ASBURY UNIVERSITY
OFFICE OF THE REGISTRAR

2018-2019

COMPUTATIONAL MATHEMATICS MAJOR, B.A.

Mathematical Department; School of Science, Health & Mathematics

Computational Mathematics involves an emphasis on applied mathematics with the computational and computer programming skills necessary to solve practical problems. These skills are in high demand in the private sector and in government employment. Study in computational science prepares students to enter a career in industry, government, or business immediately upon graduation or to enter graduate school in computational science, or related areas of applied mathematics such as statistics, management science, operations research, actuarial science or computational biology. The major is designed to allow the student flexibility in choosing a minor area of study as an application of the computational and mathematical skills learned in Department courses.

To graduate must complete all major requirements, foundational requirements, and additional electives needed for 124 hour minimum degree requirement.

MAJOR REQUIREMENTS (55)

__ 4	CSC	121	Data Science I ___ Lab
__ 4	CSC	122	Data Science II ___ Lab
__ 4	MAT	181	Calculus I ___ Lab
__ 4	MAT	182	Calculus II ___ Lab
__ 4	MAT	183	Calculus III ___ Lab
__ 3	MAT	241	Logic & Sets
__ 3	MAT	252	Diff Equations/Modeling
__ 3	MAT	271	Linear Algebra
__ 3	MAT	281	Probability
__ 3	MAT	351	Applied Mathematics I
__ 3	MAT	352	Applied Mathematics II
__ 3	MAT	442	Numerical Analysis
__ 1	MAT	475	Senior Seminar
__ 3	MAT	482	Complex Analysis
__ 5	PHY	211	Gen Physics I ___ Lab ___ Recitation
__ 5	PHY	212	Gen Physics II___ Lab ___ Recitation

PLUS FOUNDATIONAL REQUIREMENTS (39)
(3 hours Math and 4 hours Science satisfied by required major courses.)

Plus electives needed for the 124 hour degree requirement (30)