

MATHEMATICS (ACTUARIAL SCIENCE AND INSURANCE) - BACHELOR OF SCIENCE

A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1511G Calculus and Analytic Geometry I and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and english. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

Some students may be able to bypass one or more courses in the calculus sequence MATH 1511G - MATH 1521G - MATH 2530G. The calculus sequence, Introduction to Higher Mathematics, and Linear Algebra provide knowledge that is basic to further work, and students are advised to complete them or their equivalent as early as possible.

First Year		Credits
ENGL 1110G	Composition I (C- or better)	4
MATH 1511G or MATH 1511H	Calculus and Analytic Geometry I (C- or better) ¹ or Calculus and Analytic Geometry I Honors	4
Area III: Laboratory Science Course ²		4
C S 172	Computer Science I	4
Choose one from the following:		3
ENGL 2130G	Advanced Composition	
ENGL 2210G	Professional and Technical Communication Honors	
ENGL 2215G	Advanced Technical and Professional Communication	
Choose one from the following:		3
ACOM 1130G	Effective Leadership and Communication in Agriculture	
COMM 1115G	Introduction to Communication	
COMM 1130G	Public Speaking	
HNRS 2175G	Introduction to Communication Honors	
MATH 1521G or MATH 1521H	Calculus and Analytic Geometry II (C- or better) or Calculus and Analytic Geometry II Honors	4
Area V: Humanities Course ²		3
ECON 2110G	Macroeconomic Principles	3
Credits		32

Second Year		Credits
ACCT 2110	Principles of Accounting I	3
MATH 1531	Introduction to Higher Mathematics (C- or better)	3
MATH 2530G	Calculus III (C- or better)	3
ECON 2120G	Principles of Microeconomics (C- or better, and will count towards Area IV, Gen.Ed)	3
BFIN 322	Principles of Insurance (C- or better)	3
Area VI: Creative and Fine Arts Course ²		3
MATH 2415	Introduction to Linear Algebra (C- or better)	3
STAT 3110	Statistics for Engineers and Scientists (C- or better)	3
ACCT 2120	Principles of Accounting II	3

BFIN 341	Financial Analysis and Markets	3
Credits		30
Third Year		
VWW - Viewing a Wider World ³		3
MATH 3110 or MATH 3120	Introduction to Modern Algebra (C- or better, Fall Only) ⁴ or Introduction to Analysis	3
OPTION 1,2 or 3 Course (C- or better) ⁵		6
Elective Course(s) ⁶		12
MATH/STAT Elective Course: 300/3000-level or higher (C- or better) ^{7,8}		3
MATH/STAT Elective Course: 400/4000-level (C- or better) ⁸		3
Credits		30
Fourth Year		
MATH/STAT Elective Course: 400/4000-level (C- or better) ⁸		3
Option 1,2 or 3 Course (C- or better) ⁵		3
STAT 4210	Probability: Theory and Applications (C- or better)	3
BLAW 316 or BLAW 385V	Legal Environment of Business (C- or better in either) or Employment and Consumer Law	3
Elective Course(s) ⁶		7-9
STAT 4220	Statistics: Theory and Applications (C- or better)	3
Elective Course - Upper Division ⁶		6
Credits		28-30
Total Credits		120-122

¹ Math Placement: MATH 1511G Calculus and Analytic Geometry I is the starting Math course for the degree, however, students may need to complete any prerequisites prior to enrolling into this course.

² See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of the catalog for a full list of courses.

³ See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section for a full list of courses. Please note that the second VWW requirement will be satisfied by the 9 hour rule using the FIN courses that are required for the degree.

⁴ MATH 3110 Introduction to Modern Algebra is only offered in the Fall semesters, however MATH 3120 Introduction to Analysis is taught in the Spring and may be used as a substitute.

⁵ Do not mix options; pick one throughout.
 OPTION 1: BFIN 323 Life/Health/Employee Benefits; two courses from (BFIN 303V Personal Financial Planning and Investing in a Global Economy OR BFIN 421 Personal Financial Planning for Professionals); BFIN 324 Property and Liability Insurance; BFIN 391 Finance Internship and Cooperative Education I.
 OPTION 2: BFIN 324 Property and Liability Insurance; two courses from (BFIN 303V Personal Financial Planning and Investing in a Global Economy OR BFIN 421 Personal Financial Planning for Professionals); BFIN 323 Life/Health/Employee Benefits; BFIN 391 Finance Internship and Cooperative Education I.
 OPTION 3: BFIN 326 Business Risk Management; two courses from (BFIN 303V Personal Financial Planning and Investing in a Global Economy OR BFIN 421 Personal Financial Planning for Professionals); BFIN 323 Life/Health/Employee Benefits; BFIN 324 Property and Liability Insurance; BFIN 391 Finance Internship and Cooperative Education I.

⁶ Elective credit may vary based on prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The amount indicated in

the requirements list is the amount needed to bring the total to 120 credits and may appear in variable form based on the degree. However students may end up needing to complete more or less on a case-by-case basis and students should discuss elective requirements with their advisor.

⁷ MATH/STAT 300/3000-level courses that cannot be taken to fulfill this requirement: MATH 3997 Directed Readings.

⁸ MATH/STAT 400/4000-level courses that cannot be taken to fulfill this requirement: MATH 4991 Undergraduate Research, MATH 4997 Directed Reading, STAT 400 Undergraduate Research.