

GRADUATE PROGRAMS

ESF's Environmental Studies graduate programs integrate social, cultural, and environmental knowledge and skills to address the challenges of the 21st century. The Department of Environmental Studies offers several pathways for graduate training, including:

- A PhD in Environmental Studies
- A Research-based MS (Master's of Science)
- A Synthesis-Experience Based MPS (Master's of Professional Studies)
- A Fully Online MPS in Environmental Leadership, Justice, and Communication
- Three Online Advanced Graduate Certificates, which can stand alone, or be used towards partial completion of our other degree programs

PhD in Environmental Studies

The PhD in Environmental Studies prepares students to serve as leaders, researchers, scholars, and problem-solvers across multiple scales and levels. Students gain comprehensive, environmental social science foundations and methods for analyzing and addressing environmental concerns and promoting sustainability through meaningful engagement with multiple stakeholders in environmental research, policymaking, and scholarship. The PhD program's hybrid, low-residency option is designed to provide broad accessibility to traditional and non-traditional graduate students, including working, mid-career professionals.

PhD Program Requirements

A total of 60 credit hours is required to earn the PhD in Environmental Studies. Of these 60 credit hours, 33 to 45 credit hours of coursework are required. To complement coursework, students will complete 12 to 24 credits of Dissertation Research, and at least 3 hours of Professional Development experience. Up to 30 credit hours of transfer credits would be granted for related graduate coursework. Credit for relevant professional work experience may be granted by the student's PhD Steering Committee, in lieu of selected course requirements.

Ph. D. Low-Residency Option

The PhD in Environmental Studies is offered in two formats: traditional, full residency; and hybrid, low residency. For the low-residency option, students complete a minimum of two semesters of residence at ESF; during this time, they complete core requirements in "Theory, Philosophy & Knowledge Systems" and in "Research Methods, Design, and Utilization", as well as appropriate thematic coursework. Additional coursework can be completed before or after the two semesters residency, typically through taking up to nine of the courses available through online Graduate Certificate Programs. Dissertation Research credit hours are generally taken following successful completion of graduate coursework and the Ph.D. Candidacy Examination.

The below table summarized curricular requirements for both low-residency and full residency options. Starred courses are offered online.

Curricular Requirements

Theory, Philosophy and Knowledge Systems- 9 credits

Category / Course Title	Credits
-------------------------	---------

<i>Two courses in Environmental Social Science Theory, at least one of which must be taken at the 700 level, e.g.</i> EST 600, Foundations of Environmental Studies *EST 640, Environmental Thought and Ethics EST 708, Social Theory and the Environment EST 770, Regenerative Approaches to Sustainable Futures	6
<i>A discipline-focused graduate level theory course at ESF or Syracuse University (e.g., Geography Theory)</i>	3

Research Methods, Design, and Utilization- Four courses (at least one from each of the below categories)- 12 credits

Category / Course Title	Credits
<i>Research design</i> EST 603, Research Methods and Design	3
<i>Social science research methods</i> EST 604, Social Survey Research Methods for Environmental Issues EST 605, Qualitative Methods *EST 617, Measuring Environmental Inequality EST 645, Mass Media and Environmental Affairs EST 797 Indigenous Research Methods	3
<i>Research utilization</i> EST 550 Environmental Impact Analysis EST 627 Environmental and Energy Auditing EST 652 Managing Sustainability EST 690 International Environmental Policy	3

EST 702 Environmental and Natural Resource Program Evaluation	
EST 705 Environmental Policy Analysis	

Thematic Environmental Social Science- 12 credits

Category / Course Title	Credits
<i>Four thematic environmental social science courses, e.g.</i> *EST 606, Public perception and Communication of Risk, Science and Environment *EST 608, Environmental Advocacy Campaigns and Conflict Resolution EST 613, Urbanization and the Environment *EST 615, Environmental Justice: Policy, Tools & Society EST 696 Critical Climate Studies EST 796 Water, Climate, and Society	12

Additional Requirements

Category / Course Title	Credits
EST 999 Dissertation Research	12
Professional Development Seminar(s)	3
OPTIONAL: Additional Dissertation Research Credits / Topically Relevant Coursework / Guided Professional Practice	0-12

Total credits: 60

*offered online

Master of Science (M.S.)

