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

Simulation Science, Games, and Animation

Freshman Year

Fall		Credits
COM 122	English Composition	3
CS 118	Fundamentals of Computer Programming	3
	Humanities Lower-Level Elective	3
SIM 201	World Building I, Modeling	3
SIM 115	Digital Illustration	3
UNIV 101	College Success	1
	Credits Subtotal	**16.0**
Spring		
CS 125	Computer Science I	4
MA 241	Calculus and Analytical Geometry I	4
SIM 150	Games Systems I Introduction	3
SIM 202	World Building II Materials	3
SIM 215	Interactive Media I	3
	Credits Subtotal	**17.0**

Sophomore Year

Fall		
CS 225	Computer Science II	4
MA 225	Introduction to Discrete Structures	3
PS 113 or PS 215	Introductory Physics I Physics I	3
SIM 203	World Building III Mechanics	3
SIM 251	Game Systems II Multi-player	3
	Credits Subtotal	**16.0**
Spring		
MA 314	Applied Linear Algebra & Statistics	3
PSY 101	Introduction to Psychology (Or Social Science Lower-Level Elective)	3
SIM 205	Game Design Workshop	3
SIM 304	World Building IV Motion	3
SIM 315	Interactive Media II	3
	Credits Subtotal	**15.0**

Junior Year

Fall		
CS 315	Data Structures and Analysis of Algorithms	3
SIM 321	Simulation I Systems Modeling	3
SIM 335	Game Engine Architecture	3
SIM 350	Visualization and Virtual Reality Games III	3
SIM 401	Character Design & Production	3
	Credits Subtotal	**15.0**
Spring		
CS 455	Artificial Intelligence	3
PSY 321	Psychology of Gaming (or Humanities or Social Science Upper-Level Elective)	3
SIM 331	Simulation II Procedural Modeling	3
SIM 415	User Interface Design	3
SIM 450	Game Systems 4: Mixed Reality	3
	Credits Subtotal	**15.0**

Senior Year

Fall		
	Communications Elective	3
DS 411	Data Visualization	3
SIM 403	Set & Environment Design	3
SIM 482	Capstone I and Lab	4
	Technical Elective	3
	Credits Subtotal	**16.0**
Spring		
	Communications Elective	3
	Humanities or Social Science Upper-Level Elective	3
	Natural Science Elective with Lab	4
SIM 421	Modeling & Simulation II	3
SIM 483	Capstone II and Lab	4
	Credits Subtotal	**17.0**
	Credits Total:	**127.0**