

Spatial Informatics Graduate Programs in a Nutshell

The graduate programs offered by the Spatial Informatics faculty in UMaine's *School of Computing and Information Science* include a Ph.D. degree, a scientific Master's and several professional Master's degrees, as well as several graduate certificates. Almost all SIE required and elective courses are available simultaneously *online* as well as *on campus* up to and through the PhD degree.

The [*Ph.D. in Spatial Information Science and Engineering*](#) is the premier doctoral degree in the field of Spatial Informatics. It consists of graduate course work of at least 30 credit hours and a dissertation that investigates comprehensively a substantial, novel scientific question from the domains of spatial computing, including spatial human-computer interaction, spatial AI, and spatial data science. Upon completion of all required doctoral course work, the Ph.D. student receives an M.S. in Spatial Information Science and Engineering. Upon the successful defense of the dissertation, the Ph.D. in Spatial Information Science and Engineering will be conferred.

The [*M.S. in Spatial Information Science and Engineering \(MSSIE\)*](#) is the entry-level graduate degree, which may be pursued as a thesis or a project option. The thesis option is the research track, providing the master's student with an early opportunity for research experience in combination with 24 credit hours of graduate-level course work. The project option requires 27 credit hours of graduate-level course work in combination with a 3-credit semester-long practical project.

The [*M.S. in Spatial Informatics \(MSSI\)*](#) is a professional degree, comprising 30 credit hours of graduate-level course work that focus on the fundamentals of spatial informatics. This degree is available only to online students.

The [*M.S. in Information Systems \(MSIS\)*](#) is a professional degree, comprising 30 credit hours of graduate-level course work broadly within the domain of information systems. The MSIS may also be taken as a dual degree with the MBA of the Maine Business School, in which case 15 of the required 60 credit hours may double counted towards the two graduate degrees.

All three master's degrees may include in the course work requirement hours a 3-credit pre-approved *internship* course administered as SIE 590

All three master's degrees may also be taken through a *Four Plus One Option*, starting in an undergraduate's junior year, leading to a dual bachelor's and master's degree within 5 years.

Three entry-level graduate certificates provide options to acquire advanced knowledge through graduate-level course work. The [*Graduate Certificate in GIS*](#) is a 15-credit program, offering students a foundation in key aspects of geographic information systems. The [*Graduate Certificate in Information Systems*](#) is a 15-credit program, offering students foundational knowledge in information systems. The *Graduate Certificate in Computing for Educators* provides an ideal foundation for teaching computer coding and computer science problem solving in grades 9-12. One or more graduate certificates may be issued and identified on student transcripts upon meeting the course requirements for each certificate regardless of whether the courses count as well for other certificates, degrees. or credentials. A graduate certificate must be applied for during admission or prior to earning half of the required courses for the certificate.

For graduate SIE course descriptions and sample syllabi, see <https://spatial.umaine.edu/sie-graduate-info/courses/>