M.S. Program Requirements

The Environmental Studies M.S. degree program is a 30-credit-hour experience focused on advanced academic scholarship and research related to environmental affairs and sustainability. This degree requires the completion of a Master's thesis. Details on thesis proposals and expectations are available in the M.S. in Environmental Studies student handbook. All students must present a Capstone Seminar during their final semester. If necessary, the distribution of required credits may be adjusted to take into account a student's prior academic work and background. It is recommended that students entering this program have some academic background in Environmental Policy or Communication, and Environmental Science or Ecology.

Core Courses (9 credits)

EST 600	Foundations/Envrnmntl Studies	3
---------	-------------------------------	---

All students also take at least two of the following:

Elective Courses

EST 608	Env Adv Camp & Conflict Res	3
EST 612	Environmntl Policy &Governance	3
EST 613	Urbanization & the Environment	3
EST 615	Environmental Justice	3
EST 640	Envrn Thought and Ethics	3
EST 645	Mass Media&Envrn Affairs	3
EST 650	Envrn Perception&Human Behavr	3
EST 708	Environment and Society	3
EST 770	Regen Approaches Sust Futures	3

Research Methods (6 credits)

All students take:

Core Courses

EST 603	Research Methods and Design	3
---------	-----------------------------	---

And one additional research methods course, typically from the following list and typically to support their thesis research:

Elective Courses

APM 510	Statistical Analysis	3
---------	----------------------	---

APM 625	Sampling Methods	3
APM 630	Regression Analysis	3
EST 604	Quant Soc Sci Research Methods	3
EST 605	Qualitative Methods	3
EST 617	Measuring Envrnmntl Inequality	3
EST 702	Env&Nat Res Prog Eval	3
EST 705	Environmental Policy Analysis	3
LSA 640	Research Methods	3

NOTE: Other research methods courses may be identified in collaboration with the student's advisor.

Generalized / Thematic Area (9 credits)

All students take three courses--typically in a thematic area--in consultation with their major professor. The thematic area should be used to substantively prepare the student for thesis work. EST 898 and EST 899 may not be included as thematic area courses.

Thesis Research (6 credits)

All students with an approved thesis proposal take at least six credits of:
EST 899. Master's Thesis Research

Master of Professional Studies (M.P.S.) in Environmental Studies

The M.P.S. in Environmental Studies degree program is a 30-33 credit-hour experience focused on advanced academic scholarship and its application to environmental affairs and sustainability. This degree requires the completion of a synthesis experience, often involving an individual or group-based professional internship. All students must present a Capstone Seminar during their final semester. The distribution of required credits may be adjusted to take into account a student's prior academic work and background. All courses are 3 credit hours unless noted otherwise. It is recommended that students entering this program have some academic background in Environmental Policy or Communication, and Environmental Science or Ecology.

Credit for prior experience (M.P.S. degree only). Applicants with a minimum of three (3) years of post-baccalaureate, full-time professional experience directly related to the intended area of study may apply for 6 credit hours of advanced standing in the M.P.S. program. Partial credit for experience cannot be awarded. When awarded for prior work experience, the 6 credit hours are applied toward the Synthesis requirement.

M.P.S. Program Requirements

Core (12 credits)

Four courses cover the disciplinary and methodological scope of the field and demonstrate its applicability to problem analysis and the quest for sustainability. For full-time students, these courses are usually taken in the first year of the program; Part-time students may take these courses over multiple years. These courses provide a basis of common knowledge among students in the MPS program.

Required Courses

EST 600	Foundations/Envrnmntl Studies	3
---------	-------------------------------	---

AND three of the following:

These are the recommended courses to help develop the fundamental knowledge and skill set for Environmental Studies:

Required Courses

EST 606	Pblic Prcptn & Communication	3
EST 608	Env Adv Camp & Conflict Res	3
EST 612	Environmntl Policy &Governance	3
EST 613	Urbanization & the Environment	3
EST 615	Environmental Justice	3
EST 616	Global Persp on Env Justice	3
EST 624	Nature,Recreation and Society	3
EST 635	Pub Part&Decision Making	3
EST 640	Envrn Thought and Ethics	3
EST 645	Mass Media&Envrn Affairs	3
EST 650	Envrn Perception&Human Behavr	3
EST 652	Managing Sustainability	3
EST 708	Environment and Society	3
EST 770	Regen Approaches Sust Futures	3

Alternate courses may be identified in collaboration with the student's advisor.

Natural Sciences (3 credits)

At least one natural science course is required in order to enhance the student's existing knowledge. Typically this would be one of the following courses, though alternatives may be considered in consultation with the student's advisor.

