

**MATERIALS: MATERIALS & BIOMATERIALS ENGINEERING OPTION****FRESHMAN YEAR**

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
ENL	101	Critical Writing & Reading I	3	0	3	ENL	102	Critical Writing & Reading II	3	0	3
CHM	151	Principles Modern Chemistry I	4	0	3	CHM	152	Principles Modern Chemistry II	4	0	3
CHM	161	Introduction to Applied Chemistry I	1	2	1	CHM	162	Introduction to Applied Chemistry II	1	2	1
MTH	111	Analytical Geometry & Calculus I	4	0	4	MTH	112	Analytical Geometry & Calculus II	4	0	4
MTX	105	Contemp. Issues Materials Science ¹	3	0	3	MTX	110	Environmental Science & Business	3	0	3
						PHY	113	Classical Physics I	3	2	4
						14			18		

SOPHOMORE YEAR

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
EGR	241	Engineering Mechanics I	3	0	3	EGR	232	Thermodynamics	3	0	3
BIO	101	General Biology I	3	0	3	ENL	266	Technical Communications ²	3	0	3
MNE	231	Materials Science	3	3	4	MTH	104	Statistics	3	0	3
MTH	211	Analytical Geometry & Calculus III	4	0	4	MTX	201	Properties of Materials	3	0	3
MTX	252	Materials Seminar ³	1	0	1	MTX	255	Biology for Engineers	1	0	1
		General Education Elective ⁴	3	0	3			General Education Elective ⁴	3	0	3
						18			16		

JUNIOR YEAR

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
MTX	300	Textile Structures & Properties	3	3	4	MTX	304	Elec. & Optical Properties Materials	3	0	3
MTX	301	Materials Processing I	3	3	4	MTX	305	Materials Testing	3	3	4
MTX	310	Statistical Quality Control	3	0	3			General Education Elective ⁴	3	0	3
MTX	321	Soft Materials & Fluids	3	0	3			General Education Elective ⁴	3	0	3
		General Education Elective ⁴	3	0	3						
						17			13		

SENIOR YEAR

<u>First Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>	<u>Second Semester</u>			<u>R</u>	<u>L</u>	<u>C</u>
MTX	401	Materials Processing II	3	3	4	MTX	402	Adv. Materials & Composites ⁵	3	0	3
MTX	421	Biological & Biomedical Materials	3	0	3	MTX	460	Materials Selection & Design	3	0	3
MTX	422	Adv. Electronic Properties	3	0	3	MTX	463	Senior Project ^{5,3}	3	0	3
		Technical Elective ⁶	3	0	3			Technical Elective ⁶	3	0	3
		Technical Elective ⁶	3	0	3			Technical Elective ⁶	3	0	3
						16			15		

TOTAL CREDITS = 127

R = Recitation (hours)

L = Laboratory (hours)

C = Number of Credits

¹ This course meets the General Education Area E requirement: Ethics and Social Responsibility.² This course meets the General Education Area W (Tier 2) requirement: Writing Skills.³ This course meets the General Education Area O requirement: Oral Skills.⁴ See General Education requirements (Areas C, D, and G).⁵ This course meets the General Education Area I (Tier 2) requirement: Information and Computer Literacy.⁶ Must be taken from approved list of courses.