

Chose 1 course from each category of lecture or lab-based courses

Class	Class Title
Thermodynamics and Kinetics (1 course)	
MBSE 212	Thermodynamics and Kinetics of Phase Transformations [4]
Processing and Kinetics (1 course)	
MBSE 214	Tissue Engineering & Design
MBSE 224	Polymeric Materials
MBSE 226	Nanodevice Fabrication
Structure and Bonding (1 course)	
MBSE 210	Structure and Properties of Materials [4]
Properties (1 course)	
MBSE 221	Mechanical Behavior of Materials
MBSE 224	Polymeric Materials
MBSE 241	Materials Cell Interactions*
MBSE 265	Optoelectronic Properties of Materials

Other MBSE Core Requirements	
MBSE 291	Research Seminar (repeat once per year)
MBSE 294	Responsible Conduct in Research

Bring total course units to the following with additional electives (suggested list below): MS Plan I: 24 semester credits (20 required to be 200 series), MS Plan II: 30 semester credits (24 required to be 200 series), and PhD: 24 semester credits (20 required to be 200 series)

MBSE Elective Courses	
MBSE 204	Materials Kinetics and Processing*
MBSE 208	Cell as a Machine
MBSE 211	Synthetic Biology
MBSE 219	Materials Simulations
MBSE 230	Computation and Modeling
MBSE 231	Imaging and Spectroscopy
MBSE 232	Bio and Nano Fabrication
MBSE 250	Bioinspired Materials
MBSE 260	Sustainable Energy
MBSE 262	Modeling and Design of Energy Systems
MBSE 270	Introduction to Electron Microscopy
MBSE 285	Seminar: Nanomaterials for Space Exploration
MBSE 299	Directed Independent Study