

Sample Schedule for Chemical Engineering & Engineering Design, Innovation & Entrepreneurship (EDIE)

Chemical Engineering		
First Year		
Fall		Units
06-100	Introduction to Chemical Engineering	12
21-120	Differential and Integral Calculus	10
09-105	Introduction to Modern Chemistry 1	10
99-101	Computing @ Carnegie Mellon	3
76-xxx	Designated Writing/Expression Course	9
Total:		44
Spring		
21-122	Integration and Approximation	10
xx-xxx	Intro to Engineering (second intro)	12
33-141	Physics I for Engineering and Physics Students	12
xx-xxx	Select one: PCC, SDM, I&I, W&E or GE	9
Total:		43
Second Year		
Fall		Units
06-222	Sophomore Chemical Engineering Seminar	1
06-223	Chemical Engineering Thermodynamics	12
09-106	Modern Chemistry II	10
39-210	Experiential Learning I	0
21-254	Linear Algebra and Vector Calculus for Engineers	11
xx-xxx	Computer Science/Physics II*	10
xx-xxx	Select once: PCC, SDM, I&I, W&E or GE	9

Chemical Engineering + EDIE		
First Year		
Fall		Units
Same		12
Same		10
Same		10
Same		3
Same		9
Total:		44
Spring		
Same		10
49-101	Intro to Engineering Design, Innovation & Entrepreneurship	12
Same		12
73-102	Principles of Microeconomics	9
Total:		43
Second Year		
Fall		Units
same		1
Same		12
Same		10
Same		0
Same		11
Same		10
70-345 or 70-340 or 70-350	Business Presentations or Business Communications or Acting for Business	9



		Total:	53
Spring			
06-261	Fluid Mechanics		9
06-262	Mathematical Methods of Chemical Engineering		12
09-221	Lab 1: Introduction to Chemical Analysis		12
39-220	Experiential Learning II		0
xx-xxx	Computer Science/Physics II*		10-12
xx-xxx	Unrestricted Elective		9
		Total:	52-54

Third Year

Fall		Units	
06-322	Junior Chemical Engineering Seminar		2
06-325	Numerical Methods and Machine Learning for Chemical Engineering		6
06-326	Optimization Modeling and Algorithms		6
06-323	Heat and Mass Transfer		9
09-217/219	Organic Chemistry 1 or Modern Organic Chemistry		9-10
39-310	Experiential Learning III		0
06-310	Molecular Foundations of Chemical Engr		9
xx-xxx	Unrestricted Elective		9
		Total:	50-51

Spring			
06-361	Unit Operations of Chemical Engineering		9
06-363	Transport Process Laboratory		9
06-364	Chemical Reaction Engineering		9
xx-xxx	Advanced Chemistry Elective		9
xx-xxx	Select one: PCC, SDM, I&I, W&E or GE		9
xx-xxx	Unrestricted Elective		9

		Total:	53
Spring			
Same			9
Same			12
Same			12
Same			0
Same			10-12
49-206	Tech Business Planning (Mini 4)		4.5
49-305	Customer Discovery (Mini 3)		4.5
		Total:	52-54

Third Year

Fall		Units	
Same			2
Same			6
Same			6
Same			9
Same			9-10
Same			0
49-306	Engineering Design Methods (Mini 1)		4.5
49-405	Leading Engineering Innovation Teams (Mini 2)		4.5
		Total:	50-51

Spring			
Same			9
Same			9
Same			9
Same			9
Same			9
49-305	Tech Venture Marketing (Mini 3)		4.5



			49-406	Tech Venture Formation (<i>Mini 4</i>)	4.5
Total: 54			Total: 54		
Fourth Year			Fourth Year		
Fall		Units	Fall		Units
06-421	Chemical Process Systems Design	12	Discipline-specific engineering design course - OR - Defer to Spring Term		12
06-423	Unit Operations Lab	9	Same		9
xx-xxx	Unrestricted Elective	9	49-420	EDIE Innovation Capstone	9
xx-xxx	Select one: PCC, SDM, I&I, W&E, OR GE (excluding categories fulfilled after 1st year)	9	Same		9
xx-xxx	Select one: PCC, SDM, I&I, W&E, OR GE (excluding categories fulfilled after 1st year)	9	Same		9
Total: 48			Total: 48		
Spring			Spring		
06-463	Chemical Product Design	9	Same		9
06-464	Chemical Engineering Process Control	9	Same		9
xx-xxx	Select one: PCC, SDM, I&I, W&E, OR GE (excluding categories fulfilled after 1st year)	9	Same		9
xx-xxx	Select one: PCC, SDM, I&I, W&E, OR GE (excluding categories fulfilled after 1st year)	9	Same		9
xx-xxx	Unrestricted Elective	9	49-421	EDIE Entrepreneurship Capstone	9
Total: 45			Total: 45		

