

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>
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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.

Therefore, success in science and engineering enterprises 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, and the mechanisms of policy-making that supports or regulates science and engineering. Equally critical is the way that innovation is accomplished in organizations and the facilitators and inhibitors of communities' adoption of innovation. This minor illustrates the differences between technical culture and political culture and the necessity of communicating technical risk and uncertainties in a manner customized for audiences.

The *Science and Engineering in the Public Interest* Minor will give students the knowledge and skills needed to act, innovate, and lead in the public interest.

Structure of the Minor:

The *Science and Engineering in the Public Interest* minor consists of 12-13 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 Management

(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

Required for graduation: No

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 point-hour ratio required for the minor.
- 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.