

**Computer Game Design & Development, B.S.C.G.D.D.**  
**College of Computing and Software Engineering**  
**8 Semester Plan**

**Media-Production Track**

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	Math 1190- Calculus or Higher [Core D1]	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	MATH 2345- Discrete Mathematics <i>or</i> CSE 2300- Discrete Structures for Computing	3
General Education Core E3	3	CGDD 2012- Fundamentals of Game Design	2
CSE 1321- Programming & Problem Solving † Δ	3	CGDD 2012L- Fundamentals of Game Design Lab	1
CSE 1321L- Programming & Problem Solving Lab † Δ	1	CSE 1322- Programming & Problem Solving II Δ	3
		CSE 1322L- Programming & Problem Solving II Lab Δ	1
TOTAL	15	TOTAL	17
Year 2 - Fall (15 credits)	Credits	Year 2 - Spring (16 credits)	Credits
General Education Core D2 [STEM]	4	General Education Core D2 [STEM]	4
General Education Core E2	3	POLS 1101- American Government [Core E1]	3
CSE 3801- Professional Practices & Ethics	2	CS 3305- Data Structures	3
CGDD 3103- Application Extension & Scripting	3	CGDD 4003- Digital Media & Interaction	3
SWE 3313- Introduction to Software Engineering	3	CSE 3153- Database Systems	3
TOTAL	15	TOTAL	16
Year 3 - Fall (15 credits)	Credits	Year 3 - Spring (15 credits)	Credits
STAT 2332- Probability & Data Analysis	3	General Education Core C1	3
CGDD 4242- Agent-Based Artificial Intelligence	3	General Education Core E4	3
CS 4306- Algorithm Analysis	3	CS 4722- Computer Graphics & Multimedia	3
SWE 3643- Software Testing & Quality Assurance	3	CGDD 4303- Educational & Serious Game Design	3
MATH 3260- Linear Algebra I	3	SWE 4324- User-Centered Design	3
TOTAL:	15	TOTAL:	15
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (12 credits)	Credits
General Education Core B2	3	General Education Core C2	3
CGDD 4203- Mobile & Casual Game Development	3	CGDD 4814- Studio 2	4
CGDD 4803- Studio	3	Free Elective (1 of 2)	3
CGDD 4113- 3D Modeling and Animation	3	Free Elective (2 of 2)	2
CGDD 4603- Production Pipeline & Asset Management	3		
TOTAL:	15	TOTAL:	12

Program Total: 120 Credit Hours

**\*Recommended General Education Course    †Milestone    Δ Course must be completed by B or better**

This academic map is a suggested four-year schedule of courses based on degree requirements in the undergraduate catalog. This sample schedule serves as a general guideline to help build a full schedule each term. Missing milestones could delay your program. Also see the current undergraduate catalog for a complete list of requirements, electives, and pre-requisites. This map is not a substitute for academic advisement. Note: Requirements are continually under revision, and there is no guarantee they will not be changed or revoked; contact the department and/or program area for current information.

**Computer Game Design & Development, B.S.C.G.D.D.**  
**College of Computing and Software Engineering**  
**8 Semester Plan**  
**Custom Track**

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	Math 1190- Calculus or Higher [Core D1]	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	MATH 2345- Discrete Mathematics <i>or</i> CSE 2300- Discrete Structures for Computing	3
General Education Core E3	3	CGDD 2012- Fundamentals of Game Design	2
CSE 1321- Programming & Problem Solving † Δ	3	CGDD 2012L- Fundamentals of Game Design Lab	1
CSE 1321L- Programming & Problem Solving Lab † Δ	1	CSE 1322- Programming & Problem Solving II Δ	3
		CSE 1322L- Programming & Problem Solving II Lab Δ	1
TOTAL	15	TOTAL	17
Year 2 - Fall (15 credits)	Credits	Year 2 - Spring (16 credits)	Credits
General Education Core D2 [STEM]	4	General Education Core D2 [STEM]	4
General Education Core E2	3	POLS 1101- American Government [Core E1]	3
CSE 3801- Professional Practices & Ethics	2	CS 3305- Data Structures	3
CGDD 3103- Application Extension & Scripting	3	CGDD 4003- Digital Media & Interaction	3
SWE 3313- Introduction to Software Engineering	3	CSE 3153- Database Systems	3
TOTAL	15	TOTAL	16
Year 3 - Fall (15 credits)	Credits	Year 3 - Spring (15 credits)	Credits
STAT 2332- Probability & Data Analysis	3	General Education Core C1	3
CGDD 4242- Agent-Based Artificial Intelligence	3	General Education Core E4	3
CS 4306- Algorithm Analysis	3	CS 4722- Computer Graphics & Multimedia	3
SWE 3643- Software Testing & Quality Assurance	3	CGDD 4303- Educational & Serious Game Design	3
Concentration Course (1 of 5)	3	SWE 4324- User-Centered Design	3
TOTAL:	15	TOTAL:	15
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (12 credits)	Credits
General Education Core B2	3	General Education Core C2	3
CGDD 4203- Mobile & Casual Game Development	3	CGDD 4814- Studio 2	4
CGDD 4803- Studio	3	Concentration Course (4 of 5)	3
Concentration Course (2 of 5)	3	Concentration Course (5 of 5)	2
Concentration Course (3 of 5)	3		
TOTAL:	15	TOTAL:	12

