

MATERIALS ENGINEERING (MSE)
Program of Study — Catalog Year 2026-2027

		Fall Semester				Spring Semester					
		Terms Offered	Course	Course Title	Hrs.	Terms Offered	Course	Course Title	Hrs.		
Freshman	F, Sp, Su		CH 115/R/116	General Chemistry I/Lab	4	F, Sp, Su		CH 117/R/118	General Chemistry II/Lab	4	
	F		EGR 200 ¹	Introduction to Engineering	3	Sp		EGR 194	Engineering Explorations	1	
	F, Sp, Su		EH 101	English Composition I	3	F, Sp		EGR 103	Computer-Aided Graphics & Design	3	
	F, Sp, Su		MA 125/L	Calculus I/Lab	4	F, Sp, Su		MA 126	Calculus II	4	
						F, Sp, Su		PH 221/R/L	General Physics I and Lab	4	
Total Credits					14	Total Credits					16
Sophomore	F, Sp, Su		CE 210	Statics	3	F, Sp		CE 220	Mechanics of Solids	3	
	F, Sp		EGR 265 ²	Math Tools for Engineering Problem Solving	4	F, Sp, Su		EE 312	Electrical Systems	3	
	F, Sp		MSE 280	Engineering Materials	3	F, Sp		ME 251	Introduction to Thermal Sciences	2	
	F, Sp, Su		PH 222/R/L	General Physics II and Lab	4	F, Sp		MSE 281/L	Physical Materials I/Lab	4	
	F, Sp, Su		EH 102	English Composition II	3	F, Sp		EGR 150	Computer Methods in Engineering	3	
						F, Sp, Su		Blazer Core ³	Reasoning	3	
Total Credits					17	Total Credits					18
Junior	F		MSE 380	Thermodynamics of Materials	3	Sp		MSE 382	Mechanical Behavior of Materials	3	
	F		MSE 381	Physical Materials II	3	Sp		MSE 464/L	Metals and Alloys/Lab	4	
	F		MSE 401	Materials Processing	3	Sp		MSE 470/L	Ceramic Materials/Lab	4	
	F		MSE 425	Statistics and Quality	3	F, Sp, Su		MA/SCI ^{2,4}	Math/Science Elective	3	
	F		MSE 465/L	Materials Characterization/Lab	4	F, Sp, Su		Blazer Core ³	Creative Arts	3	
Total Credits					16	Total Credits					17
Senior	F		MSE 413	Composite Materials	3	Sp		MSE 430/L	Polymeric Materials/Lab	3	
	F		MSE 498	Capstone Design Project I	3	Sp		MSE 499	Capstone Design Project II	3	
	F, Sp, Su		Elective ⁴	MA/SCI/EGR Elective	3	F, Sp, Su		MSE 4XX ⁴	Materials Engineering Elective	3	
	F, Sp, Su		Blazer Core ^{3,5}	City as a Classroom	3	F, Sp, Su		Elective ⁴	MA/SCI/EGR Elective	3	
	F, Sp, Su		Blazer Core ³	Humans & Their Societies	3	F, Sp, Su		Blazer Core ³	History & Meaning	3	
Total Credits					15	Total Credits					15

1 EGR 200 preferred, other FYE courses accepted

2 May substitute MA 227 and MA 252 for EGR 265 and MA/SCI Elective

3 Please refer to the Blazer Core as specified for Engineering Majors

4 Course must be approved by MSE Undergraduate Curriculum Coordinator

5 CE 280 preferred, other CAC courses accepted