



## CAREER PATHFINDERS

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

# STATISTICS

## Overview

Statistics is the science of data collection, summarization, analysis, and interpretation. A central issue of statistics is how to make inferences about populations of interest, using data obtained from samples or designed experiments. Statistical techniques are applied extensively in virtually every branch of the physical, social, biological, and human sciences. Statistical methodologies and principles of inference are based heavily upon statistical theory, which, in turn has an essential underlying mathematical foundation.

*"I've always liked math and I wanted to do math that I could apply in the real world and connect with real-world ideas and concepts. Statistics is a way to apply my mathematical side and also interact with the world. Lives can be dramatically improved and even saved by statistical modeling of diseases."*

- Jody Krahn, BSc in Statistics

## Job Titles

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Mathematician, Statistician (NOC 21210)</li><li>• Data Scientist (NOC 21211)</li><li>• Risk Analyst (NOC 11101)</li><li>• Data Analyst (NOC 21223)</li><li>• Epidemiologist (NOC 21210)</li><li>• Accountant (NOC 11100)</li><li>• Actuary (NOC 21210)</li><li>• Computer Programmer (NOC 21230)</li><li>• Interactive Media Developer (NOC 21232)</li><li>• Financial Analyst (NOC 11101)</li><li>• Biostatistician (NOC 21210)</li><li>• Market Research Analyst/Consultant (NOC 41402)</li></ul> | <ul style="list-style-type: none"><li>• Financial Officer (NOC 11109)</li><li>• Computer Programmers and Interactive Media Developer (NOC 21232)</li><li>• Financial and Investment Analyst (NOC 11101)</li><li>• Financial Auditor (NOC 11100)</li><li>• Information Systems Analyst/Consultant (NOC 21222)</li><li>• Business Management Consultant (NOC 11201)</li><li>• Post-Secondary Teaching and Research Assistant (NOC 41201) <sup>1,2</sup></li></ul> |
|---|---|

<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. "Statistics, General (27.0501), Bachelor's degree." Job Bank, 16 November 2020, <https://www.jobbank.gc.ca/studentdashboard/27.0501/LOS05>

## Work Settings

- Statistics Canada
- Pharmaceutical Companies
- 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

## 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

- Statistics Canada <https://www.statcan.gc.ca/eng/start>
- Manitoba Bureau of Statistics <https://www.gov.mb.ca/mbs/>
- Statistical Society of Canada <http://www.ssc.ca/en/jobs>
- International Statistical Institute <https://www.isi-web.org/>

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

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

---