GIS - a professionally-focused, relevant and practical graduate degree

» With an estimated growth rate of 35-40 percent per year, the GIS job market is in need of qualified and experienced professionals to help design, implement, operate and manage geographic information systems.

» Geographical Information Science is one of the fastest expanding areas in information technology.

» A background and knowledge base in GIS can work in a variety of fields including energy, public health, urban planning, civil engineering, environmental science, archaeology and landscape architecture.

When you choose UMBC Professional Programs, you can count on:

» A curriculum that covers all aspects of the GIS profession: web development and cloud computing, GIS application development, spatial databases, and enterprise systems implementation and management.

» Programs that are led by a distinguished faculty of practitioners in the field.

» Flexible evening class schedule that accommodates working professionals.

» Classes offered in a flexible format, designed for busy working professionals, with hybrid and in-person classes offered in the early evening.

» Wide-ranging resources offered at a top-notch public research university.

Why UMBC?

» The 2017 U.S. News & World Report Best Colleges guide ranks UMBC in the top five on its closely-watched Most Innovative Schools list and has recognized UMBC as a global leader in higher education.

» UMBC provides a comprehensive and quality education at a manageable cost.
Admission Requirements

M.P.S.:

» B.A. or B.S. in Geography, Computer Science or Information Systems or a bachelor's degree in a related field with GIS-related work experience

» Working knowledge of Geographic Information Systems

» Students with a GPA less than 3.0 may be admitted to the MPS program provisionally or to the Graduate Certificate program.

» GRE is not required

Graduate Certificates:

» B.A. or B.S. in Geography, Computer Science or Information Systems or a bachelor's degree in a related field with GIS-related work experience

» Working knowledge of Geographic Information Systems

» Minimum undergraduate GPA of 3.0 on a 4.0 scale

» GRE is not required

International Applicants:

Please visit shadygrove.umbc.edu/gis/international for detailed admissions information for international applicants.

» Please pay special attention to English proficiency and testing requirements

Admission Deadlines

Fall: August 1
Spring: December 1

For detailed application process please visit: shadygrove.umbc.edu/gis

Master’s Program

Master’s of Professional Studies (M.P.S.):
Geographic Information Systems
30 Credits (10 courses)

Required Courses
18 Credits

- GES 670: Advanced Seminar in GIS
- GES 671: Spatial Database and System Design
- GES 673: Geoprocessing and Spatial Analysis
- GES 675: GIS Application Development
- GES 678: Project Management of the Enterprise GIS
- GES 679: Professional Seminar on Geospatial Technologies

Elective Courses (Select 4)
12 Credits

- GES 770: Special Topics in Enterprise GIS
- GES 771: Advanced Spatial Data Management
- GES 772: Geospatial Web Services and Interoperability
- GES 773: GIS Modeling Techniques
- GES 774: Spatial Statistics
- GES 775: Advanced GIS Application Development
- GES 776: GIS Data Sources, Tasking, and Acquisitions
- GES 777: Advanced Data Modeling and Editing Techniques
- GES 778: Advanced Visualization and Presentation

Certificate Programs

Post-Baccalaureate Certificate:
Geographic Information Systems
15 Credits

- GES 670: Advanced Seminar in GIS
- GES 671: Spatial Database and System Design
- GES 675: GIS Application Development
- GES 679: Professional Seminar on Geospatial Technologies

Choice of one GIS Elective Course

*All credits earned in this graduate certificate may be applied to the M.P.S.: Geographic Information Systems.

This academic program is a participant in the U.S. Department of Education Gainful Employment program.

For more information, https://gradschool.umbc.edu/resources/careers/gainfulemploy/