

The Ohio State University
John Glenn College of Public Affairs Minor:

Science and Engineering in the Public Interest

The John Glenn College of Public Affairs OSU Battelle Center for Science, Engineering, and Public Policy Page Hall, 1810 College Road <http://glenn.osu.edu>
<http://battellecenter.org>

Science and Engineering can shape and inform Public Policy and therefore the way that a society tackles its complex challenges. Reciprocally, Public Policy shapes both the content and the way that Science and Engineering are accomplished.

Success in science and engineering enterprises therefore requires not only a knowledge of technical topics, but also an understanding of the *context* in which science and engineering are undertaken. This context includes the nature of government funding for research and development, the impact of politics on research agendas, the mechanisms of policymaking that affect science and engineering, and the ways in which innovation is developed and adopted in organizational and community contexts.

The *Science and Engineering in the Public Interest* Minor prepares students to act, innovate, and lead in the public interest. The minor provides students with foundational knowledge about public affairs and science, engineering, and technology (SET) policy, while building skills in systems thinking and innovation, interdisciplinary collaboration, strategic policy and science communication, and specific subject matter expertise.

Expected Learning Outcomes of the Minor:

1. Students understand and can conceptualize a range of contemporary issues in SET policy, the factors that drive SET innovation and the way it is accomplished, and the role of the public sector in SET and its processes.
2. Students can identify, analyze, and navigate complex modern challenges at the intersection of the policy, science, engineering, and technology domains using interdisciplinary methods and diverse perspectives.
3. Students can apply effective communication skills to develop, propose, and advocate for innovative, evidence-based policies for both public- and private-sector decision makers.

Structure of the Minor:

The *Science and Engineering in the Public Interest* minor consists of 15-16 semester credit hours that provide students with (1) a broad awareness of this interdisciplinary landscape; (2) foundational public affairs knowledge; (3) and detailed understanding of a specific policy domain.

(1) Choose 1 of the 2 survey courses:

PUBAFRS 2620: Contemporary Issues in Science, Engineering, and Technology Policy (3)
PUBAFRS 2110: Introduction to Public Affairs (3)

(2) Choose 1 of the courses below in these traditional science and technology policy domains:

Space Policy

PUBAFRS 3620 US Space Policy and the Global Space Economy

National Security Technology Policy

PUBAFRS 2630 Contemporary Civil-Military Relations in the U.S.

Energy and Environmental Policy

ENR 3200 Environmental & Natural Resources Policy*
PUBAFRS 5770 Risk Management and Policy

Health, Biomedical, and Biotechnology Policy

PUBHEHS 3310 Current Issues in Global Environmental Health
PUBHHMP 3610 United States & International Health Care

Cyber, Autonomy, Information, and Data Privacy

ISE 5194 Human Centered Machine Learning
PUBAFRS 4040 Data Policy
INTSTDS 3702 Herding Cyber Cats: Information Security Mngmt.

(3) Choose 2 of the 4 upper-level public affairs courses:

PUBAFRS 5600: Science, Engineering, and Public Policy Analysis
(3) (cross-listed as ENVENG 5600)

PUBAFRS 5610: Innovation, Policy, and the Global Economy (3)

PUBAFRS 5620: Rapid Innovation for Public Impact (4; project-based)

PUBAFRS 5750: The Business-Government Relationship (3)

* Some courses within the minor have prerequisite requirements that should be taken into consideration.

Program Guidelines

Credit hours required: A minimum of 12 credit hours. 1000-level courses shall not be counted in the minor. At least 6 credits must be at the 3000-level or above.

Transfer and EM Credit hours allowed: A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

Overlap with GE: A student is permitted to overlap up to 6 credit hours between the GE and the minor.

Overlap with the major and additional minor(s)

- Each minor completed must contain a minimum of 12 hours distinct from the major and/or additional minors (i.e. minors that require more than 12 hours may overlap those hours beyond 12 with the major or another minor)

Grades required

- Minimum C- for a course to be listed on the minor
- Minimum 2.00 cumulative GPA for all minor course work
- Course work graded Pass/Non-pass cannot count on the minor
- No more than 3 hours of courses graded Satisfactory/Unsatisfactory may count toward the minor

X193 credit No more than 3 credit hours

Approval required: The minor course work must be approved by the academic unit offering the minor.

Filing the minor program form: The minor program form must be filed by the time the graduation application is submitted to the student's college/school/departmental advisor.

Changes to the minor: Once the minor program is filed in the college office, any changes must be approved by the John Glenn College of Public Affairs.

College of Arts and Sciences
Curriculum and Assessment Services
306 Dulles Hall, 230 Annie and John Glenn Ave
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