

# ENGINEERING, LAW, AND POLICY

## Degree Requirements

Requirements listed here are in addition to Graduate Council policies listed under GCAC-700 Professional Degree Policies (<http://gradschool.psu.edu/graduate-education-policies/>).

The Master of Engineering (M.Eng.) degree in Engineering, Law and Policy is a non-thesis professional master's degree that provides training for advanced professional practice. To receive the M.Eng. in Engineering, Law and Policy (MELP) a student must complete a minimum of 30 credits at the 400, 500, or 800 level, with a minimum of 18 credits at the 500 or 800 level, and at least 6 credits at the 500 level. The MELP residential program aims to provide Penn State graduates, as well as other U.S. and international students, with a competitive advantage when seeking employment at the nexus of science and technology policy, policy analysis, complex systems design, and regulatory compliance. This program also offers experienced engineers, as well as government and industry employers interested in supporting the professional growth of their engineers, the knowledge and skills to be versed in technology policy, regulatory policy analysis and advising, and emerging technology trends for business growth.

Students that pursue the MELP degree will attain broad, interdisciplinary competence and technical, policy and regulatory skills in as little as two semesters of intensive study, one year of full time study, or two years of part time study.

Total required credits for the MELP program is 30 credits.

Code	Title	Credits
<b>Required Courses</b>		
INTAF 502	Science, Technology, and International Policy	3
EDSGN 549	Design Decision Making	3
EDSGN 558	Systems Design	3
LPE 851	Foundations in Public Law	3
LPE 852	Foundations in Private Law	3
LPE 853	Engineering, Law, and Policy Systems	3
<b>Electives</b>		<b>9</b>
<b>Culminating Experience</b>		
LPE 854	Engineering, Law, and Technology Policy Practicum (Capstone Course)	3
<b>Total Credits</b>		<b>30</b>

Students must select 9 credits of electives, which may be a) electives in technical focus areas, b) general electives, or c) required core courses in the graduate certificate in International Affairs, International Security Studies, International Public Policy, International Development, or Engineering Leadership and Innovation Management. Electives will be chosen by the student based on their academic background, in consultation with their adviser or company (if they are associated with a sponsoring company) and the MELP program director. Elective courses can be chosen from a list of approved courses maintained by the graduate program office. Other courses may be approved in consultation with the adviser.

The culminating experience for the degree is a capstone course, LPE 854 Engineering, Law and Technology Policy Practicum. This course addresses current pressing issues in innovation, technology policy, and law through the eyes of policymakers. Students work on public-facing projects in interdisciplinary teams applying strategic technology policy, regulatory concepts and systems thinking to real world policy issues. The projects are tailored to meet the current research needs of particular federal and state lawmakers and agencies based on their legislative and regulatory agendas for the year. Students will analyze technology and policy options and conceive, design, and execute a technology policy research project taking into consideration the political, social and institutional context of technological systems. Students deliver an oral presentation, a technology policy tool, and a policy research paper on the project topic for relevant policymakers, seeking to assist them in their policy decision-making process. This course is designed to provide students with practical work experience, where they learn by doing.