



ENVIRONMENTAL SCIENCES GRADUATE PROGRAM AREA OF CONCENTRATION IN PROFESSIONAL SCIENCE MASTER'S

PROFESSIONAL MASTER'S DEGREE

With initial support from the Alfred P. Sloan Foundation, Oregon State University developed an exciting new Master's degree option in Environmental Sciences. From conversations with local and regional industry and government representatives, we were told that there is a need for environmental professionals with additional skills in business management and communications. In response to this need, the Environmental Sciences Graduate Program offers a non-thesis M.S. degree option called the Professional Science Master's (PSM) in Environmental Sciences. Students with this degree acquire skills that enhance career opportunities in both the private and public sectors. Recruitment targets students who have or seek careers as professionals working in the environmental industry.

CURRICULUM

The PSM in Environmental Sciences includes coursework in environmental sciences as well as courses from other academic units on campus. In addition, students earning the PSM degree take Cohort Curriculum, especially designed for science majors, to acquire skills in business management, communications, and ethics. Students will also complete a minimum 3-month internship arranged with private industry or agencies in the public sector in lieu of a thesis project.

CORE COURSES

A two-year academic program leading to a PSM degree in Environmental Sciences includes a number of environmental sciences core courses, a group of numerical skills courses, environmental track courses, cohort courses, and an internship. 10 Cr. for the M.S and M.A. degree (required are ENSC 515, 520, 508 and one class from the approved list of core courses- below). These courses include Environmental Perspectives, Environmental Analysis, and the Joint-Campus Workshop in Environmental Science, Studies, and Policy.

Approved Core Course List:

ANTH 581	Natural Resources and Community Values
ANTH 582	World Food and the Cultural Implications of International Development
BI/BOT 589	Analysis of Environmental Issues
BI 570	Community Structure and Analysis
BI 670	Community Structure and Analysis
Comm 540	Theories of Conflict and Conflict Management
EC 539	Public Policy Analysis
FOR 561	Forest Policy Analysis
FS520	Posing Researchable Questions
FS521	Natural Resource Research Plan
FS565	Forest Ecosystem Management
FS646	Ecosystem Analysis and Evaluation
FW515	Model Selection and Inference
GEO 520	Geography of Resource Use
H524	Health Data Analysis
H525	Intro Epidemiology
H526	Epidemiological Methods
H549	Health Risk Communication
H575	Evaluation
H576	Proposal Writing
HIST 569	History of the Pacific Northwest
LA 607	Experimental Seminar in Biocomplexity and Alternative Futures
MRM515	Coastal Resources Management
PS 574	Bureaucratic Politics and Policy

PS 575	Politics of Environmental Problems
PS 576	Science and Politics
RNG 650	GIS Watersheds Analysis
SED 580	Research and Evaluation
SOC 581	Society and Natural Resources
Z582	Molecular Methods in Ecology and Evolution

NUMERICAL SKILLS COURSES

A numerical skills course exposes students to research design, statistical analysis, modeling, survey design, or other quantitative and qualitative techniques. Students will have an opportunity to select a course based on their own needs and program objectives. Example courses include Methods of Data Analysis (ST 511), Quantitative Ecology (ST 535) and Geographic Information Systems (GEO 565).

ENVIRONMENTAL CONCENTRATION COURSES

Coursework in areas of concentration gives focus and identity to each student's program of study and allows for flexibility in responding to changing employment demands. Eight areas of concentration are currently available: Biogeochemistry , Ecology , Environmental Education , Quantitative Analysis , Social Science , Natural Resources, Water Resources , or Sustainable Natural Resources. Students choose courses listed within these areas of concentration-there are many to choose from! The new Sustainable Natural Resources area of concentration will be offered for the first time in 2006 through the College of Forestry at OSU. Electives can be taken as an 18-unit block during summer term, and students earn a Graduate Certificate in this field in addition to the Master's degree in Environmental Sciences. This will only be offered every other year.

INTERNSHIP.

Internships can take place either with environmental consulting or engineering firms, businesses involved in land use planning, or with agencies in the public sector such as the U.S. Environmental Protection Agency, the U.S. Forest Service, the U.S. Department of Agriculture, or the Bureau of Land Management. All of these governmental agencies have extensive laboratories and facilities in the Corvallis area. During their internships, students will become aware of the costs of protecting resources, career opportunities in the field of environmental monitoring and risk assessment, and the size of the environmental industry in the business world today. The graduate committee can help define specific objectives for the proposal and might be able to make some recommendations to identify potential host agencies. It is up to the student to formally initiate the internship with an industry supervisor. Visit the PSM website (http://professionalmasters.science.orst.edu/environmental_sciences.htm) to learn more about specific internship requirements.

PROFESSIONAL SCIENCE MASTER'S PROGRAM CONTACT

To learn more about the PSM Program in general, please contact:

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