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SCHOOL OF COMPUTING AND INFORMATION SCIENCE

MASTER OF SCIENCE (MS) IN SPATIAL INFORMATICS

The master-of-science degree in Spatial Informatics (MSSI) provides an “all e-learning” “all coursework” degree for place-bound students that desire strong theory, computational, analytical, cognitive, policy and technical foundations in geographic information science and systems. As a general rule, students may view class videos and accomplish assignments at any time throughout a week in any of the offered program courses and have the weekly opportunity (or requirement) to participate in a one to two hour “live” discussion session at a mutually convenient time for distance class members prior to due dates for weekly assignments.

The program focuses on advancing knowledge about spatial information particularly with respect to concepts needed in next-generation information systems. Emphasis is placed on developing novel concepts and methods in the broad field of geographic information science for sensing, storing, accessing, analyzing, and managing spatial data, and modeling, extracting, integrating, visualizing, communicating and reasoning about geospatial information.

Spatial Informatics is a term used to describe the field of study merging knowledge drawn from geographic information science, information science, cognitive science, computer science and engineering. The program is STEM certified and students build on foundations in computer science, mathematics, physics, geography, cognitive science, neuroscience, artificial intelligence, engineering and related fields to study spatio-temporal phenomena, design intelligent spatial information systems and develop human-centered accessible technologies.

The Spatial Informatics graduate program is designed to meet the growing demand in society for graduates with high-level geospatial technology skills. This student-centered curriculum provides a path for women and men from diverse fields to rapidly transition to information system career paths by providing them with foundation graduate level courses in information systems and geographic information science. Similar to an MBA or Law degree, the spatial informatics graduate program accommodates students from wide ranging undergraduate degree backgrounds.

For more information visit
online.umaine.edu/scis

PROGRAM REQUIREMENTS

The Master of Science in Spatial Informatics is available only to distance students. Admitted distance graduate students take the same comprehensive graduate course content with the same high-caliber full-time professors as taken by on-campus graduate students. Distance students view lectures and class discussions at times of their own choosing while deadlines for electronic delivery of assignments are often the same as for on-campus students. There is no thesis required although students may propose pursuit of a project based course as part of their graduate program if desired.

As required by the University, all work for a master's degree must be completed within six years. The timing starts with the first semester of registration after admission to the Master of Science in Spatial Informatics.

DEGREE REQUIREMENTS (30 credits)

The Master of Science in Spatial Informatics (MSSI) consists of 30 credits, all earned in course work. The program consists of five three-credit required core courses and a minimum of fifteen additional credits from a list of elective courses approved for the program drawn from a range of disciplines but primarily from distance courses offered by the School of Computing and Information Science. If some required courses are duplicative of courses that may have been taken in the student's undergraduate degree program or another graduate program, those courses need not be repeated, and the student will select in consultation with the MSSI Graduate Coordinator and MSSI Steering Committee additional approved courses to arrive at the total of 30 credit hours.

Required Courses

- SIE 505: Formal Foundations of Information Systems (3 cr.)
- SIE 507: Information Systems Programming (3 cr.)
- SIE 515: Human Computer Interaction (3 cr.)
- SIE 525: Information Systems Law (3 cr.)
- SIE 550: Design of Information Systems (3 cr.)

Contact an advisor to get started today umaine.edu/online

ADVISING CENTER

NOT SURE WHERE TO BEGIN?

Contact our advising center to get started. Our Enrollment Advisors can help you decide which academic program is right for you, review transfer credits, walk you through the Admission process, discuss financial aid options, describe what it's like to learn online, and more. We are here for you!

Set up an appointment today.
207.581.5858
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Belfast and Orono locations
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Tuition*

Maine Residents:
\$418/credit hour

Non-Residents:
\$1,361/credit hour

Fees*

- **Unified Fee**
less than 6 credit hours: \$125
6–11 credit hours: \$381
12–15 credit hours: \$934
16 or more credit hours: \$958
- **Online Fee**
\$25/credit hour

*Rates apply to the 2016-17 academic year. Unique course and/or program fees may apply.

Apply Now

Ready to get started?
Visit us online for information on how to apply: umaine.edu/online



OBJECTIVES

Students develop knowledge and technical skills in foundation areas of formal methods, programming, information system design, human computer interaction and information law and ethics. All of these general information systems graduate courses draw on spatial technology examples or contextual environments. Based on this foundation, a wide variety of in-depth skills are developed in the areas of web-based database systems design and development, real-time data stream processing, spatial cognition, geosensor networks, spatial data science, ontology frameworks and virtual reality. They gain working familiarity with one or more programming languages if not already acquired. The online graduate program specializes in preparing graduates to better utilize location information, geographic information systems, sensors, sensor networks and mobile technologies in accomplishing the day-to-day tasks of businesses and government and to help advance new innovations in these domains. In addition, students may propose courses within their program of study that provide an understanding of business and engineering applications and thus provide further foundations for effective communication with end users.

FACULTY PROFILES



Dr. Nicholas Giudice's research combines expertise in perception, cognitive neuroscience and human factors Engineering using an integrative approach he calls neurocognitive engineering. Studies in the VEMI lab he directs are based on behavioral experiments with human participants in both real environments and virtual reality (VR).

ACADEMIC CALENDAR

Fall Semester 2016

Classes begin August 29
Registration for Spring 2017
October 24–November 18
Final Exams end December 18

Winter Session 2016-2017

Classes begin December 27
Classes end January 14

Spring Semester 2017

Classes begin January 17
Registration for Fall 2017 (tentative)
March 27–April 28
Final exams end May 12
Commencement Saturday, May 13

Summer University 2017

Registration begins February 6
Classes begin May 15
Classes end August 18



Dr. Silvia Nittel is the director of the Geosensor Networks Lab at the University of Maine. She is a recipient of a NSF Early CAREER award, and her research has been funded with grants from NSF, NGA, NASA and the Maine National Guard. From 2005-2012, she served on the executive committee of the Sensor Science, Engineering and Informatics IGERT at the University of Maine.

See profile details for all Spatial Informatics faculty at spatial.umaine.edu/faculty. The University of Maine has been designated as a Center of Academic Excellence in Geospatial Sciences (CAE GS) in a selection process jointly administered by NGA and USGS.