

Material Science Engineering Sample Schedule

Total Term:

	Credit Hours	1	2	3	4	5	6
Subjects Required by all Programs (55 hours)							
Mathematics 115, 116, 215, and 216	16	4	4	4	4	-	-
Engineering 100, Introduction to Engineering	4	4	-	-	-	-	-
Engineering 101, Introduction to Computers	4	-	4	-	-	-	-
Chemistry 125/126 and 130 or Chemistry 210 and 2111	5	5	-	-	-	-	-
Physics 140 with Lab 141; Physics 240 with Lab 24	10	-	5	5	-	-	-
Intellectual Breadth	16	4	4	-	4	-	4
Science and Technical Subjects (14 hours)							
ME 211, Introduction to Solid Mechanics	4	-	-	-	4	-	-
Science and Technical Electives (must include a program- approved Math course)	9	-	-	-	-	-	3
Program Subjects (47 hours)							
MSE 250, Principles of Engineering Materials or MSE 220, Introduction to Materials and	4	-	-	4	-	-	-
MSE 242, Physics of Materials	4	-	-	-	4	-	-
MSE 330, Thermodynamics of Materials	4	-	-	-	-	4	-
MSE 335, Kinetics and Transport in Materials Engineering	4	-	-	-	-	-	4
MSE 350, Structure of Materials	4	-	-	-	-	4	-
MSE 360, Materials Lab I	3	-	-	-	-	3	-
MSE 365, Materials Lab II	3	-	-	-	-	-	3
MSE 420, Mechanical Behavior of Materials	3	-	-	-	-	-	-
MSE 481, Designing Sustainable Products and Processes	3	-	-	-	-	-	-
MSE 482, Product Design and Manufacturing	3	-	-	-	-	-	-
Electives							
3 MSE Electives3	9	-	-	-	-	3	3
4th MSE Elective	3	-	-	-	-	-	-
Unrestrictive Electives	13	-	-	3	-	-	3
Total	128	17	17	16	16	14	17

Revised: March 2020

Candidates for the Bachelor of Science Degree in Engineering in Materials Science and Engineering - B.S.E. in Matl. Sci. & E. - must complete the program listed above. This sample schedule is an example of one leading to graduate Notes:

1. If you have a satisfactory score or grade in Chemistry AP, A-Level, IB Exams or credit from another institution you will have met the Chemistry Core Requirement for the College of Engineering.

2. If you have a satisfactory score or grade in Physics AP, A-Level, IB Exams or credit from another institution you will have met the Physics Core Requirement for the College of Engineering.

3. Elect 3 From the Follow

MSE 400, EMO Materials for Modern Device Technology (3 hours) MSE 410, Design and Applications of Biomaterials (3 hours)

MSE 412, Polymeric Materials (3 hours)

MSE 440, Ceramic Materials (3 hours)

MSE 454, Computational Approaches in Materials (3 hours)

MSE 465, Structure & Chemical Characteristics of Materials (3 hours) MSE 470, Physical Metallurgy (3 hours)

MSE 514, Composite Materials (3 hours)

7	8
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3	-
-	3
3	-
3	-
-	3
4	3
16	15

ion in eight terms.

ring List: