Math Major: Actuarial Science Track [BA]

Associate Professors: Jeremy Chapman and Tharanga Wijetunge
Assistant Professor: Wesley Perkins
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Actuaries use mathematics, statistics, and financial theory to assess the risk of potential events, and they help businesses and clients develop policies that minimize the cost of that risk.

Individuals with this degree can find stable employment in private corporations, investment firms, banks, consulting agencies, insurance carriers, and government offices. Typically employed as an Actuary, folks with a bachelor's in Actuarial Science can also pursue careers as Data Analysts or other related occupations.

According to the Bureau of Labor Statistics (BLS), the median salary for an Actuary in 2020 was $111,030, and the number of jobs in Actuarial Science is expected to grow 18% from 2019 to 2029 - driven by the changing needs of the insurance industry.

* Students may use ECO 101 and MTH 210 to satisfy core requirements.

NOTE: To graduate with a Bachelor of Arts or Bachelor of Science degree from Lyon College, students must successfully complete a minimum of 120 semester credit hours comprised of our required Core curriculum (44-48 hours), the requirements of at least one major (credit hours vary per major), and a selection of our Liberal Arts electives. They must also earn at least a 2.00 cumulative grade point average for all work taken at Lyon College and a 2.00 cumulative grade point average in their major, minor, and concentration.

Summary of Requirements for a Major in Math: Actuarial Science Track

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Item #	Title	Credits
MTH 210	Calculus I	4
MTH 220	Calculus II	4
MTH 230	Calculus III	4
MTH 290	Foundations of Modern Mathematics	3
MTH 300	Differential Equations	3
MTH 330	Linear Algebra	3
MTH 420	Abstract Algebra I	3
MTH 440	Advanced Calculus I	3
	CSC Elective Group: Actuarial Science Track	3
MTH 225	Mathematical Theory of Interest	3
	Math Elective Group: Actuarial Science Track	3
MTH 425	Actuarial Science and Risk Management with R	3
DSC 105	Introduction to Data Science	3
DSC 205	Introduction to Advanced Data Science	4
ECO 101	Principles of Economics I	3
ECO 102	Principles of Economics II	3
ACC 210	Financial Accounting	3

CORE CURRICULUM

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Item #	Title	Credits
	Core Curriculum Requirements (In addition to Major hours)	44-48
	Total Credits	**99-103**

CSC Elective Group: Actuarial Science Track

Choose one of the following:

Item #	Title	Credits
CSC 100	Introduction to Programming in C++	3
CSC 109	Introduction to Programming in Python	3
CSC 115	Introduction to Programming in Java	3

Math Elective Group: Actuarial Science Track

Choose one of the following:

Item #	Title	Credits
MTH 325	Probability for Actuaries	3
MTH 360	Probability and Statistics	3