Required - 1 course chosen from:

Required Courses

EFB 518	Systms Ecology: Eco MdIng&Dsgn	3
EFB 523	Tropical Ecology	3
EFB 600	Toxic Health Hazards	4
EFB 611	Topics in Envrnmntl Toxicology	3
EFB 623	Marine Ecology	5
EFB 650	Landscape Ecology	3
FOR 538	Meteorology	3
FOR 642	Watershed Ecology & Management	3
FOR 680	Urban Forestry	3
SRE 525	Energy Systems	3
SRE 535	Renewable Energy	3

Research / Technical Methods (3 credits)

At least one research or technical methods course is required to provide skills necessary to apply environmental knowledge and pursue the synthesis experience for the MPS. Typically this would be one of the following, but an alternative course may be selected in consultation with the student's advisor.

Required - 1 course chosen from:

Elective Courses

APM 510	Statistical Analysis	3
APM 625	Sampling Methods	3
APM 630	Regression Analysis	3
ENS 519	Spatial Ecology	3
ERE 551	GIS for Engineers	3
EST 550	Envrn Impact Analysis	3
EST 570	Intro/Pers Env Interp Methods	3
EST 603	Research Methods and Design	3
EST 604	Quant Soc Sci Research Methods	3

EST 617	Measuring Envrnmntl Inequality	3
EST 627	Environmental &Energy Auditing	3
EST 671	Non-Personal Envrn Interp Meth	3
EST 702	Env&Nat Res Prog Eval	3
EST 705	Environmental Policy Analysis	3
FOR 557	Fundamentals of GIS	3
FOR 659	Advanced GIS	3
LSA 500	Digital Methods & Graphics I	3
LSA 501	Landscape Representation II	3
LSA 552	Graphic Communication	3
LSA 640	Research Methods	3
LSA 650	Behavr Factor/Comm Desgn	3
SRE 679	Life Cycle Assessment	3

Generalized / Thematic Area (9 credits)

Three additional courses are selected in consultation with the student's Steering Committee. The Generalized or Thematic Area courses are used to prepare the student for capstone synthesis work and post-graduation work opportunities by enhancing a solid knowledge of some aspect of Environmental Studies. Course selection is determined through the Graduate Program of Study; students will be encouraged to include courses in their plans of study that enhance their career goals. EST 898 and EST 899 may not be included as Generalized or Thematic Area courses.

Synthesis (3-6 credits)

In order to synthesize and apply their knowledge of Environmental Studies, all students take 3-6 credit hours of one of the following:

- EST 798 Problems in Environmental Studies (3-6 cr, Synthesis Paper)
- EST 898 Professional Experience (6 cr, Internship)

OR successfully complete a group research project or internship via enrollment in a graduate-level course with such a focus (3-4 cr), such as EST 690, International Environmental Policy Consultancy.

Online Master of Professional Studies (M.P.S.) in Environmental Leadership, Justice, and Communication

The Online MPS in Environmental Leadership, Justice, and Communication is a 30- credit-hour experience focused on developing analytical capacities and problem-solving skills for environmental professionals, community leaders, decision makers, and advocates. This MPS is

fully online and is designed to be accessible to working professionals and other non-traditional students. The curriculum can be completed in as short as one year or over a longer period of time, depending on how many courses a student takes per semester.

To earn the MPS, students complete three stand-alone advanced graduate certificates, each composed of three 3-credit courses: in Environmental Leadership (9 credits); Environmental Justice & Inequality (9 credits), and Science and Environmental Communication (9 credits). In their final semester, students participate in a 3-credit applied capstone project oriented towards their professional and/or civic objectives.

By building the Online MPS program on a “stackable” 3 certificate model, the program offers the opportunity for students to gather a series of smaller credentials – each of value in its own right - towards earning a graduate level professional degree.

M.P.S. Program Requirements

EST 555	Public Relations Mgt/Env Profs	3
EST 606	Pblic Prcptn & Communication	3
EST 608	Env Adv Camp & Conflict Res	3
EST 612	Environmntl Policy &Governance	3
EST 615	Environmental Justice	3
EST 616	Global Persp on Env Justice	3
EST 617	Measuring Envrnmntl Inequality	3
EST 635	Pub Part&Decision Making	3
EST 640	Envrn Thought and Ethics	3
EST 798	Problems/Envrn Studies	1 - 3
OR		
EST 898	Professional Experience	1 - 12

Certificate of Graduate Study in Environmental Decision Making

The Certificate of Graduate Study in Environmental Decision Making is designed is designed for graduate students at ESF and those enrolled in law, management, public administration, or information studies programs at Syracuse University. It provides an exposure to specialized environmental study that is relevant to students with related professional interests. The focus of this certificate is on environmental decision making, the processes by which stakeholders seek solutions to environmental problems.

