Example Program: BS in Applied Mathematics, Seattle Pacific University

Actuarial Science Concentration

Core Courses (Required)	Credits
MAT 1234 Calculus I	5
MAT 1235 Calculus II	5
MAT 1236 Calculus III	5
MAT 2360 Introduction to Statistics for Sciences	5
MAT 2401 Linear Algebra	3
MAT 2720 Discrete Mathematics	3
CSC 2230 Computer Programming for Engineers	5
MAT 4899 Senior Capstone Seminar (W)	3
Subtotal	**34**
Upper Division Mathematics Electives:	
MAT 3237 Differential Equations	3
MAT 3238 Vector Calculus	3
MAT 3360 Probability & Statistics	5
MAT 4363 Mathematical Statistics	3
MAT 4725 Numerical Analysis	5
MAT 4830 Mathematical Modeling	5
Subtotal	**24**
Lower Division Courses in Related Field:*	
ECN 2101 Principles of Microeconomics	5
ECN 2102 Principles of Macroeconomics	5
ACCT 2361 Financial Accounting	5
Subtotal	**15**
Upper Division Electives in Applied Field:	
BUS 3250 Business Finance	5
BUS 3251 Investments	5
BUS 3700 Quantitative Methods for Decision Making	3
ECN 3202 Intermediate Macroeconomics (W)	5
ECN 4010 Health Economics	5
Subtotal	**23**
Total	**96**

* While these lower-division credits in economics and accounting are not directly required for the BS in Applied Mathematics, they are prerequisites for the upper-division electives, so it is necessary to take them as a part of the major. They are also valuable courses for a student wishing to become an actuary.