

# Department of Materials Science and Engineering Curriculum Guide

## Junior Year – First Semester

## Junior Year – Second Semester

Course Name	Course Name	Credits	Course Name	Credits	
MSE 3001	Applied Thermodynamics of Materials	4	MSE 3002	Transport Phenomena in Materials	4
MSE 3003	Phase Transformation, Kinetics & Applications	3	MSE 3004	Mechanical Behavior of Materials	3
MSE 3055	Materials Processing and Microstructures Laboratory	1	MSE 3056	Mech. Behavior Lab	2
	Technical Elective (Note B)	3		Professional Elective (Note A)	3
	General Education Elective (Content Area 4)	3		Technical Elective	3
	Total	14		Total	15

## Senior Year – First Semester

## Senior Year – Second Semester

Course Name	Course Name	Credits	Course Name	Credits	
MSE 4003	Materials Characterization	3	MSE 4004	Thermal Mech Proc of Mtls	3
MSE 4001	Elect & Magnetic Prop of Materials	3	MSE 4902W	Mater. Capstone Project II	3
MSE 4005	Proc Mtls Liquid & Vapor State (Mat. Processing)	3		Professional Elective (Note A)	3
MSE 4901W	Mater. Capstone Project I	3		Professional Elective (Note A)	3
	Professional Elective (Note A)	3		Technical Elective (Note B)	3
	Total	15		Total	15

**TOTAL CREDITS:**

**128**