

Bachelor of Science in Computer Game Design & Development



Updated 7/9/2020

Catalog Year: 2020

Total Degree Credit Hours: 120

General Education Requirements (See Degreeworks for Prerequisites)

A-1	ENGL 1101 Composition I	3	
	ENGL 1102 Composition II	3	
A-2	MATH 1113 Precalculus	3	

Area A: Essential Skills (10 credit hours)

All Area A courses must be completed within the first 30 credit hours with a grade of C or higher.

B-1	ECON 1000 Contemporary Economic Issues	2	
B-2	AADS/AMST/ASIA/GWST/LAL/PAX/RELS 1102, COM 1100, FL 1002, LDRS 2300, PHIL 2200, or POLS 2401	3	

Area B: Institutional Options (5 credit hours)

Choose 1 course from B-2. COM 1100 is recommended.

C-1	ENGL 2110, 2111, 2112, 2120, 2121, 2122, 2130, 2131, 2132, or 2300	3	
C-2	ART 1107, MUSI 1107, DANC 1107, or TPS 1107	3	

Area C: Humanities, Fine Arts, and Ethics (6 cr hrs)

Choose one course from each area.

D-1	MATH 1190 Calculus I	4	
D-2	BIOL 1107/L, CHEM 1211/L, PHYS 1111/L, PHYS 2211/L, BIOL 1108/L, CHEM 1212/L, PHYS 1112/L or PHYS 2212/L	4	
		4	

Area D: Science, Math, and Technology (12 cr hrs)

Choose any two 4 credit hour science courses. A sequence is not necessary. "L" denotes the corresponding Lab course. Students **may not** take both PHYS 1111/L and PHYS 2211/L or PHYS 1112/L and PHYS 2212/L. Physics is recommended. Students complete 12 credit hours in this area with 2 hours carried over to Area F and Upper Div. Major requirements

E-1	POLS 1101 American Government	3	
E-2	HIST 2111 or 2112 US History	3	
E-3	HIST 1100, 1111, or 1112 World History	3	
E-4	CRJU 1101, GEOG 1101, PSYC 1101, SOCI 1101, STS 1101, ANTH 1102, or ECON 2100	3	

Area E: Social Sciences (12 credit hours)

Choose one course from each area for E-2, E-3, & E-4.

Area F Lower Division Major Requirements

		Prerequisites	
CSE 1321/L	Programming & Problem Solving I		4
CSE 1322/L	Programming & Problem Solving II	Minimum grade of 'B' in CSE 1321/L & MATH 1113/1190*	4
MATH 2345	Discrete Mathematics or CSE 2300 Discrete Structures for Computing	MATH 1113/1190	3
		MATH 1113/1190 & CSE 1321/L	
MATH 2332	Probability and Data Analysis	MATH 1190	3
CGDD 2012/L	Fundamentals of Game Design and lab	CSE 1322/L *	3
Carryover credit hour from Area D Group 2 Science Lab		See Area D Science requirement	1

CSE 1321/L and CSE 1322/L must have a minimum grade of 'B.' All other courses in this area must have a minimum grade of 'C'.

*May be taken before or at the same time

Upper Division Major Courses (43 Credit hours)

Prerequisite

CSE 3801 Professional Practices and Ethics	CSE 1322/L	2	
CS 3305 Data Structures	CSE 1322/L & (MATH 2345/CSE 2300)	3	
CS 3642 Artificial Intelligence	CS 3305	3	
CS 4306 Algorithm Analysis	CS 3305	3	
CS 4722 Computer Graphics and Multimedia	CS 3305	3	
SWE 3313 Intro to Software Engineering	CSE 1322/L	3	
SWE 3643 Software Testing and Quality Assurance	SWE 3313	3	
SWE 4324 User-Centered Design	SWE 3313	3	
CGDD 3103 Application Extension and Scripting	CGDD 2002 & CSE 1322/L	3	
CGDD 4003 Digital Media and Interaction	CGDD 3103	3	
CGDD 4203 Mobile and Casual Game Development	CGDD 4003	3	
CGDD 4303 Educational and Serious Game Design	CGDD 4003	3	
CGDD 4803 Studio	CGDD 4003	3	
CGDD 4814 Capstone	CGDD 4803	4	
1 credit carried over from Area D-1		1	

All major requirements (including carryover credit) must have a minimum grade of 'C,' except for CSE 1321/L and CSE 1322/L, which must have a minimum grade of 'B.'

Major Elective Tracks (Pick 1) (17 Credit hours)

Media-Production Track

Prerequisite

MATH 3260 Linear Algebra	MATH 1190	3	
CGDD 4113 3D Modeling & Animation	CS 3305	3	
CGDD 4603 Prod. Pipeline & Rendering	CS 4722	3	
Free Electives		8	
Free Electives			

Educational-Serious Track

Prerequisite

CGDD 4313 Designing Online Learning Content	-	3	
TCOM 2010	ENGL 1102	3	
TCOM approved course		3	
TCOM approved course		3	
Free Electives		5	

Planning-Management Track

Prerequisite

Pick 3	MGT 3100 Management and Behavioral Sciences	Permission of Coles	3	
	MGT 4122 Venture Analysis	MGT 3100	3	
	MGT 4185 Technology Management	MGT 3100 and permission	3	
	ENTR 4490 Entrepreneurship for Non-business majors	Permission of Coles	3	
	SWE 3623 Software Systems Requirements	SWE 3313 & CSE 2300/MATH 2345	3	
	SWE 4663 Software Project Management	SWE 3313 & MATH 2332	3	
Free Electives		8		
Free Electives				

Simulation-Informatics Track

Prerequisite

CSE 3153 Database Systems	CSE 1322/L	3	
CGDD 4703 Data Modeling & Simulation	MATH 2332	3	
Approved UL Computing course	Varies	3	
Free Electives		8	
Free Electives			

Creative-Content Track

Prerequisite

CGDD 4113 3D Modeling & Anim.	CS 3305	3	
MEBU 2270 Entertainment Media Prod.	Permission	3	
Pick 2	MEBU 3370 Fun. Of Audio Prod.	MEBU 2270	6
	MEBU 4470 Adv. Audio Prod.	MEBU 3370	
	MEBU 4490 Special Topics	Permission	
Free Electives		5	

Contact CCSE Academic Advising if you are in, or considering, this concentration to discuss enrollment permission procedure.

Computer Science Track

Prerequisite

CS		3	
CS		3	
CS		3	
Free Electives		8	
Free Electives			

CS courses must be upper level and not already required.

Custom Track

Must contain at least 9 credit hours of upper level courses. Students are encouraged to consider Special Topics, Internships, and/or Directed Studies courses.

		3	
		3	
		3	
		3	
		3	
		2	

Contact CCSE Academic Advising if you would like to create a custom track – ccseadvising@kennesaw.edu