

Geographic Information Science, GISc

“Geographic Information Science is the study and practice of methods used to collect, store, manage, visualize, analyze, and present spatial or geographic data. Examples include where to locate a landfill, find common environmental



conditions at a Zika outbreak, or predict locations at most risk in a hurricane storm surge. GIS combined with any major provides employment skills that will differentiate your degree.” *Dr. Jackie Gallagher, chair*

The GIS Certificate requires 19 credits and can be treated like a minor; classes that count toward the certificate add on to your major, general education and elective credits. It goes particularly well with majors that consider spatial distribution, like Environmental Science, Biology, Historic Preservation, Marketing and any of the social sciences. New students considering the GIS certificate should take either **GEOG 250** or **GISC 200** during their first year. During their sophomore year they should take **GEOG 351A** or **GISC 351** as they continue in the program. We highly recommend taking some geography courses, as well as CPSC 110, Introduction to Computer Science.

The Department of Geography offers a **Master of Science in Geospatial Analysis (MSGA)** for students planning a career in geographic information science. Suitably qualified juniors may apply for provisional admission to our **4+1 MSGA Program**, which allows them to take up to two master’s level courses while they are seniors completing the undergraduate degree, and then to finish the MSGA in the following academic year. This provides additional GIS courses for undergraduates, and allows completion of two degrees in five years.

“...the geospatial technology field is exploding. Jobs are being created faster than we can find the minds we need to fill them...” – National Geospatial Advisory Committee, 2013

Below are some examples of first semester schedules suitable for the GIS certificate. Since the certificate goes well with many different majors, there are many variations of a first semester schedule; the examples are meant to help you see that there are many ways to reach the same goals.

**GIS Programs
Department of
Geography**

**Monroe Hall
3rd floor**

[GISC Website](#)
[Geography Department Website](#)

[Department Chair](#)
Dr. Jacqueline Gallagher
Monroe Hall, room 313

Example 1:

Course (credits)	Requirement(s) Met
1. GEOG 250 – Intro to GIS & Cartography with lab (4)	GIS cert.
2. HISP 101 – The American Heritage (3)	HES
3. FSEM 100L9 - The Geography of Religion (3)	FSEM
4. CPSC 110 – Intro to Computer Science (3)	Quant Reasoning

Example 2:

Course (credits)	Requirement(s) Met
1. GEOG 102 – Introduction to Human Geography (3)	GI or HES
2. GEOG 250 – Intro to GIS & Cartography with lab (4)	GIS cert.
3. SPAN 101 – Beginning Spanish (3)	Language
4. FSEM 100G – Race and Revolution (3)	FSEM
5. MUPR 215 – Classical Guitar I (1)	Elective

Example 3: Athletes for varsity sports must register for the 400-level course of the sport. Practice times for varsity sports can vary, but generally speaking, athletes should allow for enough time to get to and from practice on weekdays from 3 - 6 p.m. Please check with the individual coach for your sport to verify specific practice times each semester.

Course (credits)	Requirement(s) Met
1. GISC 200 – Introduction to GIS (4)	GIS cert.
2. FSEM 100N3 – Climate Change and Energy Resources (3)	FSEM
3. BIOL 121 – Biological Concepts (4)	Natural Science
4. ENGL 202Q – Writing About Otherness (3)	ALPP, WI
5. PHYD 427 – Intercollegiate Swimming – Women (1)	Elective