Program Total: 120 Credit Hours

**\*Recommended General Education Course    †Milestone    Δ Course must be completed by B or better**

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**Computer Game Design & Development, B.S.C.G.D.D.**  
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**8 Semester Plan**

**Planning Management Track**

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	Math 1190- Calculus or Higher [Core D1]	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	MATH 2345- Discrete Mathematics <i>or</i> CSE 2300- Discrete Structures for Computing	3
General Education Core E3	3	CGDD 2012- Fundamentals of Game Design	2
CSE 1321- Programming & Problem Solving † Δ	3	CGDD 2012L- Fundamentals of Game Design Lab	1
CSE 1321L- Programming & Problem Solving Lab † Δ	1	CSE 1322- Programming & Problem Solving II Δ	3
		CSE 1322L- Programming & Problem Solving II Lab Δ	1
TOTAL	15	TOTAL	17
Year 2 - Fall (15 credits)	Credits	Year 2 - Spring (16 credits)	Credits
General Education Core D2 [STEM]	4	General Education Core D2 [STEM]	4
General Education Core E2	3	POLS 1101- American Government [Core E1]	3
CSE 3801- Professional Practices & Ethics	2	CS 3305- Data Structures	3
CGDD 3103- Application Extension & Scripting	3	CGDD 4003- Digital Media & Interaction	3
SWE 3313- Introduction to Software Engineering	3	CSE 3153- Database Systems	3
TOTAL	15	TOTAL	16
Year 3 - Fall (15 credits)	Credits	Year 3 - Spring (15 credits)	Credits
STAT 2332- Probability & Data Analysis	3	General Education Core C1	3
CGDD 4242- Agent-Based Artificial Intelligence	3	General Education Core E4	3
CS 4306- Algorithm Analysis	3	CS 4722- Computer Graphics & Multimedia	3
SWE 3643- Software Testing & Quality Assurance	3	CGDD 4303- Educational & Serious Game Design	3
Planning-Management Elective (1 of 3)	3	SWE 4324- User-Centered Design	3
TOTAL:	15	TOTAL:	15
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (12 credits)	Credits
General Education Core B2	3	General Education Core C2	3
CGDD 4203- Mobile & Casual Game Development	3	CGDD 4814- Studio 2	4
CGDD 4803- Studio	3	Planning-Management Elective (3 of 3)	3
Planning-Management Elective (2 of 3)	3	Free Elective (1 of 1)	2
TCOM Elective (1 of 2)	3		
TOTAL:	15	TOTAL:	12

Program Total: 120 Credit Hours

**\*Recommended General Education Course** †**Milestone** Δ **Course must be completed by B or better**

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**Computer Game Design & Development, B.S.C.G.D.D.**  
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**8 Semester Plan**

