

Game Design & Development

BS in Game Design & Development (Fall 2024 & Later)

Minimum 120 credits required for Bachelor's degree

80 credits GAME DESIGN & DEVELOPMENT MAJOR

Foundational Core (27-29 Credits)		Grade
FYWS-125 ¹	First Year Seminar	3
Choose 1 course from each area *		
MA	Foundational Core Math course	
² Natural/Physical Science		
Literature		3
History	HI-100, HI-102 or HI-110	3
Arts/Design/Comm.		3
Philosophy		3
Theology/Relig		3
Social/Behavioral Science		3

Human Journey Seminars: Great Books in CIT (6 Credits)

CIT 201	CIT Seminar I	3
CIT 202	CIT Seminar II	3

Liberal Arts Explorations (LAE) (12 Credits Total)

Student must complete 4 courses from at least 2 different subjects and one course in each area. (see list on Registrar's Website - checksheets)		
Humanistic Inquiry (3 credits)		3
Social and Global Awareness (3 credits)		3
Scientific Literacy (3 credits)		
LAE in any area (3 credits)		3

* See list of courses.

¹(Requires Grade C or higher)

²Science/Natural Science courses includes

approved Math and Computer Science courses. Students are required to take at least one course in Biology, Chemistry, or Physics in the Foundational or Liberal Arts Exploration Core. CS and MA courses may be used as a Science/Natural Science in either the Foundational Core **or** as a requirement in the LAE Core but not in both categories.

Note: MA 006 and ESL courses **will not** count towards the 120 credit graduation requirement.

Approved Study Abroad courses may be used to satisfy requirements for the foundational core or a Liberal Arts Exploration

A maximum of 8 Applied Music credits may be applied towards graduation

REQUIRED CURRICULUM		CR	Grade
CSE 125	CSE Explorations	1	
GDD 125	GDD Explorations	3	
CS 111	Introduction to Structured Programming	3	
CS 112	Data Structures	3	
CS 113	Discrete Structures	3	
CS 215	Computer Systems Organization	3	
CY 221	Foundations of Cybersecurity	3	
GDD 271	Game Development with Unity	3	
GDD 273	3D Digital Object Creation	3	
GDD 274	Building Games with Unreal Engine	3	
CS 319	Computer Ethics	3	
CS 321	Research Methods Seminar	2	
GDD 370	OOP for Game Development	3	
CS 390	Internship	3	
CS 312	Software Engineering	3	
GDD 417	Senior Project Design	3	
GDD 418	Senior Project Implementation	3	

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GDD ELECTIVES - TAKE FIVE OF THE FOLLOWING		CR	Grade
GDD 310	Music and Sound Design for Games	3	
GDD 326	Mobile Game Development	3	
GDD 399	Special Topics in GDD	3	
GDD 422	Augmented and Virtual Reality	3	
GDD 433	Theory of Computer Gaming	3	
AR 161	Sequential Storyboards	3	
PH 180	Logic	3	
MU 181	Digital Audio Production	3	
CM 221	Digital Film/Video Production I	3	
ITI 232	Human Computer Interaction	3	
CM 277	Screenwriting	3	
CM 280	Immersive Media Production	3	
CM 391	Lab Practicum	3	

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Required Supporting Courses ***		CR	Grade
MA 131	Elementary Statistics	3	
MA 151	Calculus I	4	
PY 111/113	General Physics I and Lab	4	
AR 114	Digital Design Basics	3	
ENG 253	Introduction to Creative Writing	3	
*** Must have grade of C or better			

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Total

116

Free electives		CR	Grade
		3	
		1	

WELCH COLLEGE OF BUSINESS AND TECHNOLOGY
SCHOOL OF COMPUTER SCIENCE & ENGINEERING
BS in Game Design and Development (Fall 2024 & Later)

YEAR 1	SEMESTER 1	YEAR 1	SEMESTER 2
FYWS 125	First Year Seminar	CORE	Foundational Core
MA 151	Calculus I	MA 131	Elementary Statistics
CSE 125	CSE Explorations	GDD 125	GDD Explorations
CS 111	Intro to Structured Programming	CS 112	Data Structures
CORE	Foundational Core	CS 113	Discrete Structures

YEAR 2	SEMESTER 3	YEAR 2	SEMESTER 4
CIT 201	Human Journey Seminar I	CIT 202	Human Journey Seminar II
ENG 253	Introduction to Creative Writing	CS 215	Computer Systems Organization
GDD 271	Game Development	GDD 273	3D Digital Object Creation
PY 111/113	General Physics I and Lab	GDD 274	Building Games With Unreal Engine
AR 114	PhotoShop and Illustrator	CORE	Foundational Core

YEAR 3	SEMESTER 5	YEAR 3	SEMESTER 6
CS 319	Computer Ethics (LAE Awareness)	CS 321	Research Methods Seminar
GDD ELEC	GDD Elective	CS 312	Software Engineering
GDD 370	OOP for Game Development	GDD 372	Building Computer Games
CORE	Foundational Core	GDD ELEC	GDD Elective
	Free Elective	CORE	Foundational Core
CS 390	<i>Internship (Summer or Fall)</i>		

YEAR 4	SEMESTER 7	YEAR 4	SEMESTER 8
GDD 417	Senior Project Design	GDD 418	Senior Project Implementation
GDD ELEC	GDD Elective	GDD ELEC	GDD Elective
GDD ELEC	GDD Elective	LAE	Social and global awareness
CORE	Foundational Core		Free Elective
LAE Inquiry	LA Exploration Inquiry	LAE	LAE Other

effective Fall 2024

Total Credits 120