

# 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

## Materials Science 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

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

Third Year

Fall		Units
Same		9
Same		9
Same		9
Same		0
70-345 or 70-340 or 70-350	Business Presentations or Business Communications or Acting for Business	9
49-306	Engineering Design Methods (Mini 1)	4.5
49-405	Leading Engineering Innovation Teams (Mini 2)	4.5
Total:		45

Spring

Same	6
Same	6
Same	9
Same	9
Same	9



xx-xxx	Free Elective	9
<b>Total:</b>		<b>48</b>

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
<b>Total:</b>		<b>51</b>

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
<b>Total:</b>		<b>42</b>

49-205	Tech Venture Marketing ( <i>Mini 3</i> )	4.5
49-406	Tech Venture Formation ( <i>Mini 4</i> )	4.5
49-305	Customer Discovery (Mini 3)	4.5
<b>Total:</b>		<b>52.5</b>

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

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

