

Materials Science & Engineering
Catalog Year 2024-2025

Note: This is a recommended sequence and shifts are likely to occur due to prerequisite completion and course availability.

Semester One	Semester Two
CHEM 1127Q: General Chemistry I (4 credits)	CHEM 1128Q: General Chemistry II (4 credits)
MATH 1131Q: Calculus I (4 credits)	MATH 1132Q: Calculus II (4 credits)
CSE 1010: Intro to Computing for Engineers (3 credits)	ENGR 1166: Foundations of Engineering (3 credits)
ENGL 1007: Writing and Composition (4 credits)	Gen Ed (3 credits)
	Gen Ed (3 credits)
15 credits	17 credits

Semester Three	Semester Four
PHYS 1501Q: Physics for Engineers I (4 credits)	PHYS 1502Q: Physics for Engineers II (4 credits)
MATH 2110Q: Multivariable Calculus (4 credits)	MATH 2410Q: Elem. Differential Equations (3 credits)
PHIL 1104: Philosophy & Social Ethics (CA 1) (3 credits)	MSE 2053: Materials Charact. & Proc. Lab (2 credits)
MSE 2001: Intro to Structure, Properties, & Processing Of Materials I (3 credits)	MSE 2002: Intro to Structure, Properties, & Processing of Materials II (3 credits)
CE 2110: Applied Mechanics I (3 credits)	Gen Ed (3 credits)
	Gen Ed (3 credits)
17 credits	18 credits

Semester Five	Semester Six
MSE 3001: App. Thermodyn. of Materials (4 credits)	MSE 3002: Transport Phenomena (4 credits)
MSE 3003: Phase Transfor., Kinetics & App (3 credits)	MSE 3004: Mechanical Behavior of Mat. (3 credits)
MSE 3055: Mat. Process. & Microstruc. Lab (2 credits)	MSE 3056: Mechanical Modelling (2 credits)
Professional Elective (3 credits)	Professional Elective (3 credits)
Technical Elective (3 credits)	Technical Elective (3 credits)
Gen Ed (3 credits)	
18 credits	15 credits

Semester Seven	Semester Eight
MSE 4901W: Capstone Design Project I (3 credits)	MSE 4902W: Capstone Design Project II (3 credits)
MSE 4003: Materials Characterization (3 credits)	MSE 4004: Therm./Mech. Process. Of Mat. (3 credits)
MSE 4001: Elect. & Mag. Prop. Of Mat. (3 credits)	Professional Elective (3 credits)
Professional Elective (3 credits)	Gen Ed/Free Elective* (3 credits)
Technical Elective (3 credits)	
15 credits	12+ credits

*as needed to reach total degree credits

See reverse for important general education and major specific information.

Total Credits: 127