GEOGRAPHIC INFORMATION SCIENCE - M.G.I.SC.

College of Arts and Sciences
Department of Geography
www.kent.edu/geography

About This Program
the Geographic Information Science M.G.I.Sc. program prepares you for a career at the forefront of geospatial technology. With a blend of technical knowledge and practical experience, you'll learn to analyze and manage geospatial data and make informed decisions. Read more...

Contact Information
• Program Coordinator: Andrew Scholl | ascholl1@kent.edu | 330-672-7669
• Connect with an Admissions Counselor: U.S. Student | International Student

Program Delivery
• Delivery:
  • Fully online

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

Admission Requirements
• Bachelor's degree from an accredited college or university in geography or a related field\(^1\)
• Minimum 2.750 undergraduate GPA on a 4.000 point scale
• Official transcript(s)
• Goal statement
• Two letters of recommendation
• English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  • Minimum 550 TOEFL PBT score (paper-based version)
  • Minimum 79 TOEFL IBT score (Internet-based version)
  • Minimum 77 MELAB score
  • Minimum 6.5 IELTS score
  • Minimum 58 PTE score
  • Minimum 110 Duolingo English Test score

For more information about graduate admissions, please visit the Graduate Studies admission website. For more information on international admission, visit the Office of Global Education’s admission website.

\(^1\) Requirement that undergraduate degree be in geography or related field may be waved with evidence of professional experience using geospatial technologies or alternative evidence of ability to excel in a geographic information science graduate program.

Program Requirements

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>GEOL 59071</td>
<td>FUNDAMENTALS OF GEOGRAPHIC INFORMATION SCIENCE I</td>
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<td>GEOL 59081</td>
<td>FUNDAMENTALS OF GEOGRAPHIC INFORMATION SCIENCE II</td>
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<td>GEOL 69164</td>
<td>CARTOGRAPHIC DESIGN</td>
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<td>GEOL 69231</td>
<td>ENVIRONMENTAL REMOTE SENSING</td>
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<td>GEOL 69392</td>
<td>PRACTICUM IN GEOGRAPHIC INFORMATION SCIENCE</td>
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Major Electives, choose from the following:

- CS 61002 ALGORITHMS AND PROGRAMMING I
- CS 61003 ALGORITHMS AND PROGRAMMING II
- EMAT 64210 DATA SCIENCE
- GEOL 59072 GEOGRAPHIC INFORMATION SCIENCE AND HEALTH
- GEOL 59075 GEOGRAPHIC INFORMATION SCIENCE: APPLICATIONS FOR SOCIAL PROBLEMS
- GEOL 59076 SPATIAL PROGRAMMING
- GEOL 59078 GEOGRAPHIC INFORMATION SCIENCE AND ENVIRONMENTAL HAZARDS
- GEOL 69004 QUANTITATIVE METHODS IN GEOGRAPHY
- GEOL 69007 SPATIOTEMPORAL ANALYTICS
- GEOL 69073 GEOGRAPHIC INFORMATION SCIENCE: GLOBAL HEALTH
- GEOL 69074 GEOGRAPHIC INFORMATION SCIENCE: SPATIAL ANALYSIS FOR HEALTH GEOGRAPHY
- GEOL 69079 ENVIRONMENTAL GEOGRAPHIC INFORMATION SCIENCE
- GEOL 69079 BIOSPHERE-ENVIRONMENTAL GEOGRAPHIC INFORMATION SCIENCE
- GEOL 69079 CYBERGIS
- GEOL 69083 GEODETABASES

Minimum Total Credit Hours: 30

Program Learning Outcomes
Graduates of this program will be able to:
1. Collect, edit, integrate, manage and analyze geospatial data.
2. Demonstrate skills and working knowledge of commercial and open source GIS application suites and utilities.

Application Deadlines
• Fall Semester
  • Rolling admissions
• Spring Semester
  • Rolling admissions
• Summer Term
  • Rolling admissions
3. Identify, explain and analyze spatial patterns, relationships and processes.
4. Apply cartographic principles and techniques to create quality maps.
5. Apply critical and spatial thinking to solve geospatial problems with respect to theories, principles and practices of geographic information science and fields in the degree concentration areas.
6. Demonstrate good communication skills and ability to work in a team environment.

Full Description

The Master of Geographic Information Science degree provides students with skills that extend beyond simply understanding software features or capabilities. Students develop a more robust understanding of how GISc functions across different sectors and have a positive impact on some of the greatest global challenges today, including climate change, transportation, and public health. Students have the opportunity to design and manage geographic information technologies to develop and improve the tools and systems people rely on every day.

Graduates of the program are prepared for analytical and managerial positions that utilize geospatial technologies. Those positions can be found in a number of sectors, ranging from real estate and healthcare to disaster relief and finance.