

ACTUARIAL AND DATA SCIENCES (M)

FIN 321	Financial Math for Actuaries	3
FIN 322	Probability and Statistics for Actuaries I	3
FIN 424	Advanced Excel for Financial Analysis	3
Total Hours		56

The Actuarial and Data Science program combines the skills and knowledge taught in Concordia's data science program and eight courses in our current Actuarial Science program to create a major that is uniquely suited for a career as an actuary. The driving force behind this new program is the Society of Actuaries encouraging more data science in Actuarial Science curricula. The data science portion of the program contains courses in math, data science, and computer science, while the actuarial science classes emphasize accounting and finance. Together these skills will prepare students for rewarding and challenging jobs in actuarial science.

Program Learning Outcomes:

1. Students will solve real-world problems by applying the concepts and strategies of actuarial and data science, using computer software tools when appropriate.
2. Students will communicate effectively using oral, written, and symbolic formats.
3. Students will be prepared to pass The Society of Actuaries Exam P.
4. Students will be prepared to pass The Society of Actuaries Exam FM.
5. Students will analyze and interpret data using an ethical approach stemming from a Christian worldview.

Curriculum

Code	Title	Hours
Core Requirements (https://catalog.cuw.edu/undergraduate/university/acad-prog/trad/core/) ¹		45
Major Requirements		56
Emphasis/Electives		19
Total Hours		120

¹ For transfer students, please see the Advanced Transfer Core (<https://catalog.cuw.edu/undergraduate/university/acad-prog/trad/transfer-core/>).

Major Requirements

Code	Title	Hours
MATH 201	Calculus I	4
MATH 202	Calculus II	4
MATH 205	Statistics I	3
CSC 200	Coding I- Fundamentals	3
CSC 250	Coding II - Algorithms	3
CSC 430	Database Fundamentals	3
DSAA 200	Introduction to Data Science and Analysis	3
DSAA 300	Data Mining and Predictive Analysis	3
DSAA 310	Visual Analytics	3
DSAA 400	Senior Research Seminar	3
BUS 399	Business Internship	3
ACCT 203	Financial Accounting	3
FIN 300	Principles of Finance	3
FIN 310	Basic Investing	3
FIN 315	Principles of Insurance	3