

MASTER OF ARTS IN THE FIELD OF INTERNATIONAL SCIENCE AND TECHNOLOGY POLICY

Scientific and technological advances provide the basis of international competitiveness and account for the bulk of national growth and the improvement of the quality of life around the world. The ability to create, adapt, and adopt new technologies defines modern societies. In today's global environment, the need for innovation is essential for solving societal problems and staying ahead of competition. Developments in information technology, space exploration, genetic modification, and advances in material science are governed and shaped by institutions that set science and technology policy. The master of arts in international science and technology policy prepares students to understand and respond to these important dynamics.

The 40-credit, multidisciplinary MA program includes a core field in science technology and international affairs that allows students to concentrate on areas of particular interest; an analytical competency requirement that provides career-enhancing, marketable skills in policy analysis, economic theory, or statistics; and an elective field that reflects individual interests and career goals.

Recent graduates often work in research, analysis, or management positions with titles such as research analyst, program or policy analyst, legislative analyst, or more specialized areas. Analysts are often employed with government agencies, advocacy groups, think tanks, science and technology-oriented publications, among other organizations.

Visit the program website (<https://elliott.gwu.edu/international-science-and-technology-policy/>) for additional information.

ADMISSIONS

Admission Fall: January 7th - Fellowship & Application Deadline deadlines:

Spring: October 1st - Fellowship & Application Deadline
Applications for admission will continue to be accepted on a rolling basis after the fellowship deadlines have passed, but students will not be considered for fellowships.

Standardized GRE/GMAT test-optional test scores:

Recommendations (2) letters are required. Applicants should submit required: one (1) academic letter from a professor and one (1) professional reference.

Prior academic records: Transcripts are required from all colleges and universities attended, whether or not credit was earned, the program was completed, or the credit appears as transfer credit on another transcript. Unofficial transcripts from all colleges and universities attended should be uploaded to your online application. Official transcripts are required only of applicants who are offered admission and choose to enroll.

If academic records are in a language other than English, English language translations must be provided. The English translations alone should be uploaded into the online application. Official transcripts and certified English translations will be required of applicants who are offered admission and choose to enroll.

Statement of purpose: All applicants are required to submit an essay of approximately 500 words that answers one of the two questions below:

State your purpose in undertaking graduate study at the Elliott School. As part of your statement of purpose, describe your academic and research interests, career objectives, how a degree from the Elliott School will enable you to achieve your goals, and what unique skills, talents and/or perspectives you will bring to your program. Please be specific.

OR -
Please discuss an issue of international importance you wish to address in your professional career. Please include how the Elliott School and the academic program to which you have applied will prepare you to address this global issue.

Additional requirements: A resumé or curriculum vitae is required. Resumés/CVs must include dates of employment (if applicable) and date of degree conferral or expected degree conferral.

International applicants only: International Applicants may be required to submit official English Language tests scores with their application. Please see the Elliott School's English Language Requirements for guidance on whether you need to take the TOEFL/IELTS/PTE. Please send official TOEFL scores to institution code 5246.

The minimum English Language Test Requirements can be found below:

Eligible for Admission & requires EAP Courses:

IELTS- 7.0 overall score, no band score below 6.0

TOEFL- 100 (internet test) 600 (paper test)

PTE- 68

Eligible for Admission & Exempt from EAP Courses**:

IELTS- 7.0 overall score, no band score below 6.5

TOEFL- 105 (internet test) 650 (paper test)

PTE- 72

**Spring applicants must receive at least these scores to be considered for admission.

Please review International Applicant Information carefully for details on required documents, earlier deadlines for applicants requiring an I-20 or DS-2019 from GW, and English language requirements.

Supporting documents not submitted online should be mailed to:
Office of Graduate Admissions
The Elliott School of International Affairs
The George Washington University
1957 E Street, NW, Suite 301
Washington, DC 20052

Contact for questions:
esiagrad@gwu.edu ~ 202.994.7050 ~ 202.994.9537 (fax)
9:00 am – 5:00 pm, Monday through Friday

REQUIREMENTS

See note regarding special topics courses, skills courses, and LAW courses.*

The following requirements must be fulfilled: 40 credits, including 6 credits in core field courses, a 4-credit capstone course sequence, 15 credits in a concentration, 6 credits in analytical competency courses, and 9 credits in elective courses.

