Minor

Modeling and Simulation Minor

James Leathrum, Minor Coordinator

An undergraduate minor in modeling and simulation may be obtained by successful completion of 12 or more credit hours of approved modeling and simulation engineering coursework at the 200-, 300-, and 400-level. In addition, a student seeking a minor in modeling and simulation must satisfy all pre- or corequisite requirements for the courses selected.

There are two tracks available in the minor in modeling and simulation: simulation application and simulation development. The minor coordinator must approve the precise course of study in the minor.

Requirements

The basic course requirements for the two tracks are as follows:

Simulation Application Track

STAT 330	An Introduction to Probability and Statistics (or ECE 304)	3
ECE 306	Discrete System Modeling and Simulation	3
ECE 320	Continuous System Modeling and Simulation	3
Select one of the following:		3
ECE 410	Model Engineering	
ECE 453	Analysis for Modeling and Simulation	
Total Credit Hours		**12**

Simulation Development Track

STAT 330	An Introduction to Probability and Statistics (or ECE 304)	3
ECE 306	Discrete System Modeling and Simulation	3
ECE 348	Simulation Software Design	3
Select one of the following:		3
ECE 406	Computer Graphics and Visualization	
ECE 407	Introduction to Game Development	
ECE 409	Introduction to Distributed Simulation	
Total Credit Hours		**12**

When appropriate, other course work can be developed in consultation with the minor coordinator.

For completion of the minor, a student must pass each course required for the minor, achieve a cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites, complete a minimum of twelve credit hours of approved coursework for the minor, and complete at least six hours of upper-level courses in the minor requirement through courses offered by Old Dominion University. To enter the program, students must have completed calculus and one college-level computer-programming course (CS 150 or equivalent).