Example Program: BS in Applied Mathematics, Seattle Pacific University

Physics 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	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 3730 Complex Variables	3
MAT 4830 Mathematical Modeling	5
Subtotal	**22**
Lower Division Courses in Physics:*	
PHY 1121 Physics for Science & Engineering	5
PHY 1122 Physics for Science & Engineering	5
PHY 1123 Physics for Science & Engineering	5
PHY 2321 Intermediate Physics	5
Subtotal	**20**
Upper Division Electives in Physics:	
PHY 3841 Dynamics	5
PHY 3315 Electricity and Magnetism I	3
PHY 3340 Quantum Mechanics I	3
PHY 3401 Thermodynamics	5
PHY 3311 Advanced Physics Lab	3
PHY 3312 Advanced Physics Lab	3
Subtotal	**22**
Total	**98**

* While these lower-division credits in physics 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.

Example Program: B.S. in Applied Mathematics, Seattle Pacific University

Chemistry 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	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 4363 Mathematical Statistics	3
MAT 4830 Mathematical Modeling	5
Subtotal	**22**
Lower Division Courses in Chemistry and Physics:*	
CHM 1211 General Chemistry I	5
CHM 1212 General Chemistry II	5
PHY 1121 Physics for Science & Engineering	5
PHY 1122 Physics for Science & Engineering	5
PHY 1123 Physics for Science & Engineering	5
Subtotal	**25**
Upper Division Electives in Chemistry:	
CHM 3225 Chemical Equilibrium & Analysis	5
CHM 3410 Survey of Physical Chemistry	5
CHM 3421 Quantum Mechanics	4
CHM 3422 Statistical Thermodynamics	4
CHM 3461 Physical Chemistry Lab I	2
Subtotal	**20**
Total	**101**

* While these lower division credits in chemistry are not directly required for the B.S. in Applied Mathematics, they are prerequisites for the upper division electives, so it is necessary to take them as a part of the major.