## Example Program: BS in Applied Mathematics, Seattle Pacific University Computational Mathematics Concentration

Core Courses (Required)	Credit
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 2430* Data Structures I	5
MAT 4899 Senior Capstone Seminar	3
Subtotal	34
Upper Division Mathematics Electives:	
MAT 3237 Differential Equations	3
MAT 3238 Vector Calculus	3
MAT 3360 Probability & Statistics	5
MAT 3724 Applied Analysis	3
MAT 4725 Numerical Analysis	5
MAT 4830 Mathematical Modeling	5
Subtotal	24
Lower Division Computer Science Courses:**	
CSC 1230 Problem Solving & Programming	5
CSC 2431 Data Structures II	5
Subtotal	10
Upper Division Electives in Computer Science:	
CSC 3150 Systems Design	5
CSC 3220 Applications Programming	3
CSC 3221 Netcentric Computing	3
CSC 3310 Concepts in Programming Languages	3
CSC 3750 Computer Architecture/Organization	5
CSC 3430 Algorithm Design & Analysis	3
Subtotal	22
Total	90

<sup>\*</sup> CSC 2430 is substituted for CSC 2230.

<sup>\*\*</sup> While these lower-division credits in computer science 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.