

GREAT LAKES ENVIRONMENTAL SCIENCE (M.S.)

Master of Science Program

Program Code: MS-AS

Major Code: GES

Great Lakes Center

Chris Pennuto, *Program Coordinator*

Alexander Y Karatayev, *Great Lakes Center Director*

Science and Mathematics Complex 319

(716) 878-4329

greatlakescenter.buffalostate.edu/ ([https://](https://greatlakescenter.buffalostate.edu/)

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The master of science in Great Lakes Environmental Science program combines coursework in environmental science with communication and project management classes and an internship experience. The M.S. program is designed to meet the needs of industry, consulting firms, nongovernmental organizations (NGOs), and governmental agencies, preparing graduates for leadership roles as they address a wide range of problems and issues related to the management of resources within the Great Lakes and surrounding watersheds.

Admission Requirements

1. A bachelor's degree in a science (e.g., chemistry, biology, geography, geology, earth science, environmental science) or math discipline from an accredited college or university with a minimum cumulative GPA of 3.0 (4.0 scale).
2. An official transcript of the applicant's undergraduate program, giving evidence of satisfactory completion of college science and mathematics courses. It is strongly recommended that all applicants have introductory college coursework in chemistry, biology, geography, geology, and mathematics/statistics. The absence of any of this coursework may be regarded as a deficiency and students may be required to complete this recommended coursework before graduation.
3. Two letters of recommendation and completed survey evaluating the applicant's academic qualifications. It is highly desirable to have at least one letter of recommendation from a professor with whom the applicant has done coursework or projects.
4. A written statement of the applicant's academic background, academic and career plans, and area(s) of research interest.
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 2. In addition, all applicants should review the Admission to a Graduate Program (<https://ecatalog.buffalostate.edu/graduate/admission-graduate-program/>) section in the Graduate Catalog.

Program Requirements

Code	Title	Credit Hours
Required Core Courses (11 credit hours)		
GLC 535	GREAT LAKES ECOSYSTEMS	3
BIO 670	BIOLOGICAL DATA ANALYSIS (or equivalent quantitative data analysis course)	3
Select one from the following:		3
GEG 525	FUNDAMENTALS OF GIS	
GEG 528	ENVIRONMENTAL ASSESSMENT AND PLANNING APPLICATIONS IN GIS	
GEG 529	ADVANCED TOPICS IN GIS	
Required Business Communication and Project Management Courses (6 credit hours)		
<i>Project Management (3 credit hours)</i>		
PSM 601	PROJECT MANAGEMENT FOR MATH AND SCIENCE PROFESSIONALS or MMT 620 MANAGING ENGINEERING PROJECTS	3
<i>Communication (3 credit hours)</i>		
Select one from the following:		3
PSM 602	COMMUNICATION STRATEGIES FOR MATH AND SCIENCE PROFESSIONALS	
COM 519		
COM 610	PUBLIC RELATIONS PRINCIPLES AND PRACTICES	
Required Internship (3 credit hours)		
GLC 688	INTERNSHIP	3
Elective Courses (12 credit hours)		
Appropriate biology, chemistry, earth sciences, and geography and planning courses selected by advisement.		12
Total Credit Hours		30

Students will:

1. demonstrate analytical skills required to interpret and evaluate research literature
2. demonstrate proficiency in professional writing
3. demonstrate comprehension of the broad aspects of project management and communication strategies.
4. demonstrate ability to effectively organize oral presentation for either informal or formal settings