

Video Game Design

Video Game Design

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:

Video Game Design is a program of study in game design, interactive software development, and programming. Students develop skills and technical knowledge that apply to traditional artistry, 3D modeling, animation, fundamentals of game engine development, and artificial intelligence for games. They develop an understanding of the full game development life cycle through the art and design process and are able to design, develop, test, and deploy interactive software. With an understanding of the full cycle of creating game software, students can assume responsibility for a specific job within this cycle. Graduates could pursue a career as a 3D modeler, animator, game support specialist, computer programmer, game analyst, and more.



Video Game Design Artistic Track Curriculum

Course #	Title	Credits
COM 753	Technical Communications	3
CIS 162	C++	4
CIS 386	Game Design 101	3
CIS 387	Game Development Process	3
CSC 110	Introduction to Computers	3
CIS 383	Digital Composition & Graphics Pipeline I	3
CIS 388	Creative Writing for Games	3
CIS 389	Level Design I	3
CIS 392	Interface Design for Games	3
ART 371	Traditional & New Media Art 3-D Design	3
MAT 102	Intermediate Algebra	4
CIS 384	Digital Composition & Graphics Pipeline II	3
CIS 390	Level Design II	3
ART 121	2-D Design	3
CIS 395	Game Engines	3
CIS 391	Animation for Games	2
ART 372	Digital Color, Lighting, & Rendering	1
CIS 393	Introduction to 3-D Gaming Art	3
PSY 111	Introduction to Psychology	3
SPC 112	Public Speaking	3
CIS 396	Game Development Team	3
CIS 397	Gaming Physics	4
CIS 398	Game Final Submission	2
Program Total		65

Video Game Design Scripting Track Curriculum

Course #	Title	Credits
COM 753	Technical Communications	3
CIS 162	C++	4
CIS 386	Game Design 101	3
CIS 387	Game Development Process	3
CSC 110	Introduction to Computers	3
CIS 383	Digital Composition/Graphics I	2
CIS 388	Creative Writing for Games	3
CIS 389	Level Design I	3
CIS 392	Interface Design for Games	3
MAT 102	Intermediate Algebra	4
CIS 165	Advanced C++	4
CIS 390	Level Design II	3
ART 121	2-D Design	3
CIS 395	Game Engines	3
CIS 391	Animation for Games	2
CIS 394	Introduction to Game Programming	3
MAT 141	Finite Mathematics	4
PSY 111	Introduction to Psychology	3
SPC 112	Public Speaking	3
CIS 396	Game Development Team	3
CIS 397	Gaming Physics	4
CIS 398	Game Final Submission	2
Program Total		68

For more information, please contact:

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Video Game Design

Video Game Design Audio Production

Certificate
Sioux City Campus

Program Overview and Opportunities:

Through this certificate offering students learn to choose, create, mix, reproduce or record music, voices, or sound effects for video productions. Students engage in an in-depth and academic look at video game music; exploring the composers, the pieces and the games they are written for.

Coursework relates to video game sound, music and sound effects/vox (sound editing, effects, sound bites, voice editing, etc.). In addition to these courses students will take MUS-102 Music Fundamentals to develop the basic composition skills needed.

Video Game Audio Production Certificate Option Curriculum

Course #	Title	Credits
CIS 373	Introduction to Game Audio	3
CIS 374	Sound Design for Games	3
MUS 102	Music Fundamentals	3
CIS 375	Music Development for Games	3
	Program Total	12

Video Game 3-D Animation

Certificate
Sioux City Campus

Program Overview and Opportunities:

The 3-D Animation certificate prepares students to enter the dynamic, fast growing, virtual gaming industry. Demand from consumers for new and exciting computer games continues to create jobs for talented artists who are skilled in the latest software to design visual and animated objects as well as the creativity to formulate engaging storylines for video games and other areas of the entertainment industries.

Students are introduced to multiple aspects of 2-D and 3-D art, interactive media and animation. Hands-on training in modeling, design, texturing, animation, lighting and rendering for 3-D design is provided. Using Autodesk Maya, the leading 3-D software tool for professionals, and web applications such as Adobe Flash, students work on a variety of projects from product illustration and architectural visualization to character animation and web media presentation.

For more information, please contact:

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