

GEOMATICS - UNDERGRADUATE MINOR

Geomatics involves the application of knowledge to the analysis, design and execution of mapping, geomatics, geospatial information systems, and surveying. When performing this work, professionals must have an understanding of: the science of geomatic measurement and analysis; the legal principles of boundary location; the laws related to boundaries and land use; and applicable mathematical and computational theories and principles. Geomatics is made up of positional accuracy, land planning and development concepts pertinent to subdivision science. Geomatics professionals work for private surveying or engineering firms, for City, County, State or Federal Highway Departments, for State Lands Commissions, for the US Forest Service and for the US Bureau of Land Management, among others.

The mission of the Department of ETSE is to provide men and women with the rigorous, fundamental education needed to enter and succeed in the Geomatics and related professions. To accomplish this mission, the department will introduce students to the theory and application of recognized geomatics principles.

Required 12 credits from:	12
SUR/DRFT 222	Plane Surveying
SUR 285	Precise Digital Mapping
SUR 312	Legal Principles and Boundary Law I
SUR 328	Construction Surveying & Automation Technologies
SUR 351	Introductory Spatial Data Adjustment I
Select 6 credits from:	6
E T 355	Site/Land Development and Layout
SUR 361	Introduction to Geodesy/Geodetic Control Surveying
SUR 322	Laser Scanning Mapping Technologies
SUR 461	GNSS Positioning
GEOG 373 or GEOG 381	Introduction to Remote Sensing Cartography and Geographic Information Systems
GEOG 381	Cartography and Geographic Information Systems
Total Credits	18