics	3
STA 270- Applied Statistics	4
CHE 111- General Chemistry I	3
CHE 111L- General Chemistry I Lab	1
CSC 174- Intro. to Programming for Science & Engineering	3

Junior (2nd Semester) 17 hrs

MFE 330- Materials Testing and Metrology	3
MFE 349- Applied Learning in Manufacturing Engineering	1
PHY 315- Electrical Circuits	4
PHY 380- Fluid Mechanics	3
† Concentration Elective	3
Gen. Ed. 5B Course 2	3

Senior (2nd Semester) 11 hrs

MFE 499- Senior Capstone Project II	3
† Concentration Elective	3
Gen. Ed. 3B Course 2	3
Free Elective (<i>upper division</i>)	2

⁶ Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

UNIVERSITY GRADUATION REQUIREMENTS

Total hours University Graduation Requirements

39 hours

MAJOR REQUIREMENTS

Core Courses

47-49 hours

AEM 201, AEM 301, MFE 150, MFE 195, MFE 202, MFE 330, MFE 349, MFE 407, MFE 498, MFE 499, PHY 221, PHY 315, PHY 360, PHY 375, PHY 380, CSC 174

Concentration Requirements (Choose 9 hours from one of the options below)

9 hours

Quality and Lean Manufacturing Concentration
MFE 308, MFE 332, MFE 506, STA 585, STA 570

Advanced Manufacturing Concentration
MFE 352, MFE 382, MFE 390, MFE 453

Supporting Course Requirements

23 hours

ECO 230, ⁶CHE 111, CHE 111L, ⁶MAT 234, MAT 244, MAT 353, ⁶PHY 201, PHY 202, STA 270, STA 340

Free Electives

0-2 hours

Total Curriculum Requirements

120 hours