Student Eligibility

Graduate students currently matriculated and in good academic standing in their graduate degree programs at SUNY ESF and Syracuse University are eligible to apply for entrance to the certificate program.

Administrative Procedures

Application and admissions procedures, compliance with college requirements for successful graduate study and the awarding of certificates are all administered by ESF's Dean of Instruction and Graduate Studies, 227 Bray Hall. If enrollment limitations are established, acceptances will be made on a rolling basis, according to the date of receipt of applications.

Certificate Program Requirements

Core Courses

EST 635	Pub Part&Decision Making	3
---------	--------------------------	---

Choose 9 credits from the following two lists*, at least one course from each:

Environmental Policy and Law

EST 609	Collaborative Governance Proc	3
EST 612	Environmntl Policy &Governance	3
EST 615	Environmental Justice	3
EST 660	Land Use Law	3
EST 702	Env&Nat Res Prog Eval	3
EST 705	Environmental Policy Analysis	3
EST 770	Regen Approaches Sust Futures	3
EST 796	Adv Topics/Envrn Studies	1 - 3
FOR 687	Environmental Law & Policy	3
FOR 689	Natural Resources Law & Policy	3
LAW 716		
LAW 865		
PAI 775	Engy, Envrmt, Rsrces Policy	0 - 8
PAI 777	Econ of Environmental Policy	0 - 8
SRE 622	Energy Markets and Regulation	3
<i>Human and Environment Interactions</i>		
EST 606	Pblic Prcptn & Communication	3

EST 608	Env Adv Camp & Conflict Res	3
EST 613	Urbanization & the Environment	3
EST 624	Nature, Recreation and Society	3
EST 640	Envrn Thought and Ethics	3
EST 645	Mass Media&Envrn Affairs	3
EST 650	Envrn Perception&Human Behavr	3
EST 750		
EST 708	Environment and Society	3
LSA 650	Behavr Factor/Comm Desgn	3
PAI 730	Problems in Public Admin.	0 - 8

*Alternate courses may be substituted in these two areas, by petition.

Certificate of Advanced Study in Environmental Leadership

The graduate certificate of advanced study in Environmental Leadership equips decision-makers, managers, facilitators, advocates, and community leaders with the skills and understanding to address complex environmental challenges. Participants in the program will develop their capacities to find common ground among diverse points of view, to advance decision making that considers both scientific knowledge and deeply held values, and to facilitate cooperation across social, organizational, and administrative boundaries.

All students take

EST 640	Envrn Thought and Ethics	3
EST 612	Environmntl Policy & Governance	3
EST 635	Pub Part&Decision Making	3

Certificate of Advanced Study in Science & Environmental Communication and Public Relations Management

The certificate of advanced study in Science and Environmental Communication and Public Relations Management prepares current and future environmental professionals, decision-makers, and engaged citizens to communicate effectively, as well as to analyze and assess factors influencing public perceptions of environment, science, and risk. Effective communication and dialogue in environmental decision-making is emphasized, as participants learn to develop, engage, and evaluate audience-centered communication strategies that respond to points of convergence and conflict.

All students take

EST 555	Public Relations Mgt/Env Profs	3
EST 606	Pblic Prception & Communication	3
EST 608	Env Adv Camp & Conflict Res	3

Certificate of Advanced Study in Environmental Justice and Inequality

The Certificate of Advanced Study in Environmental Justice and Inequality is designed to equip people interested in social and justice issues, including environmental professionals, community leaders, and advocates, with the analytical skills to deeply engage existing research and evidence on the unique environmental vulnerabilities faced by marginalized communities. This engagement uses a theory and case-based grounding in the structural and systemic factors that generate and perpetuate these inequities. The program's interdisciplinary approach includes tools and methods drawn from geography, sociology, environmental and public health, policy and law, sustainability science, and critical race theory. It builds upon these frameworks to develop new strategies for equitable and liberatory practice.

All students take

EST 615	Environmental Justice	3
EST 616	Global Persp on Env Justice	3
EST 617	Measuring Envrnmntl Inequality	3

* **Special Course Codes** (Code indicates course meets certain program or accreditation requirements. Ignore if there is no relevance to this program of study.) **G** = General Education Course (GenEd), **E** = Engineering, **ES** = Engineering Sciences, **M** = Mathematic, **NS** = Natural Sciences, **PE** = Professional Education, **S** = Summer-only

