

GIS Certificate Program

University of Maine at Presque Isle

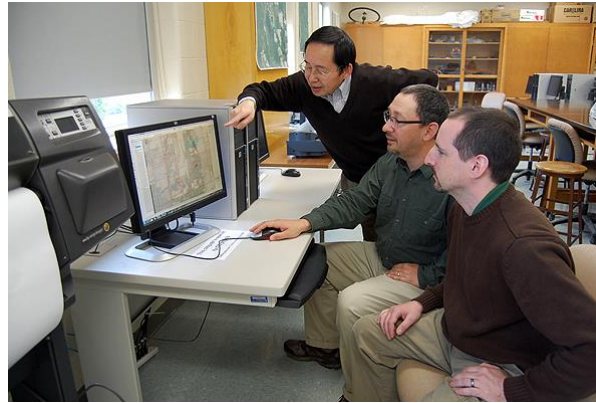


The **GIS (Geographic Information Systems)** Program and the Certificate in GIS Applications at the University of Maine at Presque Isle are developed to meet increasing demand for GIS education and for GIS skills required in the fields of natural resource management, community and urban planning and management, environmental management, wildlife management, tourism and recreation management, criminal data mapping, public health and social services, forestry, agriculture, land use planning, marketing, etc. The program is built on faculty strengths in geospatial information technologies, computing and programming, and database management systems, and based on its advanced GIS Laboratory, located at the College of Arts and Sciences. Funded through Maine Technology Asset Fund & STEM bond, the Laboratory is fully equipped with the state-of-the-art computing facility and cutting-edge GIS and GPS technologies, and is one of the best in its kind in New England.



Hands-on Training with Real-World Projects

GIS Program emphasizes hands-on training experience. Both GIS I and GIS II courses focus on hands-on skills. Students taking GIS II work on projects with real-world applications to gain real working experience. With a close community GIS partnership that includes major northern Maine cities, towns, and non-profit organizations, students may work on projects as either paid or non-paid interns to collect GIS data with advanced GPS technology, develop GIS databases, conduct GIS analysis, and cartography and make presentations. After completion of the GIS certificate students are able to work on their own as GIS specialists or become competitive on their current jobs and in job hunting market.



Above: team work on one of real-world application projects.

Below: a community GIS workshop in the GIS Laboratory.



A Fully-Equipped, State-of-the-Art GIS Laboratory

20 high-end HP Z440 workstation computers
4 high-end HP laptops
2 Trimble Geo 7X GNSS high-accuracy GPS units
3 Trimble GeoXh GPS units (with sub-foot accuracy)
3 Trimble Nomad and Recon units (mobile GIS and GPS)
1 Trimble Zephyr Model 2 GNSS antenna
12 Garmin Montana 680T GPS units
6 Garmin GPSMAP 76cx GPS units
1 GEI 35-inch wide-format color roll scanner
1 HP Designjet T1300 44-inch plotter/printer
1 HP Designjet 1050C Plus 36-inch plotter/printer
1 Xerox color laser printer
1 Xerox grayscale laser printer
1 GSSI ground penetrating radar (GPR) unit

Course Requirements

The GIS Certificate consists of three required courses and two electives with a total number of 17 credits. Electives may be taken before, concurrent with, or after the required courses. The minimum time for completion is two semesters.

Required courses (11 credits)

BUS345–Database Management (3 credits)
ENV308–GIS I–Fundamentals of GIS (4 credits)
ENV408–GIS II–Advanced GIS (4 credits)

Electives (select from the list with two courses with a total of 6 credits)

COS105–Computer Programming (3 credits)
BUS200–Intermediate Business Computing (3 credits)
BUS244–Management Information Systems (3 credits)
BUS245–Programming for Managers (3 credits)
BUS405–Special Topics in MIS (3 credits)
REC420–Natural and Cultural Resource Protection (3 credits)

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