MATHEMATICS (FOUNDATIONS) - 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 (C- or better)	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	
Either an Area III/IV: Laboratory Science Course or Social/Behavioral Science Course [2]		3-4
MATH 1521G or MATH 1521H	Calculus and Analytic Geometry II (C- or better) or Calculus and Analytic Geometry II Honors	4
Elective Course [3]		3
	Credits	**29-30**
Second Year		
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	
Area V: Humanities Course [2]		3
Elective Course [3]		3
MATH 2415	Introduction to Linear Algebra (C- or better)	3
MATH 2530G	Calculus III (C- or better)	3
Area IV: Social/Behavioral Sciences Course [2]		3
Area VI: Creative and Fine Arts Course [2]		3
PHIL 312	Formal Logic	3
MATH 1531	Introduction to Higher Mathematics	3
MATH/STAT Elective Course: 3000-level or higher (C- or better) [4,6]		3
	Credits	**30**
Third Year		
Upper level Philosophy course [8]		3
VWW - Viewing a Wider World [5]		3
MATH 3110 or MATH 3120	Introduction to Modern Algebra (C- or better in either) or Introduction to Analysis	3
MATH/STAT Elective Course: 3000-level or higher (C- or better) [4,6]		3
Elective Course [3]		3
Elective Course(s) - Upper Division [3]		6
MATH 4320	Logic and Set Theory	3
PHIL 316	Philosophy of Mathematics	3
MATH/STAT Elective Course: 4000-level (C- or better) [6]		3
	Credits	**30**
Fourth Year		
Elective Course(s) - Upper Division [3]		12
MATH 4110V	Great Theorems in Mathematics	3
Elective Course(s) [3]		13
MATH 4320 or MATH 3130	Logic and Set Theory or Introduction to Geometry	3
	Credits	**31**
	Total Credits	**120-121**

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. 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.
4. MATH/STAT 3000-level courses that cannot be taken to fulfill this requirement: MATH 3997 Directed Readings.
5. See the Viewing a Wider World (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext) section for a full list of courses.
6. MATH/STAT 4000-level courses that cannot be taken to fulfill this requirement: MATH 4991 Undergraduate Research, MATH 4997 Directed Reading, STAT 400 Undergraduate Research.
7. 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.
8. Choose from PHIL 350 Epistemology or PHIL 351 Philosophy of Science.