

# Bryant University

## M.S. in Global Environmental Studies

CREATE YOUR PATH  
EXPAND YOUR WORLD  
ACHIEVE YOUR SUCCESS



[www.bryant.edu/msges](http://www.bryant.edu/msges)

### THE MASTER OF SCIENCE IN GLOBAL ENVIRONMENTAL STUDIES

Global environmental challenges demand that we monitor the quality of our rapidly changing environment, interpret and manage the impacts of human actions, and develop restoration strategies. Environmental scientists will be needed for planning and constructing buildings and transportation corridors, and for protecting water resources. Consultants will be needed for waste management, remediation of polluted areas, resource recovery, pollution prevention, and developing green products and sustainable systems.

Bryant's Master of Science in Global Environmental Studies program will prepare students to work in any international setting, from small firms and multinational corporations to governmental agencies and non-governmental organizations (NGOs) grappling with global environmental realities, as well as prepare international students to address their nation's challenges. The program qualifies graduates with science backgrounds to understand and attack international challenges from a sustainable systems perspective, and prepares those with business backgrounds to develop intervention skills for dealing with environmental management problems.

Employment of environmental scientists and specialists is expected to increase by 28 percent through 2018, with job growth strongest in private-sector consulting firms, according to the U.S. Bureau of Labor Statistics.

*"Our graduate program in Global Environmental Studies embodies a commitment to fostering sustainable systems in a rapidly changing world, using integrative thinking and cross-disciplinary perspectives for solving complex problems."*

Gaytha A. Langlois, Ph.D.  
Director, Master of Science  
in Global Environmental Studies program  
Professor, Environmental Policy

To learn more about the program,  
please contact:

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For application information, go to:  
[gradschool.bryant.edu](http://gradschool.bryant.edu)

### ENGAGED LEARNING + APPLIED SCHOLARSHIP

The Master of Science degree in Global Environmental Studies is intended for graduate students interested in professional careers in fields such as environmental management, policy making, NGO development, site assessment, toxics mitigation, renewable energy implementation, energy efficiency improvements, green building technologies, coastal planning, land use assessment, and wetlands protection.

The program features course flexibility; an emphasis on research, data analysis, and publication; many opportunities for international collaboration; interaction with faculty scholars; and development of technical skills and certification.

The M.S. in Global Environmental Studies will prepare graduate students for a variety of

professional careers in business, government, and academic settings. Students accumulate skills certification, field experience, internships, and international/cultural training to enhance their degree, and will be qualified for environmental technology careers, or to move forward in advanced graduate studies in environmental policy, resource management, or legal studies. Bryant's M.S. in Global Environmental Studies program affords students the opportunity to work directly with research faculty in a multidisciplinary department, while gaining extensive hands-on experience in well-equipped laboratories. The degree program can be completed on a full-time or part-time basis.

The program includes collaboration with the China University of Geosciences (CUG) at Wuhan, including study abroad opportunities for both U.S. and Chinese students.

The Integrated 4 + 1 Program offers Bryant undergraduates the potential for completing a Bachelor of Science degree and a Master of Science degree in five years; with a specialty focus that will support not only careers in applied environmental fields, but also serves as preparation for further graduate studies or certifications.

The Integrated 4 + 1 Program is primarily for Environmental Science majors who can assemble 400/500 level courses to complete the program in a minimum of one additional year plus one summer, with the possibility of using the summer between the junior and senior year.

Completion of a thesis based on a laboratory or field research project is required for master's candidates. International experiences are encouraged.



# M.S. in Global Environmental Studies

## STUDENTS CAN EXPECT TO BECOME PROFICIENT IN THESE CORE COMPETENCIES:

- Ability to use *systems thinking* for incorporating different types of technology and information when making environmental decisions
- Capability of analyzing *cost/benefit factors* involved in complex environmental problems
- Commitment to *seeking sustainable solutions*
- Ability to *conduct basic or applied research* that provides a contribution to the scientific community and society as a whole.
- Become an *environmental expert* and highly competitive for environmental positions in
  - Government agencies
  - Private industry
  - Non-governmental organizations (NGOs)

## SPECIFIC COMPETENCIES:

- *Information technology software* used by environmental experts for quantification, inventory database management, web-based resources, and Geographic Information Systems – GIS. Specialties might also include robotics, mathematical modeling, and advanced statistical analysis
- *Hands-on experience with equipment commonly used by environmental technology professionals* (such as Gas Chromatography, Mass Spectrometry – GC/MS and ICP/MS, Liquid Chromatography – HPLC, Automated Solvent Extraction – ASE, Ultraviolet/Visible Light Spectrometry – UV-VIS, Scanning Electron Microscopy – SEM)
- *Familiarity with a variety of environmental monitoring equipment and protocols* (e.g., for water testing, atmospheric monitoring, toxicity assessment, measuring physical parameters, biological diversity analysis, radiation impacts, etc.)
- *Scientific and technical writing/oration* Preparation of publishable papers, and opportunities for conference presentations

## DISTINGUISHED FACULTY

Our programs, led by dedicated faculty who are committed to academic excellence and delivered in quality facilities, will prepare students for environment-focused careers or for further graduate or professional study. We emphasize personalized educational experiences with a global perspective.

## M.S.G.E.S. COURSE SELECTIONS

**Biological Imaging** (SCI550)

**Instrumental Analysis for Environmental and Life Sciences** (SCI551)

**Innovation and the Global Energy Crisis** (SCI552)

**GIS Tools – Climate Change and Coastal Planning** (SCI553)

**Conservation in U.S. and China** (SCI554)

**Environmental Policy: Decision Making and Problem Solving** (SCI555)

**Environmental Toxicology and Risk Assessment** (SCI557)

**Global Change and Geochemical Impact** (SCI558)

**Systems Modeling** (SCI560)

**Plant Diversity in Ancient and Modern Environments** (SCI562)

**Issues in Environmental Science** (SCI563)

**Biomarkers and Isotope Signals** (SCI564)

**Green Technology for Sustainability** (SCI565)

**Global Health Challenges – Epidemiology Studies** (SCI566)

**Research Directed Study – Experimental Design** (SCI590)

**Thesis Research** (SCI690)

**Research Directed Study – Thesis Submission and Oral Defense** (SCI691)

## Open Elective

Any graduate-level course at Bryant in areas such as Accounting, Communication, Economics, Finance, Information Systems, Legal Studies, Public Policy and Government, Management, Marketing, and Statistics.

## Full- or Part-Time Completion

A student who intends to pursue graduate study on a full-time basis may complete the program in as few as 15 months based on the schedule below:

*Fall Semester – Choose two courses (different specialties) + thesis preparation*

*Winter Session – choose one course*

*Spring Semester – Choose two to three courses (different specialties + thesis preparation)*

*Summer Session – (3 week condensed courses – 2.5 to 3 hrs/day – lecture/lab course) Choose one to two courses (different specialties). Thesis completion.*

## CERTIFICATE OF GRADUATE STUDY IN SUSTAINABILITY

Four courses, chosen in conjunction with your faculty advisor, plus one field experience.

## ADMISSION REQUIREMENTS

- Online application
- CV/Résumé
- Official transcript for last degree earned
- Three references
- Personal statement describing program expectations and connection to career goals

*TOEFL/GRE/IELTS may be required. Applications are welcome from any undergraduate major.*

