

MATHEMATICS, WITH AN ACTUARIAL SCIENCE CONCENTRATION

Bachelor of Science

Actuarial Science is a cross-disciplinary field that requires knowledge from mathematics, economics, and business to solve problems involving risk assessment and risk management. Actuaries apply mathematical principles and techniques to solve problems in finance, insurance, and related fields. They are involved with every aspect of the insurance industry and must possess strong mathematical skills and a solid business background to apply their technical knowledge. Dalton State College's Mathematics degree with an Actuarial Concentration will provide students with the courses to be successful in the actuarial field. Courses in this pathway include calculus, probability & statistics, economics, marketing, accounting, computer science, and finance. Professional status is obtained through a series of exams and this degree starts the student on the path to becoming an actuary.

Area A: Essential Skills

ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
MATH 1113	Precalculus Mathematics	3

Area B: Institutional Options

Beginning Fall 2022, incoming (entering) students with 29 hours or fewer college credits will take only a Perspectives course for their one-hour Area B credit.

COMM 1110	Fundamentals of Speech	3
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One of the following electives: 1

ENGL 1105	Intro to Greek Mythology	
ENGL 1110	Creative Writing	
GEOL 1000	Natural Hazards	
HIST 1050	Appalachian Hist-Special Topic	
HIST 1051	Sports Hist & Amer Character	
HUMN 1000	Mystery Fiction in Pop Culture	
HUMN 1300	Christian Fiction/Pop Culture	
SOCI 1000	Race and Ethnicity in America	
PRSP Elective (See advisor)		

Area C: Humanities/Fine Arts

Choose one or two ENGL course(s): 3-6

ENGL 2000	Topics in Literature & Culture	
ENGL 2111	World Literature I	
ENGL 2112	World Literature II	
ENGL 2120	British Literature I	
ENGL 2121	British Literature II	
ENGL 2130	American Literature I	
ENGL 2131	American Literature II	
ENGL 2201	Intro to Film as Literature	

If only one ENGL course chosen add one of the following: 0-3

ARTS 1100	Art Appreciation	
HUMN 1201	Expressions of Culture I	
HUMN 1202	Expressions of Culture II	

MUSC 1100	Music Appreciation	
MUSC 1110	World Music	
MUSC 1120	American Music	
THEA 1100	Theatre Appreciation	

Area D: Science/Mathematics/Technology

One of the following Laboratory Science Sequences: 8

BIOL 1107K & BIOL 1108K	Principles of Biology I and Principles of Biology II	
CHEM 1211K & CHEM 1212K	Principles of Chemistry I and Principles of Chemistry II	
PHYS 1111K & PHYS 1112K	Introductory Physics I and Introductory Physics II	
PHYS 2211K & PHYS 2212K	Principles of Physics I and Principles of Physics II	
MATH 2253	Calculus and Analytic Geom I	4

Area E: Social Sciences

HIST 2111 or HIST 2112	United States History to 1877 United States Hist since 1877	3
POLS 1101	American Government	3
ECON 2105	Principles of Macroeconomics	3
ECON 2106	Principles of Microeconomics	3

Area F: Major Related

CMPS 1301	Principles of Programming I	3
MATH 2254	Calculus and Analytic Geom II	4
MATH 2255	Calculus and Analytic Geom III	4
MATH 2256	Introduction to Linear Algebra	3
MATH 2403	Differential Equations	4

Upper Level Concentration

ACCT 2101	Principles of Accounting I	3
ACCT 2102	Principles of Accounting II	3
BUSA 2850	Business Statistics	3
ECON 4101	Applied Econometrics	3
FINC 3056	Principles of Finance	3
FINC 3101	Intermediate Corporate Finance	3
FINC 3201	Investments	3
FINC 4301	Risk Management	3
FINC 4701	Finance Case Studies	3
MATH 3101	Intro to Advanced Mathematics	3
MATH 3511	Intro to Numerical Analysis	3
MATH 4401	Operations Research	3
MATH 4502	Statistics for Process Control	3
MATH 4601	Real Analysis I	4
MATH 4602	Real Analysis II	3
MATH 4701	Probability and Statistics I	3
MATH 4702	Probability and Statistics II	3
MATH 4850	Mathematical Finance	3
MATH 4860	Internship In Mathematics	4

Total Hours 120