



Curriculum for the Bachelor Degree in Materials Engineering
Courses Plan

First Year					
First semester			Second Semester		
Course No.	Course title	Cr.H	Course No.	Course title	Cr.H
AEL101	Applied English 1	3	AAL101	Applied Arabic	3
30202101	Calculus 1	3	CS101	Computer Skills 1	1
30201101	General Physics 1	3	AEL102	Applied English 2	3
30206101	General Chemistry 1	3	30202102	Calculus 2	3
30206102	General Chemistry 1 Lab.	1	30201102	General Physics 2	3
30201111	General Physics 1 Lab.	1	30206103	General Chemistry 2	3
			30206104	General Chemistry 2 Lab.	1
			BSE0102	Engineering Workshop	1
Total	14		Total	18	

Second Year					
First semester			Second Semester		
Course No.	Course title	Cr.H	Course No.	Course title	Cr.H
CIE0221	Statics	3	MEE0214	Strength of Materials	3
BSE0201	Programming for Engineers	3	BSE0203	Technical Writing & Professional Ethics	3
ELE0217	Electrical and Electronics Engineering	3	MAE0212	Materials Science 2	3
MAE0211	Materials Science 1	3	MAE0214	Materials Science Lab.	1
BSE0205	Engineering Drawing	2	MAE0226	Crystallography	3
NE101	National Education and University Behavior	3	MAE0228	Crystallography Lab.	1
			30202203	Differential Equations	3
Total	17		Total	17	



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Third Year					
First semester			Second Semester		
Course No.	Course title	Cr.H	Course No.	Course title	Cr.H
MAE0321	Metallography	3	MAE0310	Testing and Evaluation of Engineering Materials	3
MAE0323	Physical Metallurgy	3	MAE0312	Testing and Evaluation of Engineering Materials Lab.	1
MAE0315	Introduction to Polymer Science	3	MAE0334	Extractive Metallurgy	3
MAE0347	Thermodynamics of Materials 1	3	MAE0316	Polymeric Materials	3
MAE0349	Transport Phenomena	3	MAE0348	Thermodynamics of Materials 2	3
	University Elective Course	3	BSE0306	Numerical methods	3
			IEC101	Innovation, Entrepreneurship and Creativity	2
Total	18		Total	18	

Fourth Year					
First semester			Second Semester		
Course No.	Course title	Cr.H	Course No.	Course title	Cr.H
MAE0421	Phase Transformation	3	MAE0430	Metal Casting	3
MAE0433	Technology of Iron and Steelmaking	3	MAE0432	Metals Casting Lab.	1
MAE0437	Manufacturing Processes	3	MAE0422	Corrosion and Protection of Metals	3
BSE0401	Engineering Economy	3	MAE0424	Corrosion and Protection of Metals Lab.	1
MAE0429	Heat Treatments	3	MAE0416	Ceramic Materials	3
35001101	Military Sciences	3	-	University Elective Course	3
Total	18		Total	14	



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Summer Semester		
MAE0458	Field Training passed 115 Credit hours	Total 3

Fifth Year					
First semester			Second Semester		
Course No.	Course title	Cr.H	Course No.	Course title	Cr.H
MAE0531	Polymer Processing	3	MAE0530	Nanomaterials Technology	3
MAE0533	Composite Materials	3	MAE0534	Materials Selection and Design	3
-	Technical Elective Requirement	3		Technical Elective Requirement	3
-	Technical Elective Requirement	3	MAE0552	Graduation Project (2)	3
MAE0551	Graduation Project (1)	1			
Total	13		Total	12	