

Required Core Courses

<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>	<u>Semester</u>	<u>Required Pre-Reqs (C- minimum grade needed)</u>
CS 1030	Foundations of Computer Science	3	Fall/ Spring	Co-Req: Math 1060 or Math 1080
CS 1410	Intro. to Object-Oriented Prog.	4	Fall/ Spring	CS 1030, Co-Req: Math 1210
CS 2100	Discrete Structures	3	Fall/ Spring	CS 1410, Math 1210
CS 2420	Intro. to Algrthms & Data Structures	4	Fall/ Spring	CS 1410
CS 3100	Models of Computation	3	Fall	CS 2100 & major status
CS 3200	Scientific Computing	3	Spring	CS 1410, Math 2270
CS 3500	Software Practice	4	Fall/ Spring	CS 2420 & major/minor status
CS 3505	Software Practice II	3	Fall/ Spring	CS 3500 & major status
CS 3810	Computer Organization	4	Fall/ Spring	CS 2420 & major status
CS 4150	Algorithms	3	Fall/ Spring	CS 2100, CS 3500 & major status
CS 4400	Computer Systems	4	Fall/ Spring	CS 3810
*EAE 4500	Senior Project I	3	Fall	CS 3505 & (WRTG 3012, 3014, 3015 OR FA 3600) & major status
EAE 4510	Senior Project II	3	Spring	CS 4000 & major status

EAE Core Requirements

<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>	<u>Semester</u>	<u>Required Pre-Reqs (C- minimum grade needed)</u>
EAE 1050	Digital Content Creation	3	Fall/Spring/Summer	
EAE 2100	Intro to Game Design	3	Fall/Spring	
EAE 3010	Asset Pipeline	3	Fall/Spring/Summer	EAE 1050 AND (COMP 1010 OR CS 1030)

EAE Requirements

<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>	<u>Semester</u>	<u>Required Pre-Reqs (C- minimum grade needed)</u>
EAE 3660	Machinima	3	Fall/Spring	EAE 3010
EAE 3710	Traditional Game Development	3	Fall/Spring	EAE 3010 AND (COMP 1020 OR CS 1410)
EAE 3720	Alternative Game Development	3	Fall/Spring	EAE 3010 AND (COMP 1020 OR CS 1410)

Area Focus Electives: AI/Analytics

<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>	<u>Semester</u>	<u>Required Pre-Reqs (C- minimum grade needed)</u>
CS 4300	Artificial Intelligence	3	Spring	CS 3505, CS 4150, CS 3130 & major status
CS 5140	Data Mining	3	Spring	CS 3500, CS 3130, Math 2270; Co-Req: CS 4150
CS 5340	Natural Language Processing	3	Fall	CS 3505, CS 3100 & major status
CS 5350	Machine Learning	3	Fall	CS 3500 & Math 2270 & CS 3130 & major status; Co-Reqs: CS 4150 or CS 3100

Area Focus Electives: Core/Fundamentals

<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>	<u>Semester</u>	<u>Required Pre-Reqs (C- minimum grade needed)</u>
CS 4470	Compilers	3	(every other) Spring	CS 3100 & CS 4400 & major status
CS 5150	Advanced Algorithms	3	Fall	CS 4150 & major status
CS 5460	Operating Systems	3	Spring	CS 4400 & major status

Area Focus Electives: Human Centered Computing

<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>	<u>Semester</u>	<u>Required Pre-Reqs (C- minimum grade needed)</u>
CS 3540	Human/Computer Interaction	3	Fall	CS 2420 & major status
CS 4600	Intro Computer Graphics	3	Fall	CS 3500 & major status
CS 4530	Mobile Application Programming	3	Fall/ Spring	CS 3505 & major status (Fall Android/Spring iOS)
CS 5650	Perception for Graphics	3	Spring	

Area Focus Electives: Infrastructure

<u>Course #</u>	<u>Course Name</u>	<u>Credits</u>	<u>Semester</u>	<u>Required Pre-Reqs (C- minimum grade needed)</u>
CS 3470	Scripting Language Design/ Implementation	4	Varies	CS 2100 & major status
CS 4440	Computer Security	3	Spring	CS 3505 & CS 3810
CS 4480	Computer Networks	3	Spring	CS 3500 & major status
CS 5530	Database Systems	3	Spring	CS 3500 & major status

* Students should have four or less CS electives/ required courses left when signing up for this course and should be graduating during the following semester.