B.S. in Simulation Science, Games, and Animation

The Simulation Science, Games, and Animation Program's mission is to advance knowledge through content creation, interdisciplinary research and development, and to equip students with an essential foundation in simulation science, games and animation. The curriculum prepares students for excellence as future leaders in constructing interactive, immersive experiences that leverage emerging technology to improve the human experience and foster lifelong critical and design thinking skills.

The SSGA degree requires diligence in computer science, game design, digital media, simulation, systems modeling, spatial computing, software engineering and general education that merge into a coordinated, coherent major. The breadth and depth designated for areas of study provide a functional and whole degree experience.

The program consists of project-based production courses, where students design virtual worlds and user experiences using industry-standard applications and cutting-edge equipment. Example courses include Games Systems, Interactive Media, World Building, Multiplayer Systems, Game Engine Architecture, Artificial Intelligence, Mixed Reality, User Interface Design, Data Visualization, Systems and Procedural Simulation.

From these experiences, students can design real-time interactive systems from the ground up; build game systems to employ artificial intelligence, code, and content designed to generate compelling interactive models and virtual environments. Students design data-driven simulations for user-centered and multi-user training, management, scientific research, and concept exploration.

Graduates of this major can expect to find flexible options and rewarding career opportunities. Employment opportunities are possible in the established global entertainment industries, such as game design, game development, and a vast array of other areas, such as military and intelligence communities, high-tech manufacturing, aviation, and healthcare.