Bachelor of Science in Mathematics

Sample Plan

The academic plan below is one pathway through the degree/certificate. It includes all requirements, taking into account recommendations from program faculty. Each student's plan may vary according to their initial course placement (http://catalog.uaa.alaska.edu/academicpoliciesprocesses/academicstandardsregulations/courseplacement/), intended course load, additional majors and/or minors, and their placement into required prerequisite courses. Any change in the plan below can have an unforeseen impact on the rest of the plan. **Therefore, it is very important to meet with your academic advisor to verify your personal academic plan.**

Please review the following terms, definitions, and resources associated with the sample academic plan below.

- Each course in the far left column links to a pop-up bubble with a course description, prerequisite requirements, and associations with university requirements. For example, if a course fulfills a general education requirement, you will see that in the pop-up bubble.
- **GER**: indicates a General Education Requirement (http://catalog.uaa.alaska.edu/undergraduateprograms/baccalaureaterequirements/gers/). GERs that also count toward degree/certificate requirements appear as a specific course in the plan. For these courses, "GER" is not indicated explicitly in the table, but if you click on the course, you will see the course's GER status in the pop-up bubble.
- **Program Elective**: indicates a specific course selection determined by program faculty to fulfill a degree/certificate requirement. Students should seek assistance from their academic advisor.
- **Elective**: indicates an open selection of 100-400 level university courses to fulfill elective credits needed to meet the minimum total credits toward the degree/certificate.
- **Upper Division Program Elective**: indicates a specific 300-400 level course selection determined by the program faculty to fulfill a degree/certificate requirement. Students should seek assistance from their academic advisor.
- **Upper Division Elective**: indicates an open selection of 300-400 level courses to fulfill elective credits needed to meet the minimum total credits toward the degree/certificate. These courses must be upper division in order to meet General University Requirements for the particular degree/certificate type.

Course	Title	Credits
First Year		
Fall		
MATH A251	Calculus I	4
WRTG A111	Writing Across Contexts	3
GER Natural Sciences Lecture (recommend BIOL A102)		3
GER Oral Communication Skills		3
Elective		1
	Credits	**14**
Spring		
MATH A252	Calculus II	4
MATH A264	Introduction to the Mathematics Major	1
GER Fine Arts		3
GER Natural Sciences Lab		1
GER Natural Sciences Lecture		3
GER Written Communication Skills (recommend WRTG A213)		3
	Credits	**15**
Second Year		
Fall		
MATH A253	Calculus III	4
MATH A371 or MATH A407 or STAT A307 or STAT A308 or STAT A402 or STAT A403 or STAT A404 or STAT A407 or STAT A408 or STAT A410	Stochastic Processes or Mathematical Statistics or Probability and Statistics or Intermediate Statistics for the Sciences or Scientific Sampling or Regression Analysis or Analysis of Variance or Time Series Analysis or Multivariate Statistics or Statistical Methods	3
GER Alaska Native-Themed		3
GER Humanities		3
GER Social Sciences		3
	Credits	**16**
Spring		
MATH A265	Fundamentals of Mathematics	3
MATH A314	Linear Algebra	3
GER Diversity & Inclusion		3
GER Humanities		3
Elective		3
	Credits	**15**
Third Year		
Fall		
MATH A306	Discrete Methods	3
MATH A401	Introduction to Real Analysis	3
Upper Division Program Elective (Analysis & Topology)		3
Upper Division Program Elective (Statistics)		3

Upper Division Program Elective [1]		3
Credits		**15**
Spring		
MATH A405	Introduction to Abstract Algebra	3
GER Social Sciences		3
Upper Division Program Elective (Applied Math)		3
Upper Division Program Elective (Statistics)		3
Upper Division Program Elective [1]		3
Credits		**15**
Fourth Year		
Fall		
Elective		2
Elective		3
Elective		3
GER Integrative Capstone		3
Mathematics Capstone Experience (MATH A495A, MATH A495B, MATH A496, or MATH A498)		1
Upper Division Program Elective (Statistics)		3
Credits		**15**
Spring		
Elective		3
Elective		3
Elective		3
Upper Division Program Elective (Other Mathematics Course)		3
Upper Division Program Elective (Statistics)		3
Credits		**15**
Total Credits		**120**

[1] *Choose 3 additional credits (6 credits in total) from the Analysis and Topology, Applied Math, Statistics, or Other Mathematics Course categories.*