#### **GRADUATE PROGRAMS**

The Department of Environmental Studies offers degree and certificate programs in environmental studies, science, and policy, as well as interdepartmental master's and Ph.D. options.

Programs integrate and balance the social sciences, humanities, and natural sciences in creative, interdisciplinary contexts.

#### **Advanced Standing**

- i. **Course transfers**. A maximum of six graduate credit hours with a grade of "B" or better that have not been applied to another degree may be transferred via Petition. The Petition must include an attached syllabus, and a justification of how the courses are to be included on the student's Plan Sheet. Petitions for course transfers are submitted following matriculation.
- ii. **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.

### **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 tv	vo 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
<b>Research Methods</b>	(6 credits)	
All students take:		
Core Courses EST 603	Research Methods and Design	3
And one additional research m support their thesis research:	ethods course, typically from the following list and typically to	
Elective Courses APM 510	Statistical Analysis	3
APM 625	Sampling Methods	3
APM 630	Regression Analysis	3
EST 604	Survey 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. See your advisor or the Department Office for information on procedures and deadlines for setting up the Capstone Seminar. 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.

#### 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	Envrn Risk Perceptn/Comm&Pol	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 Mdlng&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	Survey 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.

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

M.P.S. Program Requirements		
EST 555	Public Relations Mgt/Env Profs	3
EST 606	Envrn Risk Perceptn/Comm&Pol	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 OR	Problems/Envrn Studies	1 - 3
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, Envrmnt, Rsrces Policy	0 - 8
PAI 777	Econ of Environmental Policy	0 - 8
SRE 622	Energy Markets and Regulation	3
Human and Environment Interact EST 606	tions Envrn Risk Perceptn/Comm&Pol	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

<sup>\*</sup>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	Envrn Risk Perceptn/Comm&Pol	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

<sup>\*</sup> 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

