

## Short Certificate - Visual Communications: Simulation and Modeling option

The simulation and modeling short certificate teaches the theory, tools and techniques necessary for creating high-quality graphics. Students will learn the principles of interactive 3D, 3D modeling, GIS and programming. They are introduced to 2D and 3D editing software and programming tools. Emphasis is placed on acquiring the skills necessary to create scalable virtual characters and environments for use in simulations and games.

Reauired cours	es	credit hours
CIS 153	Introduction to Unity 3D Scripting	
CIS 223	Three-Dimensional Computer Modeling	
CIS 294	Special Topics: Capstone	
CIS 196	Commercial Software Applications (Photoshop)	3
or VCM 185	Digital Imaging	3
Total		12