GEOGRAPHIC INFORMATION SCIENCE MINOR

Department of Mathematics and Computer Science (https://catalog.washcoll.edu/catalog/departments-programs/mathematics-computer-science/)

GIScience offers students a powerful way to ask questions about the world: how people, places, and systems interact, and how those relationships shape the issues we care about most. That spirit of inquiry is at the heart of a liberal arts education, and GIScience adds tools that help students explore those questions with clarity and depth. The field itself is now well established, supported by decades of scholarship, national standards, and a strong research community.

This five-course minor introduces students to the core concepts and analytical methods of GIScience and gives them room to apply those skills within their chosen fields of study. Housed in Mathematics & Computer Science and carried under a dedicated GIS course prefix, the program reflects the field's growing emphasis on computation and modeling while offering students an inviting, accessible path into spatial thinking.

Code	Title	Credits	Notes
Core Courses		**8**	_____
GIS 101	Introduction to GIS		_____
GIS 200	Spatial Analysis and Modeling		_____
3 courses from the following, spanning at least 2 course prefixes		**12**	_____
ANT 305	Culture, Power & the Human Experience		_____
ANT 354	Visual Anthropology		_____
CSI 220	Data Science		_____
CSI 310	Database Systems		_____
ENV 294	Special Topics (Natural Hazards) [1]		_____
ENV 394	Special Topics (Spatial Analysis Techniques for Environmental Science) [1]		_____
MAT 209	Statistical Inference & Data Analysis II		_____
Total Credits		**20**	_____

[1] To qualify for the minor, an elective must:
- Include substantial GIS or spatial-analysis work in the syllabus
- Require or build on skills taught in GIS 101 or GIS 200, or draw on equivalent statistical or programming preparation
- Involve applied spatial reasoning, visualization, modeling, or data analysis rather than incidental or purely descriptive use of maps

Major

- Anthropology Major (https://catalog.washcoll.edu/catalog/departments-programs/anthropology-archaeology/anthropology-major/)
- Computer Science Major (https://catalog.washcoll.edu/catalog/departments-programs/mathematics-computer-science/computer-science-major/)
- Data Science Major (https://catalog.washcoll.edu/catalog/departments-programs/mathematics-computer-science/data-science-major/)
- Environmental Science Major (BS) (https://catalog.washcoll.edu/catalog/departments-programs/environmental-science-studies/environmental-science-bs/)
- Environmental Studies Major (BA) (https://catalog.washcoll.edu/catalog/departments-programs/environmental-science-studies/environmental-studies-ba/)
- Mathematics Major (https://catalog.washcoll.edu/catalog/departments-programs/mathematics-computer-science/mathematics-major/)

Minor

- Anthropology Minor (https://catalog.washcoll.edu/catalog/departments-programs/anthropology-archaeology/anthropology-minor/)
- Computer Science Minor (https://catalog.washcoll.edu/catalog/departments-programs/mathematics-computer-science/computer-science-minor/)
- Data Science Minor (https://catalog.washcoll.edu/catalog/departments-programs/mathematics-computer-science/data-science-minor/)

- Environmental Studies Minor (https://catalog.washcoll.edu/catalog/departments-programs/environmental-science-studies/environmental-science-studies-minor/)
- Mathematics Minor (https://catalog.washcoll.edu/catalog/departments-programs/mathematics-computer-science/mathematics-minor/)