

A Guide to Completing the GISC Certificate

The GIS Certificate can be completed in as few as three semesters.

GIS Certificate Students do NOT have to be degree-seeking. You may apply to take the certificate as a stand-alone program, or you may work on it while you are earning your bachelor's degree. You may complete coursework AFTER graduation.

If you are interested in the [Master of Science in Geospatial Analysis](#), speak to an advisor.

Semester 1

After taking your first course in GIS (GEOG 250, GISC 200*, or EESC 205) and deciding to pursue the certificate, you must be conscientious about what courses that you take. To sign up for it, fill out the 'minor' section of the Major/Minor Declaration Form (from the Registrar's [Forms](#) page) and email or bring it to Dr. Jackie Gallagher, jgallagh@umw.edu, Monroe 313.

Semester 2

In the following semester, you should take GEOG/GISC 351, Spatial Analysis*.

Semester 3

Once you have completed the first two courses, you should be taking one course each semester (or two, depending on where you are in your college career).

The electives include:

GEOG 340 Remote Sensing and Air Photo Interpretation*

GEOG 355 Mobile Geographic Information Systems and Global Positioning Systems

GISC 440 Application of Spatial Statistics and Models in GIS

GISC 471 Special Topics

GISC 482 Web GIS: Concepts and Applications¹

In addition to an elective course in semester 3, we highly recommend taking CPSC 110 Introduction to Computer Science* especially if you plan to take GISC 450, GIS Programming.

Semester 3 or 4

Take one of

- GISC 450 GIS programming*

While there is no programming prerequisite for this class students are strongly urged to take at least one computer science programming course (CPSC 110) prior to taking this class. While the course assumes no experience, as the course title states programming is a large component of the course. The Python language is used.

- GISC 482 Web GIS: Concepts and Applications¹

Semester 4 or 5

The capstone experience: look at [GIS Certificate Capstone](#) page to decide which to take:

GISC 491 Directed Study in GIS

GISC 499 Internship in GIS

* These courses are offered every semester

¹ This course is only offered in the fall semester

Other courses are offered less frequently – please ask!