

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.

Materials Science and Engineering**Materials Science and Engineering and Engineering and Public Policy**

Engineering Courses		Units	Engineering Courses		Units
27-100	Engineering the Materials of the Future	12	27-100	same	12
xx-xxx	Other Introductory Engineering Elective	12	19-101	<i>Introduction to Engineering and Public Policy</i>	12
27-201	The Structure of Materials	9	27-201	same	9
27-202	Defects in Materials	9	27-202	same	9
27-205	Introduction to Material Characterization	3	27-205	same	3
27-210	Materials Engineering Essentials	6	27-210	same	6
27-215	Thermodynamics of Materials	12	27-215	same	12
27-216	Transport in Materials	9	27-216	same	9
27-217	Phase Relations and Diagrams	12	27-217	same	12
27-301	Microstructure and Properties I	9	27-301	same	9
27-367	Selection and Performance	6	27-367	same	6
27-401	MSE Capstone Course I	6	27-401	same	6
27-402	MSE Capstone Course II	6	27-402	same	6
27-xxx	MSE Restricted Elective [1]	9	27-xxx	same	9
27-xxx	MSE Restricted Elective [2]	9	27-xxx	same	9
27-xxx	MSE Restricted Elective [3]	9	27-xxx	same	9
27-xxx	MSE Restricted Elective [4]	9	27-xxx	same	9
xx-xxx	MSE Approved Technical Elective	9	xx-xxx	same	9

Students must complete all required courses for the Materials Science and Engineering Bachelor degree.

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 and Approximati	10	21-122	same	10
21-259	Calculus in Three Dimensions	9	21-259	same	9
21-260	Differential Equations	9	21-260	same	9
33-141	Physics for Engineering Students II	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
09-101	Introduction to Experimental Chemistry	3	09-101	same	3
09-105	Introduction to Modern Chemistry I	10	09-105	same	10
xx-xxx	Restricted MSE science elective	9	xx-xxx	same	9
36-220	Engineering Statistics and Quality Control	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 and 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>	1
		<i>EPP Technology-Policy Elective [1]</i>	var
		<i>EPP Technology-Policy Elective [2]</i>	var
		<i>EPP Technology-Policy Elective [3]</i>	var
		19-451/ <i>EPP Project [1]</i>	12
		19-451/ <i>EPP Project [2]</i>	12
		addition free elective units to meet 45 unit minimum	var
Total Units (minimum)	379	Total Units (minimum)	379

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.