AUJAS

GEOMATICS

Co-op allows you to apply your skills in the field and try out different industries before graduating. Aujas spent his work terms with both public and private sector companies, including Statistics Canada as a remote sensing and geospatial analyst – he worked with data grabbed from space satellites! He now works for the City of Oshawa as an Asset Management Data Analyst.

BACHELOR OF ENVIRONMENTAL STUDIES, CO-OP AVAILABLE

GEOMATICS

ADD 4 COURSES to earn a computing minor

Map your future

Harness the power of remote sensing, GIS, and other tools to address some of the world’s biggest problems.

According to the World Economic Forum, there are over 2.5 quintillion bytes of data generated every day. New technology gives us an opportunity to track our environment more closely with satellite imagery and sensors that track everything from water and weather to grizzly bears. In Geomatics, you’ll gain strong foundational skills in data analysis, software development, technology, and environmental analysis. You’ll get to use cool technology, like satellite data, drones, and high-end software, to track environmental changes.

YOUR FIRST YEAR:

SEPTEMBER TO DECEMBER

› GEOG 181 Designing Effective Maps
› GEOG 187 Problem Solving in Geomatics
› ENVS 178 Environmental Applications of Data Management and Statistics

Choose one of:

› ENGL 109 Introduction to Academic Writing
› ENGL 129R/EMLS 129R Written Academic English

Choose one of:

› CS 115 Introduction to Computer Science 1
› CS 135 Designing Functional Programs

JANUARY TO APRIL

› GEOG 101 – Human Geographies: People, Space and Change
› GEOG 281 – Geographic Information Systems (GIS)
› ENVS 278 – Applied Statistics for Environmental Research

Choose one of:

› CS 116 Introduction to Computer Science 2
› CS 136 Elementary Algorithm Design and Data Abstraction

Choose one of:

› MATH 106 Applied Linear Algebra 1
› MATH 114 Linear Algebra for Science

uwaterloo.ca/future/environment
CAREERS IN GEOMATICS

You’ll gain the technical expertise and hands-on experience to get a head start on building a career in this exciting field. Apply your degree to a range of industries:

› Insurance: collect and analyze data to understand the costs and risk of extreme weather

› Government: track crime rates or the incidence of disease across the population

› Retailers: map demographics to identify new clients or locations for expansion

› Municipalities: plan efficient transportation routes, how land will be used, or community services to provide

GRADS AT WORK

› GIS Technician, Pelmorex Media Inc.

› Java Developer, Genworth Canada

› Senior Application Analyst, Accenture Inc. (US)

› Analyst, Department of National Defence

› Applications Support Engineer, exactEarth Ltd.

CAREER INFO

uwaterloo.ca/future/careers/environment-sustainability

PLAN FOR YOUR FUTURE

You have the option to apply to the five-year co-op program or fast-track in the four-year regular option. In co-op, you’ll alternate study and paid work terms.

UP TO 20 MONTHS of paid work experience before you graduate

WORK TERMS BY INDUSTRY

44.3% PUBLIC ADMINISTRATION
18.9% PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES
10.3% EDUCATIONAL SERVICES
6.8% INFORMATION, CULTURE AND RECREATION
6.3% FINANCE AND INSURANCE
4.4% TRANSPORTATION AND WAREHOUSING
15.8% OTHER

SAMPLE CO-OP JOBS

› Geomatics Assistant, Agriculture and Agri-Food Canada

› Geospatial Analyst, Natural Resources Canada

› Geographic Information System (GIS) Analyst, The Weather Network (Pelmorex Media Inc)

› Geometrics Engineering Assistant, Ontario Ministry of Transportation

WORK AND STUDY SCHEDULE

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ADMISSIONS

Required courses: Six Grade 12 U or M courses, including any Grade 12 U English (minimum final grade of 70% is required) and any Grade 12 U Mathematics (minimum final grade of 70% is required)

Admissions average: Low 80s

MORE TO EXPLORE

Meet us online for more tips and stories:

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FACULTY OF ENVIRONMENT
UNDERGRADUATE ADMISSIONS
UNIVERSITY OF WATERLOO
200 UNIVERSITY AVE. W., WATERLOO, ON, CANADA N2L 3G1
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