**Educational-Serious Track**

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	Math 1190- Calculus or Higher [Core D1]	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	MATH 2345- Discrete Mathematics <i>or</i> CSE 2300- Discrete Structures for Computing	3
General Education Core E3	3	CGDD 2012- Fundamentals of Game Design	2
CSE 1321- Programming & Problem Solving † Δ	3	CGDD 2012L- Fundamentals of Game Design Lab	1
CSE 1321L- Programming & Problem Solving Lab † Δ	1	CSE 1322- Programming & Problem Solving II Δ	3
		CSE 1322L- Programming & Problem Solving II Lab Δ	1
TOTAL	15	TOTAL	17
Year 2 - Fall (15 credits)	Credits	Year 2 - Spring (16 credits)	Credits
General Education Core D2 [STEM]	4	General Education Core D2 [STEM]	4
General Education Core E2	3	POLS 1101- American Government [Core E1]	3
CSE 3801- Professional Practices & Ethics	2	CS 3305- Data Structures	3
CGDD 3103- Application Extension & Scripting	3	CGDD 4003- Digital Media & Interaction	3
SWE 3313- Introduction to Software Engineering	3	CSE 3153- Database Systems	3
TOTAL	15	TOTAL	16
Year 3 - Fall (15 credits)	Credits	Year 3 - Spring (15 credits)	Credits
STAT 2332- Probability & Data Analysis	3	General Education Core C1	3
CGDD 4242- Agent-Based Artificial Intelligence	3	General Education Core E4	3
CS 4306- Algorithm Analysis	3	CS 4722- Computer Graphics & Multimedia	3
SWE 3643- Software Testing & Quality Assurance	3	CGDD 4303- Educational & Serious Game Design	3
TCOM 2010- Technical Writing	3	SWE 4324- User-Centered Design	3
TOTAL:	15	TOTAL:	15
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (12 credits)	Credits
General Education Core B2	3	General Education Core C2	3
CGDD 4203- Mobile & Casual Game Development	3	CGDD 4814- Studio 2	4
CGDD 4803- Studio	3	TCOM Elective (2 of 2)	3
CGDD 4313- Designing Online Learning Content & Environments	3	Free Elective (1 of 1)	2
TCOM Elective (1 of 2)	3		
TOTAL:	15	TOTAL:	12

Program Total: 120 Credit Hours

**\*Recommended General Education Course    †Milestone    Δ Course must be completed by B or better**

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**Computer Game Design & Development, B.S.C.G.D.D.**  
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**8 Semester Plan**

**Simulations-Information Track**

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	Math 1190- Calculus or Higher [Core D1]	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	MATH 2345- Discrete Mathematics <i>or</i> CSE 2300- Discrete Structures for Computing	3
General Education Core E3	3	CGDD 2012- Fundamentals of Game Design	2
CSE 1321- Programming & Problem Solving † Δ	3	CGDD 2012L- Fundamentals of Game Design Lab	1
CSE 1321L- Programming & Problem Solving Lab † Δ	1	CSE 1322- Programming & Problem Solving II Δ	3
		CSE 1322L- Programming & Problem Solving II Lab Δ	1
TOTAL	15	TOTAL	17
Year 2 - Fall (15 credits)	Credits	Year 2 - Spring (16 credits)	Credits
General Education Core D2 [STEM]	4	General Education Core D2 [STEM]	4
General Education Core E2	3	POLS 1101- American Government [Core E1]	3
CSE 3801- Professional Practices & Ethics	2	CS 3305- Data Structures	3
CGDD 3103- Application Extension & Scripting	3	CGDD 4003- Digital Media & Interaction	3
SWE 3313- Introduction to Software Engineering	3	CSE 3153- Database Systems	3
TOTAL	15	TOTAL	16
Year 3 - Fall (15 credits)	Credits	Year 3 - Spring (15 credits)	Credits
STAT 2332- Probability & Data Analysis	3	General Education Core C1	3
CGDD 4242- Agent-Based Artificial Intelligence	3	General Education Core E4	3
CS 4306- Algorithm Analysis	3	CS 4722- Computer Graphics & Multimedia	3
SWE 3643- Software Testing & Quality Assurance	3	CGDD 4303- Educational & Serious Game Design	3
Free Elective (1 of 3)	3	SWE 4324- User-Centered Design	3
TOTAL:	15	TOTAL:	15
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (12 credits)	Credits
General Education Core B2	3	General Education Core C2	3
CGDD 4203- Mobile & Casual Game Development	3	CGDD 4814- Studio 2	4
CGDD 4803- Studio	3	Free Elective (2 of 3)	3
Approved Upper-Level CCSE Course	3	Free Elective (3 of 3)	2
CGDD 4703- Data Modeling and Simulations	3		
TOTAL:	15	TOTAL:	12

Program Total: 120 Credit Hours

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**Computer Game Design & Development, B.S.C.G.D.D.**  
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**8 Semester Plan**

