The Ohio State University
John Glenn College of Public Affairs

Science, Engineering, and Public Policy Minor

The John Glenn College of Public Affairs
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This minor introduces students to the governmental roles and responsibilities surrounding more than one trillion dollars of spending worldwide on science, engineering, and innovation. The majority of these funds are provided by governments, and as such, is a crucial aspect of public policy. National security, healthcare, transportation, energy, environment, and much more are supported by government spending. In addition to determining spending, items such as standards, regulations, patents, inventions, and medicines, result from this spending, all of which are determined by government policy. Students will become familiar with all aspects of this major government role. They will be able to:

- Name the key governmental and non-governmental organizations, ad hoc groups and advocacy networks that influence investment in science, engineering, and innovation.
- Identify top theories of administration, governance, and development related to publicly funded science and engineering at national and international levels; critique the usefulness of existing theories of the contribution of science and engineering to economic growth.
- Know authoritative sources of data on science and engineering funding and impact, and be able to use data to explain science, engineering and innovation activities.
- Critique sources of information that may assist professional careers in the public and nonprofit sectors in scientific, health, or engineering fields.
- Get excited about playing a role in national and international science and engineering issues.

Overview
The minor in Science, Engineering and Public Policy consists of 12 semester credit hours composed of six credits of core courses from the John Glenn College of Public Affairs and six credits of thematic courses in substantive areas of relating science, engineering, and public policy (e.g., Energy Policy).

Required Courses (Take two of the following)
PUBAFR /ENVENG 5600: Science, Engineering and Public Policy (3)
PUBAFR 5610: Innovation, Policy, and the Global Economy (3)
PUBAFR 5750/5750H: The Business Government Relationship (3)

Thematic Courses**
The goal of the thematic specialization is that all students emerge with knowledge about a substantive area of science, technology, or engineering policy. Students must select two courses from the thematic areas listed below. They may also petition to count other courses related to science or engineering policy that are not listed here.
** A student may take all three core courses and one elective in a thematic area, if desired

Land-Use Policy
ENR 3600 Management of Public Lands
ENR 4400 Law and Legal Process
ENR 5325 Public Forest and Lands Policy

Food and Agriculture Policy
PUBAFR 5800 US Food Policy
PUBAFR 5900 Food Systems Planning and the Economy
FDSCTE 5320 Food Laws and Regulations
AED ECON 4597 Population, Food, and the Environment
AED ECON 4002.02 Operations Research in Agribusiness and Applied Economics
FABENG 5320 Agroecosystems

Energy and Environmental Policy
ENR 2155 Energy and Environment
ENR 4000 Environmental and Natural Resources Policy
ENR 5451 Water Law
MATSCEN 5572 Materials for Energy Technology

Health Policy
BMI 5760 Public Health Informatics
PUBHEHS 3310 Current Issues in Global Environmental Health
PUBHLTH 4650 United States & International Health Care

Science/Engineering and Society
SOCIOL 3302 Technology and Global Society
ENGR 2362 History of American Technology
CIVENG 3080 Engineering Economics
ISE 2040 Engineering Economics
ISE 5840 Market Engineering and Applications
ENGR 5050 Humanitarian Engineering

Science, Engineering, and Public Policy minor 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)

- The minor must be in a different subject than the major
- 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.

College of Arts and Sciences
Curriculum and Assessment Services
154 Denney Hall, 164 W. 17th Ave.
http://artsandsciences.osu.edu

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