

BS MSE Research Option Curriculum

<u>Course #</u>	<u>Course Name</u>	<u>Hours</u>		<u>Course #</u>	<u>Course Name</u>	<u>Hours</u>
	<u>1st Semester</u>				<u>2nd Semester</u>	
Math 1501	Calculus I	(3-2-4)		Math 1502	Calculus II	(3-2-4)
Chem 1310	General Chemistry I	(3-3-4)		Phys 2211	General Physics I	(3-3-4)
CS 1371	Computing for Engineers	(2-3-3)		Chem 1311	Inorganic Chemistry I	(3-0-3)
Engl 1101	English Composition I	(3-0-3)		Engl 1102	English Composition II	(3-0-3)
HPS 1040	Health/Fitness	(2-0-2)			Hist/Pol Sci Requirement_____	(3-0-3)
MSE 1001	Introduction to Engineering	(1-0-1)				(15-5-17)
		(14-8-17)				
	<u>3rd Semester</u>				<u>4th Semester</u>	
Chem 2311	Organic Chemistry I	(3-0-3)		MSE 2020	Characterization of Materials	(3-3-4)
MSE 2001	Introduction to Engineering Materials	(3-0-3)		COE 2001	Statics	(2-0-2)
Math 2401	Calculus III	(3-2-4)		Math 2403	Differential Equations	(3-2-4)
Phys 2212	General Physics II	(3-3-4)		Econ 2100/05/06	Econ. Analysis and Policy Problems - Prin. of Macroecon. - Prin. of Microecon.	(3-0-3)
	Humanities elective_____	(3-0-3)			Humanities elective_____	(3-0-3)
		(15-5-17)				(14-5-16)
	<u>5th Semester</u>				<u>6th Semester</u>	
MSE 3000	Thermodynamics and Phase Equilibrium	(3-2-4)		MSE 3002	Structural Transformations	(3-0-3)
MSE 3003	Mechanical Behavior of Materials	(4-0-4)		MSE 3012	Thermal and Transport Properties of Materials	(3-0-3)
MSE 3015	Electrical, Optical, and Magnetic Properties	(3-0-3)		MSE 3020	Materials Laboratory	(1-6-3)
MSE 3025	Statistics and Numerical Methods in MSE	(3-0-3)		ISyE 3025	Essentials of Engineering Economy	(1-0-1)
ECE 3710	Circuits and Electronics	(2-0-2)		ECE 3741	Electrical Engineering Lab	(0-3-1)
MSE 4699	Undergraduate Research	(0-3-1)		MSE 4699	Undergraduate Research	(0-3-1)
		(15-5-17)			Social Science Elective_____	(3-0-3)
						(11-9-15)
	<u>7th Semester</u>				<u>8th Semester</u>	
MSE 4002	Ceramic Materials	(3-0-3)		MSE 4021	Designing with Materials II	(0-6-2)
MSE 4020	Designing with Materials I	(1-0-1)		MSE 4010	Environmental Degradation	(3-0-3)
MSE 4777	Intro to Polymer Science & Engineering	(3-0-3)		MSE 4006	Processing and Apps. of Engineering Alloys	(3-0-3)
MSE 4699	Undergraduate Research	(0-12-4)		MSE 4699	Undergraduate Research	(0-9-3)
					Free Elec. LCC 4700 Thesis Writing	(1-1-2)
	Social Science Elective_____	(3-0-3)			Free Elec.	(1-0-1)
		(10-12-14)				(8-15-14)
						127 Total