

# MICROPROGRAM GEOMATICS

## Overview

The field of geomatics uses science and information technologies to gather and manage spatial data. It draws on a variety of disciplines such as geography, cartography, photogrammetry, computer science, mathematics and statistics, as well as geographic information systems, global positioning systems, and remote sensing. The applications of geomatics include health-care planning, epidemiology, criminology, environmental and resources monitoring and urban planning. As such, it is ubiquitous in today's society; there are numerous examples of this including the creation of the Centre for Geography and Exploration in Ottawa, the evolution of Google Maps, the navigation of autonomous vehicles, and the growing use of satellite remote sensing of the environment.

The 12 course-unit option in *Geomatics* allows students to develop competencies in geomatics applications in view of applying them to a wide variety of fields and disciplines. This option can be integrated into most of the BA and BSc programs of the Faculty of Arts.

## Program Requirements

The table below includes only the option-specific courses. Please refer to the Academic Regulations (<https://www.uottawa.ca/about-us/policies-regulations/academic-regulations/b-2-program-studies/>) for information on the possible combinations available within the Faculty of Arts.

Requirements for this program have been modified. Please consult the 2021-2022 calendars (<http://catalogue.uottawa.ca/en/archives/>) for the previous requirements.

### Compulsory courses

GEG 2320	GIS and the Digital Earth	3 Units
GEG 3105	Earth Observation	3 Units
GEG 3312	Digital Earth Analysis Modeling	3 Units

### Optional Courses

3 course units from:		3 Units
GEG 4120	Spatial Data Science	
GEG 4121	Applications of Remote Sensing in the Polar Regions	
GEG 4301	Coding the Digital Earth	

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**Total:** **12 Units**