Interdisciplinary Minor in Scientific Computing

The minor in Scientific Computing is available to any student enrolled at Southeastern, but it is especially appropriate for majors in the College of Science and Technology. Individuals participating in the minor are required to take 18 hours of courses that are offered in the College. The required courses for the minor include:

Required Courses: .................................................................6 hours
CMPS 152: Introduction to Programming for Scientists ..........3 hours
SC 200: Computational Methods for Scientists .......................3 hours

Discipline-Specific Project or Special Topics Course: ...............3 hours
GBIO 493: Special Topics in Biology ...................................3 hours
CHEM 404: Special Topics in Chemistry ..............................3 hours
MATH 383: Independent Projects......................................3 hours
PHYS 430: Special Topics in Physics ...............................3 hours

Elective Courses: ..............................................................9 hours
GBIO 153H: General Biology II Honors .................................3 hours
GBIO 314: Genetics Laboratory .........................................2 hours
GBIO 408: Biological Data Analysis ....................................4 hours
GBIO 409: Internship ..........................................................1-3 hours
GBIO 411: Evolutionary Data Science ..................................4 hours
CHEM 491: Theoretical Chemistry ......................................3 hours
CHEM 492: Quantum Chemistry ........................................3 hours
CMPS 443: Simulation and Modeling ..................................3 hours
CMPS 451: Data Mining ......................................................3 hours
CMPS 470: Machine Learning ............................................3 hours
MATH 360: Linear Algebra I .................................................3 hours
MATH 380: Mathematical Statistics I ...................................3 hours
MATH 392: Numerical Methods .........................................3 hours
MATH 402: Partial Differential Equations ............................3 hours
MATH 415: Mathematical Modeling .....................................3 hours
MATH 480: Mathematical Statistics II ................................3 hours
PHYS 225: Applied Physics Experience .............................1 hour (may be repeated)