



## CAREER PATHFINDERS

### BACHELOR OF ARTS OR SCIENCE DEGREE WITH A MAJOR IN

# MATHEMATICS

## Overview

Mathematics graduates have many skills that are valuable to employers, such as the ability to recognize, analyze and interpret data, and the ability to make sound judgements and solve quantitative problems. A mathematical background will provide a basis for entry into almost any technological field. Graduates can search for employment in areas related to finance, data science, computers and cyber security, information technology, education, insurance, telecommunications, economics, and more.

*“The faculty at UWinnipeg is some of the best in the country, and I also had a lot of opportunities to do research starting early in my degree, which is uncommon at larger universities.”*

- Adam Borchert, BSc (Math, UWinnipeg), MSc (Math, Cambridge), studying at Berlin Mathematical School

## Job Titles

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| <ul style="list-style-type: none"> <li>• Accountant (NOC 1111)</li> <li>• Actuary (NOC 2161)</li> <li>• Air Traffic Controller (NOC 2272)</li> <li>• Applications Programmer (NOC 2174)</li> <li>• Astronomer (NOC 2111)</li> <li>• Banking/Credit/Investment Manager (NOC 0122)</li> <li>• Biostatistician (NOC 2161)</li> <li>• Contract Administrator (NOC 1225)</li> <li>• Cryptographer (NOC 2161)</li> <li>• Data Control Administrator (NOC 1211)</li> <li>• Data Scientist (NOC 2172)</li> <li>• Demographer (NOC 2161)</li> <li>• Econometrician (NOC 4162)</li> <li>• Inventory Control Specialist (NOC 1215)</li> <li>• Market Research Analyst (NOC 4163)</li> </ul> | <ul style="list-style-type: none"> <li>• Meteorologist (NOC 2114)</li> <li>• Public Health Statistician (NOC 2161)</li> <li>• Quality Assurance Analyst (NOC 2171)</li> <li>• Technical Writer (NOC 5121)</li> <li>• Underwriter (NOC 1114, 1313)</li> <li>• Mathematician, Statistician (NOC 2161)</li> <li>• Teacher (NOC 4031)</li> <li>• Computer Programmers and Interactive Media Developer (NOC 2174)</li> <li>• Financial and Investment Analyst (NOC 1112)</li> <li>• Financial Auditor (NOC 1111)</li> <li>• Information Systems Analyst/Consultant (NOC 2171) <sup>1,2</sup></li> </ul> |
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<sup>1</sup> The numbers following each job title refer to [Canada's National Occupational Classification \(NOC\) code](#). Jobs may require additional education or training.

<sup>2</sup> Government of Canada. "Mathematics, General (27.0101), Bachelor's degree." Job Bank, 26 March 2020, <https://www.jobbank.gc.ca/studentdashboard/27.0101/LOS05>

## Work Settings

- Auditing/Accounting Firms
- Aerospace Industry
- Consulting Firms
- Educational Institutions
- Financial Industry
- Government Agencies/Departments
- Insurance Industry
- International Organizations
- Investment Industry
- Marketing/Public Relations Firms
- Media/Publishing/Telecommunications Industries
- Military
- Private Practice
- Research Institutes
- Software/Hardware Developers
- Trade/Professional Associations

## Skills and Characteristics

- Analytical skills
- Clear, logical thinking
- Critical thinking
- Problem solving
- Time management
- Organizational skills
- Teamwork skills and the ability to work independently

## Professional Associations and Other Links

- Association for Women in Mathematics <https://awm-math.org>
- Canadian Mathematical Society <http://cms.math.ca/>
- CMS Employment <http://cms.math.ca/Employment/>
- Math Jobs.org <http://www.mathjobs.org/jobs>
- Statistical Society of Canada <http://www.ssc.ca/en/jobs>
- Canadian Applied and Industrial Mathematics Society <http://www.caims.ca/>
- National Council of Teachers of Mathematics <http://www.nctm.org/>

This document is intended to provide a starting point for your career research. For more information about UWinnipeg's Mathematics program, visit the [Department of Mathematics](#) website and the [Mathematics Fact Sheet](#).

Students are encouraged to [schedule an appointment with an Academic and Career Advisor](#) for assistance with career planning.

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