

SCIENCE POLICY GRADUATE CERTIFICATE

Banner Code: SC-CERG-SCPO

Website: <https://science.gmu.edu/academics/graduate-programs>

Admissions & Policies

Admissions

University-wide admissions policies can be found in the Graduate Admissions Policies (<http://catalog.gmu.edu/admissions/graduate-policies/>) section of this catalog.

To apply for this program, please complete the George Mason University Admissions Application (<https://www2.gmu.edu/admissions-aid/apply-now/>).

Applicants should have an undergraduate degree from an institution of higher education accredited by a Mason-recognized U.S. institutional accrediting agency or international equivalent with a minimum GPA of 3.00 (on a 4.00 scale). No specific undergraduate degree is required.

Policies

For policies governing all graduate programs, see AP.6 Graduate Policies (<http://catalog.gmu.edu/policies/academic/graduate-policies/>).

Requirements

Certificate Requirements

Total credits: 16-17

This certificate may be pursued on a full-or part-time basis.

Core Courses

Code	Title	Credits
COS 510	Introduction to Science Policy	3
COS 515	Science Policy Internship Preparation	1
EVPP 529	Environmental Science Communication	3
POGO 794	Internship ¹	3
Total Credits		10

¹ Students will be required to complete 120 clock hours in a federal government office for the 3 credit hour externship. Since the students are practicing new policy-based skills learned in the science policy certificate program, the externship placement cannot be in their current position of employment. Prior experience cannot be applied toward the credit hour requirement.

The externships will be coordinated by the Program Director of the certificate program. The externship performance will be evaluated by externship supervisor and the Program Director. The Program Director assessment is based on participation in the graded discussion forums, course assignments, journaling, midterm and final self-evaluations, and timesheets to verify contact hours. In addition, the externship supervisor conducts and submits to the Program Director a graded midterm supervisor and final supervisor evaluation. If a student fails the externship, then the course will be repeated in the next term to fulfill the externship requirement. If a student fails the externship a second time, they will be given a permanent failing grade in the course and will not be allowed to complete the certificate.

Elective Courses

Students select 6-7 credits of relevant science and policy coursework at the 500-level or above. Elective coursework must be pre-approved, in writing, by the Program Director.

Elective coursework must include at least one technical science course, and one policy course. Any remaining elective credits may be taken from either subject area. Independent directed research and reading courses will not count toward the required credits for this certificate program.

Code	Title	Credits
Students select 6-7 credits from the following: ¹		
6-7		
Technical Science Courses		
Atmospheric, Oceanic, & Earth Sciences		
CLIM 690	Scientific Basis of Climate Change	
GEOL 521	Geology of Energy Resources	
Biology		
BIOL 562	Personalized Medicine	
BIOL 685	Emerging Infectious Diseases	
Chemistry & Biochemistry		
CHEM 560	Environmental Biotechnology	
Computational & Data Sciences		
CDS 502	Introduction to Scientific Data and Databases	
Environmental Science & Policy		
EVPP 533	Energy Policy	
EVPP 534	Food-Energy-Water Nexus	
EVPP 642	Environmental Policy	
Forensic Science & Digital Forensics		
FRSC 640	Legal, Privacy and Ethical Issues in Identity Analysis	
DFOR 768	Digital Warfare	
Physics & Astronomy		
PHYS 581	Topics in Renewable Energy	
Policy Courses		

BIOD 609	Biodefense Strategy
BIOD 706	Nuclear, Biological, and Chemical Weapons Policy and Security
BIOD 760	National Security Technology and Policy
GOVT 753	Collaborative Public Management
POGO 611	Advanced Data Analysis for Policy and Government
PUBP 500	Theory and Practice in Public Policy
PUBP 605	State and Local Government Policy and Economic Development
PUBP 707	Budget Decision Making: Concepts and Practices in Economic and Financial Analyses
PUBP 760	Science and Technology Policy in the 21st Century
PUBP 820	Technology, Science, and Innovation: Institutions and Governance
Total Credits	6-7

¹ Alternative courses can be applied with permission of the Program Director.