

The Engineering and Public Policy additional major degree is intended to complement the technical nature of the traditional engineering degree with a set of courses focused on the connection between technical issues and society/policy. The EPP additional major curriculum is designed to be completed in the usual 8-semester time frame of an undergraduate degree, with minimal overload of courses or units. The columns on the left show the course requirements for the traditional major, while the columns on the right show the corresponding course requirements for the traditional major with the EPP additional major.

Chemical Engineering**Chemical Engineering and Engineering and Public Policy**

Engineering Courses		Units	Engineering Courses		Units
06-100	Introduction to Chemical Engineering	12	06-100	same	12
xx-xxx	Other Introductory Engineering Elective	12	19-101	<i>Introduction to Engineering and Public Policy</i>	12
06-222	Sophomore Chemical Engineering Seminar	1	06-222	same	1
06-322	Junior Chemical Engineering Seminar	2	06-322	same	2
06-221	Thermodynamics	9	06-221	same	9
06-261	Fluid Mechanics	9	06-261	same	9
06-262	Mathematical Methods of Chemical Engineering	12	06-262	same	12
09-221	Laboratory I: Introduction to Chemical Analysis	12	09-221	same	12
06-321	Chemical Engineering Thermodynamics	9	06-321	same	9
06-323	Heat and Mass Transfer	9	06-323	same	9
09-21x	Organic Chemistry I OR Modern Organic Chemistry	9	09-21x	same	9
09-347	Advanced Physical Chemistry	12	09-347	same	12
06-361	Unit Operations of Chemical Engineering	9	06-361	same	9
06-363	Transport Process Laboratory	9	06-363	same	9
06-364	Chemical Reaction Engineering	9	06-364	same	9
06-421	Chemical Process Systems Design	12	06-421	same	12
06-423	Unit Operations Laboratory	9	06-423	same	9
06-462	Optimization Modeling and Algorithms	6	06-462	same	6
06-463	Chemical Product Design	6	06-463	same	6
06-464	Chemical Engineering Process Control	9	06-464	same	9

Students must complete all required courses for the Chemical Engineering Bachelor degree, with the exception of 03-232 Biochemistry. Students will take 36-220 Engineering Statistics and Quality Control instead.

Math and Science Courses		Units	Math and Science Courses		Units
21-120	Differential and Integral Calculus	10	21-120	same	10
21-122	Integration, Differential Equations & Approximation	10	21-122	same	10
21-259	Calculus in Three Dimensions	9	21-259	same	9

33-141	Physics I for Engineering Students	12	33-141	same	12
33-142	Physics II for Engineering and Physics Students	12	33-142	same	12
15-11x	Principles of Computing/Fund. of Programming	10	15-11x	same	10
09-105	Introduction to Modern Chemistry I	10	09-105	same	10
09-106	Modern Chemistry II	10	09-106	same	10
03-232	Biochemistry I	9	19-250	<i>Stat Models for Engineering Analysis & Design or</i>	9
			36-220	<i>Engineering Statistics and Quality Control</i>	

CIT General Education Courses		Units	CIT/EPP Non-technical courses		Units
99-101	Computing @ Carnegie Mellon	3	99-101	same	3
39-210	Experiential Learning I	0	39-210	same	0
39-220	Experiential Learning II	0	39-220	same	0
39-310	Experiential Learning III	0	39-310	same	0
76-10x	First-Year Writing Requirement	9	76-10x	same	9
	Social Analysis and Decision Making (SDM)	9		<i>EPP-approved Decision Science course</i>	9
	Writing and Expression (W&E)	9		<i>EPP-approved Writing & Communications course</i>	9
	Innovation & Internationalization (I&I)	9		same	9
	Peoples, Places, and Cultures (PPC)	9		same	9
	General Education Elective [1]	9		same	9
	General Education Elective [2]	9	73-102	<i>Principles of Microeconomics</i>	9
	General Education Elective [3]	9	19-351	<i>Applied Methods for Technology-Policy Analysis</i>	9

Free Electives	Units	Free Electives	Units
	45	19-201	<i>EPP Sophomore Seminar</i>
			<i>EPP Technology-Policy Elective [1]</i>
			<i>EPP Technology-Policy Elective [2]</i>
			<i>EPP Technology-Policy Elective [3]</i>
		19-451/2	<i>EPP Project [1]</i>
		19-451/2	<i>EPP Project [2]</i>
			free elective units to meet 45 unit minimum

Total Units (minimum)

389

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389

EPP Technology-Policy Electives are courses that address the connections between technology and society. Students select courses from a list of approved courses, which is updated each semester. Students can also petition for courses to be approved for EPP Electives.

Research credits, in EPP or another department, can be substituted for EPP Technology-Policy Elective credits with prior approval. EPP Technology-Policy Electives may fulfill General Education requirements.