Code	Title	Credits
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Required

Core field courses (6 credits)

IAFF 6141	International Science and Technology Policy Cornerstone
IAFF 6143	Science and Technology Policy Analysis

Capstone (4 credits)

Students complete a two-course capstone sequence that most closely matches the thematic area of their project. The capstone sequence includes a 2-credit capstone workshop taken before the 2-credit capstone seminar. Students must have completed at least 18 credits of coursework prior to starting the capstone sequence. The two 2-credit capstone courses must be taken consecutively.

IAFF 6157	International Science and Technology Policy Capstone Workshop (offered in the Fall semester only)
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IAFF 6159	International Science and Technology Policy Capstone Project (offered in the Spring semester only)
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Concentration (15 credits)

At least five courses in one concentration. Students may choose from the following concentrations or they may design a personalized concentration in consultation with the program director. Requests for courses beyond these lists will be discussed with the program director.

Space policy concentration

IAFF 6145	U.S. Space Policy
IAFF 6146	Space Law
or LAW 6548	Air and Space Law
IAFF 6148	Space and National Security
IAFF 6153	Science, Technology, and National Security
IAFF 6158	Special Topics in International Science and Technology Policy (Issues in Space Policy)
IAFF 6158	Special Topics in International Science and Technology Policy (Space Economics)
IAFF 6158	Special Topics in International Science and Technology Policy (Science, Technology, and Global Statecraft)
EHS 6227	Introduction to Human Health in Space
MAE 3145	Orbital Mechanics and Spacecraft Dynamics
MAE 6249	Spacecraft Design

Energy policy concentration

IAFF 6151	Environmental Policy
IAFF 6152	Energy Policy
IAFF 6138	Special Topics in International Development Studies (Climate Change and Sustainable Development)
IAFF 6118	Special Topics in International Affairs (Global Energy Markets)
IAFF 6378	Special Topics in Middle East Studies
IBUS 4404	Global Energy
EMSE 6200	Policy Factors in Environmental and Energy Management
LAW 6438	Energy Law and Regulation
PUBH 6130	Sustainable Energy and the Environment
IAFF 6158	Special Topics in International Science and Technology Policy (Science Diplomacy)
IAFF 6158	Special Topics in International Science and Technology Policy (Science, Technology, and Global Statecraft)

Technology innovation management and policy concentration

IAFF 6158	Special Topics in International Science and Technology Policy (Economics of Technological Change. Same as: ECON 6255)
IAFF 6138	Special Topics in International Development Studies (Development and Technology)
ECON 6237	Economics of the Environment and Natural Resources
ECON 6283	Survey of International Trade Theory and Policy
ISTM 6214	Foundations of Artificial Intelligence
ISTM 6218	Business Applications of Artificial Intelligence
ISTM 6222	IS/IT Strategy and Implementation
ISTM 6223	Technology Entrepreneurship
ISTM 6224	Management of Technology and Innovation
ISTM 6233	Emerging Technologies
IBUS 6401	International Business Strategy
MGT 6280	Entrepreneurship
Environmental policy concentration	
IAFF 6151	Environmental Policy
IAFF 6158	Special Topics in International Science and Technology Policy (Science Diplomacy)
IAFF 6118	Special Topics in International Affairs (Managing the World's Water)
IAFF 6164	Environmental Security
IAFF 6138	Special Topics in International Development Studies (Climate Change and Smallholder Agriculture)
IAFF 6138	Special Topics in International Development Studies (Urbanization and Climate Change)
IAFF 6138	Special Topics in International Development Studies (Strategic Environmental Management)
IAFF 6358	Special Topics in Latin American and Hemispheric Studies (Climate Change and Environmental Policy in Latin America)
EMSE 6200	Policy Factors in Environmental and Energy Management

EMSE 6220	Environmental Management
GEOG 6220	Seminar: Climatic Change
GEOG 6293	Special Topics (Environmental Conservation)
GEOG 6230	Seminar: Environmental Issues in Development (Environment and Development)
PPPA 6140	Introduction to Environmental Law
PUBH 6130	Sustainable Energy and the Environment
Nuclear policy concentration	
IAFF 6152	Energy Policy
IAFF 6158	Special Topics in International Science and Technology Policy (Science Diplomacy)
IAFF 6158	Special Topics in International Science and Technology Policy (Science, Technology, and Global Statecraft)
IAFF 6106	Nuclear Weapons
IAFF 6107	The Science of Nuclear Materials
IAFF 6118	Special Topics in International Affairs (Nuclear Security Policy)
IAFF 6186	Special Topics in Security Policy Studies (Nuclear Strategy)
IAFF 6186	Special Topics in Security Policy Studies (Nuclear Proliferation and Nonproliferation)
National security concentration	
IAFF 6153	Science, Technology, and National Security
IAFF 6148	Space and National Security
IAFF 6158	Special Topics in International Science and Technology Policy (Artificial Intelligence and Policy Challenges)
IAFF 6158	Special Topics in International Science and Technology Policy (Science, Technology, and Global Statecraft)
IAFF 6186	Special Topics in Security Policy Studies (Cybersecurity)
IAFF 6186	Special Topics in Security Policy Studies (Weapons of Mass Destruction and Arms Control in the 21st Century)
IAFF 6186	Special Topics in Security Policy Studies (Emerging Threats)

