

Sample Schedule for MSE (Materials Science) & Engineering Design, Innovation & Entrepreneurship (EDIE)

Materials Science Engineering

First Year

Fall		Units
xx-xxx	Approved PCC/SDM CIT Gen Ed	9
21-120	Differential and Integral Calculus	10
33-141	Physics I for Engineering Students	12
99-101	Computing @ Carnegie Mellon	3
27-100	Engineering Materials of the Future	12
Total:		46

Spring

21-122	Integration and Approximation	10
xx-xxx	Intro to Engineering (second intro)	12
xx-xxx	Physics II for Engineering	12
76-101	Interpretation and Argument	9
Total:		43

Second Year

Fall		Units
27-201	The Structure of Materials	9
27-210	Materials Engineering Essentials	6
27-215	Thermodynamics of Materials	12
15-110 OR 15-112	Principles of Computing OR Fundamentals	10
90-105	Modern Chemistry 1	10
21-254	Linear Algebra and Vector Calculus for Engineers	11
39-210	Experiential Learning 1	0
Total:		58

Environmental Engineering + EDIE

First Year

Fall		Units
Same		0
Same		10
Same		12
Same		3
Same		12
Total:		46

Spring

Same		10
49-101	Intro to Engineering Design, Innovation & Entrepreneurship	12
Same		12
Same		10
Total:		43

Second Year

Fall		Units
same		9
Same		6
Same		12
Same		10
Same		10
Same		11
Same		0
Total:		58



Spring

27-202	Defects in Materials	9
27-216	Transport Materials	9
27-217	Phase Relations and Diagrams	12
21-260	Differential Equations	9
39-220	Experiential Learning II	0
xx-xxx	Approved PCC/SDM/II/WE Elective	9
Total:		48

Third Year

Fall		Units
		9
27-301	Microstructure and Properties 1	
27-xxx	MSE Restricted Elective	9
33-225 OR 03-121 OR 09-217	Quantum Physics and the Structure of Matter OR Modern Biology OR Organic Chemistry	9
39-310	Experiential Learning III	0
xx-xxx	Approved PCC/SDM/II/WE Elective	9
xx-xxx	Free Elective	4.5
Total:		45

Spring

27-305	Introduction to Materials Characterization	6
27-367	Selection and Performance of Materials	6
27-xxx	MSE Restricted Elective	9
36-220	Engineering Statistics and Quality Control	9
xx-xxx	Approved PCC/SDM/II/WE Elective	9

Spring

<i>Same</i>		9
<i>Same</i>		9
<i>Same</i>		12
<i>Same</i>		9
<i>Same</i>		0
73-102	Principles of Microeconomics	9
49-206	Tech Business Planning (<i>Mini 4</i>)	4.5
Total:		52.5

Third Year

Fall		Units
<i>Same</i>		9
<i>Same</i>		9
<i>Same</i>		9
<i>Same</i>		0
70-345 or 70-340 or 70-350	Business Presentations or Business Communications or Acting for Business	9
49-205	Tech Venture Marketing (<i>Mini 3</i>)	4.5
49-406	Tech Venture Formation (<i>Mini 4</i>)	4.5
Total:		45

Spring

<i>Same</i>		6
<i>Same</i>		6
<i>Same</i>		9
<i>Same</i>		9
<i>Same</i>		9

xx-xxx	Free Elective	9
Total:		48

49-405	Leading Engineering Innovation Teams (Mini 3)	4.5
49-306	Engineering Design Methods (Mini 4)	4.5
49-305	Customer Discovery (Mini 3)	4.5
Total:		52.5

Fourth Year		
Fall		Units
27-401	Capstone Design 1	6
27-xxx	MSE Restricted Elective	9
27-xxx	MSE Restricted Elective	9
xx-xxx	H&SS Elective	9
xx-xxx	Free Elective	9
xx-xxx	Approved PCC/SDM/II/WE Elective	9
Total:		51

Fourth Year		
Fall		Units
	Discipline-specific engineering design course	6
<i>Same</i>		9
<i>Same</i>		9
<i>Same</i>		9
49-420	EDIE Innovation Capstone	9
<i>Same</i>		9
Total:		51

Spring		
27-402	Capstone Design 2	6
xx-xxx	MSE Approved CIT Technical Elective	9
xx-xxx	H&SSElective	9
xx-xxx	Free Elective	9
xx-xxx	Free Elective	9
Total:		42

Spring		
<i>Same</i>	Discipline-specific engineering design course	6
<i>Same</i>		9
<i>Same</i>		9
49-421	EDIE Entrepreneurship Capstone	9
<i>Same</i>		9
Total:		42

