

Suggested Plan of Study Materials Science & Engineering (Fall 2026 Catalog) 122 Credit Hours

SEMESTER 1 - FALL		
Course No.	Course Name	Hours
CHM 2045C	Chemistry Fundamentals I	4
MAC 2311C	Calc w/Analytic Geomertry I	4
ENC 1101	Composition I	3
EGS 1006C	Intro to the Engr. Profession	1
Total		12

SEMESTER 2 - SPRING		
Course No.	Course Name	Hours
CHM 2046/L	Chemistry Fundamentals II & Lab	4
MAC 2312	Calc w/Analytic Geometry II	4
PHY 2048/L	Gen. Physics using Calc I & Lab	4
EGN 1007C	Engr. Concepts & Methods	1
Total		13

SEMESTER 3 - SUMMER		
Course No.	Course Name	Hours
MAC 2313	Calc w/Analytic Geometry III	4
ENC 1102	Composition II	3
Total		7

SEMESTER 4 - FALL		
Course No.	Course Name	Hours
CHM 2210	Organic Chemistry I	3
PHY 2049/L	Gen. Physic using Calc II & Lab	4
EGN 3365	Structure & Prop. of Materials	3
EGN 3211	Engr. Analysis & Computation	3
Total		13

SEMESTER 5 - SPRING		
Course No.	Course Name	Hours
MAP 2302	Ordinary Diff. Equations I	3
EMA 3012C	Exp. Techni. in Mechanics of Mats.	3
EMA 3102	Thermodynamics of Materials	3
EMA 3124	Design & Selec. of Materials	3
EGN 3373	Princ. of Electrical Engr.	3
Total		15

SEMESTER 6 - SUMMER		
Course No.	Course Name	Hours
STA 3032	Prob. & Stats for Engineers	3
Communications/Sp eech Found.		3
Humanities Foundation 1		3
Total		9

SEMESTER 7 - FALL		
Course No.	Course Name	Hours
EMA 3000	Engineering Polymeric Mats.	3
EMA 4513	Structures of Materials	3
EMA 4223	Fund. of Mech. Behav. of Mats.	3
EMA 4307	Kinetics of Materials	3
Total		12

SEMESTER 8 - SPRING		
Course No.	Course Name	Hours
EMA 4115	Transport Phenomena in Mats.	3
EMA 4125	Phase Transf. & Microstructural Dev. In Mats.	3
EMA 4013C	Exp. Techni. In Properties of Mats.	3
Science/Engineerin g Elective	Choose 1: CHM 2211, PHY 3101, or EGN 3310	3
Total		12

SEMESTER 9 - SUMMER		
Course No.	Course Name	Hours
Total		0

SEMESTER 10 - FALL		
Course No.	Course Name	Hours
EMA 4915	Materials Senior Design I	3
EMA 4602C	Mats. Processing & Testing Lab	3
EMA 4413	Fund. of Electronic Mats	3
Technical Elective		3
Technical Elective		3
Total		15

SEMESTER 11 - SPRING		
Course No.	Course Name	Hours
EMA 4916	Materials Senior Design II	3
EMA 4009	Materials in Society	2
Humanities Foundation 2		3
Social Science Foundation 1		3
Social Science Foundation 2		3
Total		14

SEMESTER 12 - SUMMER		
Course No.	Course Name	Hours
Total		0