ONLINE MASTER OF GEOGRAPHIC INFORMATION SCIENCE

Kent State University’s online Master of Geographic Information Science (MGISc) program helps provide you with the necessary expertise to make significant impacts in major global challenges such as health, water resources and climate change. By developing skills that include cartography, geographic information technology design, and the use of data management and analytics software, you can prepare yourself to thrive in vital industries and roles ranging from healthcare and emergency management to logistics and consulting.

PROGRAM BENEFITS

• Learn from our full-time, expert faculty with varied and robust experience across the multiple applications of GISc
• Study within a flexible online program structure designed for full-time working professionals
• Concentrate your studies with a specialization in Cyber GISc, Environmental GISc, or Health & GISc
• No GRE requirement

PROGRAM STRUCTURE

• 32 credits total
• 9 courses
  • 4 required courses, 3 concentration courses and 2 elective courses
  • 3-4 credits per course
• Courses last 7 weeks each
• Graduate in as few as 2 years
• 3 annual start dates: January, May, August

ADMISSIONS REQUIREMENTS

• Bachelor’s degree from an accredited university with a GPA of 3.0 or higher (on a 4.0 scale) for Unconditional Admittance or a 2.75-3.0 cumulative undergraduate GPA for Conditional Admittance.
• Conditional Admittance requires students to maintain a grade of “B” or better in the first nine credit hours
• Completed online application form
• Goal statement
• Two letters of recommendation from professors or employers
• Official transcripts from all prior institutions attended
• Resume/CV
Required Courses (17 credits):
- GEOG 59070 – Geographic Information Science (4 Credits)
- GEOG 59080 – Advanced Geographic Information Science (3 Credits)
- GEOG 69164 – Cartographic Design (4 Credits)
- GEOG 69392 – Practicum in Geographic Information Science (6 Credits)

Electives (2 courses, minimum 6 credits):
- BST 52019 – Biostatistics in Public Health (4 Credits)
- CS 61002 – Algorithms and Programming I (4 Credits)
- CS 61003 – Algorithms and Programming II (4 Credits)
- DSCI 64010 – Data Architecture (3 Credits)
- DSCI 64210 – Data Science (3 Credits)
- GEOG 59075 – Geographic Information Science: Urban and Economic Applications (3 Credits)
- GEOG 69004 – Quantitative Methods in Geography (3 Credits)
- GEOG 69007 – Spatiotemporal Analytics (3 Credits)
- SBS 50002 – Quantitative Methods in Social and Behavioral Sciences (3 Credits)
- SBS 50020 – Social and Behavioral Science Theory (3 Credits)
- SBS 54634 – Social Determinants of Health Behaviors (3 Credits)

Concentration Courses (9 credits):

Cyber GIsC:
- GEOG 59076 – Spatial Programming (3 Credits)
- GEOG 69082 – Cyber GIS (3 Credits)
- GEOG 69083 – Geodatabases (3 Credits)

Environmental GIsC:
- GEOG 59078 Geographic Information Science and Environmental Hazards (3 Credits)
- GEOG 69079 Environmental Geographic Information Science (3 Credits)
- GEOG 69231 Environmental Remote Sensing (3 Credits)

Health & GIsC:
- GEOG 59072 – Geographic Information Science and Health (3 Credits)
- GEOG 69073 – Geographic Information Science: Global Health (3 Credits)
- GEOG 69074 – Geographic Information Science: Spatial Analysis for Health Geography (3 Credits)

WHAT YOU’LL LEARN
Students in the online MGIsC program will master a wide-ranging set of technical skills and professional knowledge crucial for the successful development and management of rapidly evolving geographic information technologies. Cyber GIsC students will focus on solving data-centered problems, including those arising from the vast quantities of spatiotemporal data provided by mobile and other connected technologies. Environmental GIsC students will work to apply technological solutions to emergency management, public safety, homeland security and other problems. And Health & GIsC students will utilize mapping techniques and other geographic information systems to track and chart outbreaks, manage other public health crises and work generally toward the improvement of community health outcomes.