IAFF 6186	Special Topics in Security Policy Studies (Nuclear Proliferation and Non-Proliferation)
IAFF 6186	Special Topics in Security Policy Studies (U.S. National Security)
IAFF 6106	Nuclear Weapons
IAFF 6107	The Science of Nuclear Materials
IAFF 6162	Security Policy Analysis
IAFF 6118	Special Topics in International Affairs (Nuclear Security Policy)
IAFF 6160	Defense Policy and Program Analysis
Analytical competency (6 credits)	
Two courses from the following:	
IAFF 6158	Special Topics in International Science and Technology Policy (Economics of Technological Change. Same as: ECON 6255)
IAFF 6118	Special Topics in International Affairs (Applied Qualitative Methods)
IAFF 6118	Special Topics in International Affairs (Data Analytics for International Affairs)
IAFF 6216	Analytic Tools for Global Policy
IAFF 6501	Quantitative Analysis for International Affairs Practitioners
ECON 6217	Survey of Economics I
ECON 6218	Survey of Economics II
ECON 6219	Managerial Economics
ECON 6321	Applied Managerial Economics
ECON 6237	Economics of the Environment and Natural Resources
ECON 6250	Survey of Economic Development
ECON 6280	Survey of International Economics
ECON 6301	Applied Microeconomic Theory
ECON 6305	Applied Macroeconomic Theory
EMSE 4571	Introduction to Programming for Analytics
EMSE 4572	Exploratory Data Analysis
MAE 3145	Orbital Mechanics and Spacecraft Dynamics

MAE 6249	Spacecraft Design
PPPA 6002	Research Methods and Applied Statistics
PPPA 6003	Economics for Public Decision Making
PPPA 6005	Public Budgeting, Revenue, and Expenditure Analysis
PPPA 6007	Microeconomics for Public Policy I
PPPA 6015	Benefit-Cost Analysis
PPPA 6020	Decision Modeling for Public Policy

Other relevant concentration courses and analytical competency courses not listed above may be substituted with the approval of the program director.

Electives (9 credits)

9 credits in elective courses. Elective courses may include graduate-level courses offered through other Elliott School programs, departments in other GW schools, or a combination of the two. Up to 3 credits may be taken as professional skills courses (IAFF 6502 or IAFF 6503).

*Specific subject matter covered in special/selected topics courses varies by semester. Consult the Schedule of Classes (<http://my.gwu.edu/mod/pws/>) for each semester's offerings. Topics courses not listed here may be used to fulfill program requirements if approved by the program director.

Additional information regarding skills courses (<https://elliott.gwu.edu/professional-skills-courses/>) (<https://elliott.gwu.edu/thesis/>) is available on the Elliott School website.

Law School courses—Students may, with permission of their advisor, include courses in the Law School (<http://www.law.gwu.edu/>) in their major field. Enrolling in a LAW course also requires permission of the Law School dean of students. Students should consult the Elliott School's Graduate Student Services (<https://elliott.gwu.edu/graduate-academic-advising/>) office before enrolling in LAW courses.

PPPA courses—Students may, with permission of the Department of Public Policy and Public Administration, enroll in these courses. If not listed here, program director permission would also be required. Students should consult their academic advisor within the Elliott School's Graduate Student Services (<https://elliott.gwu.edu/graduate-academic-advising/>) office regarding appropriate next steps for enrolling in PPPA courses.

COMBINED PROGRAMS

Combined Programs

- Joint Master of Arts in Elliott School programs and Master of Business Administration (<https://bulletin.gwu.edu/international-affairs/graduate-programs/joint-mba-ma-international-affairs/>)

- Joint Master of Arts and Juris Doctor (<https://current.bulletin.gwu.edu/international-affairs/graduate-programs/joint-ma-jd/>)