**Creative Content Track**

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	Math 1190- Calculus or Higher [Core D1]	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	MATH 2345- Discrete Mathematics <i>or</i> CSE 2300- Discrete Structures for Computing	3
General Education Core E3	3	CGDD 2012- Fundamentals of Game Design	2
CSE 1321- Programming & Problem Solving † Δ	3	CGDD 2012L- Fundamentals of Game Design Lab	1
CSE 1321L- Programming & Problem Solving Lab † Δ	1	CSE 1322- Programming & Problem Solving II Δ	3
		CSE 1322L- Programming & Problem Solving II Lab Δ	1
TOTAL	15	TOTAL	17
Year 2 - Fall (15 credits)	Credits	Year 2 - Spring (16 credits)	Credits
General Education Core D2 [STEM]	4	General Education Core D2 [STEM]	4
General Education Core E2	3	POLS 1101- American Government [Core E1]	3
CSE 3801- Professional Practices & Ethics	2	CS 3305- Data Structures	3
CGDD 3103- Application Extension & Scripting	3	CGDD 4003- Digital Media & Interaction	3
SWE 3313- Introduction to Software Engineering	3	CSE 3153- Database Systems	3
TOTAL	15	TOTAL	16
Year 3 - Fall (15 credits)	Credits	Year 3 - Spring (15 credits)	Credits
STAT 2332- Probability & Data Analysis	3	General Education Core C1	3
CGDD 4242- Agent-Based Artificial Intelligence	3	General Education Core E4	3
CS 4306- Algorithm Analysis	3	CS 4722- Computer Graphics & Multimedia	3
SWE 3643- Software Testing & Quality Assurance	3	CGDD 4303- Educational & Serious Game Design	3
MEBU 2270- Entertainment Media Production	3	SWE 4324- User-Centered Design	3
TOTAL:	15	TOTAL:	15
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (12 credits)	Credits
General Education Core B2	3	General Education Core C2	3
CGDD 4203- Mobile & Casual Game Development	3	CGDD 4814- Studio 2	4
CGDD 4803- Studio	3	MEBU Elective (2 of 2)	3
CGDD 4113- 3D Modeling & Animation	3	Free Elective (1 of 1)	2
MEBU Elective (1 of 2)	3		
TOTAL:	15	TOTAL:	12

Program Total: 120 Credit Hours

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**Computer Game Design & Development, B.S.C.G.D.D.**  
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**8 Semester Plan**

**Computer Science Track**

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (17 credits)	Credits
ENGL 1101- Composition I [Core A1]	3	ENGL 1102- Composition II [Core A1]	3
MATH 1113- Pre-Calculus or Higher [Core A2]	3	Math 1190- Calculus or Higher [Core D1]	4
ECON 1000- Contemporary Economic Issues [Core B1]	2	MATH 2345- Discrete Mathematics <i>or</i> CSE 2300- Discrete Structures for Computing	3
General Education Core E3	3	CGDD 2012- Fundamentals of Game Design	2
CSE 1321- Programming & Problem Solving † Δ	3	CGDD 2012L- Fundamentals of Game Design Lab	1
CSE 1321L- Programming & Problem Solving Lab † Δ	1	CSE 1322- Programming & Problem Solving II Δ	3
		CSE 1322L- Programming & Problem Solving II Lab Δ	1
TOTAL	15	TOTAL	17
Year 2 - Fall (15 credits)	Credits	Year 2 - Spring (16 credits)	Credits
General Education Core D2 [STEM]	4	General Education Core D2 [STEM]	4
General Education Core E2	3	POLS 1101- American Government [Core E1]	3
CSE 3801- Professional Practices & Ethics	2	CS 3305- Data Structures	3
CGDD 3103- Application Extension & Scripting	3	CGDD 4003- Digital Media & Interaction	3
SWE 3313- Introduction to Software Engineering	3	CSE 3153- Database Systems	3
TOTAL	15	TOTAL	16
Year 3 - Fall (15 credits)	Credits	Year 3 - Spring (15 credits)	Credits
STAT 2332- Probability & Data Analysis	3	General Education Core C1	3
CGDD 4242- Agent-Based Artificial Intelligence	3	General Education Core E4	3
CS 4306- Algorithm Analysis	3	CS 4722- Computer Graphics & Multimedia	3
SWE 3643- Software Testing & Quality Assurance	3	CGDD 4303- Educational & Serious Game Design	3
CS Elective Course (1 of 3)	3	SWE 4324- User-Centered Design	3
TOTAL:	15	TOTAL:	15
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (12 credits)	Credits
General Education Core B2	3	General Education Core C2	3
CGDD 4203- Mobile & Casual Game Development	3	CGDD 4814- Studio 2	4
CGDD 4803- Studio	3	CS Elective Course (3 of 3)	3
CS Elective Course (2 of 3)	3	Free Elective (2 of 2)	2
Free Elective (1 of 2)	3		
TOTAL:	15	TOTAL:	12

Program Total: 120 Credit Hours

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