

Game Design and Development Bridging Disciplines Program Certificate

Through the program, students learn about and create video game experiences, integrating skills and approaches from art, design, programming, and media studies, among other disciplines. A vast, interdisciplinary field that reaches well beyond the entertainment industry, video games have applications in medicine, architecture, geology, and much more. Whatever applications they envision, students learn about the art and design of games, the underlying programming, and how games are part of a social context. In the process, students will build their capacity for developing a creative vision, strong technical skills, critical reasoning, and problem-solving. Students in the program will apply all of these skills as they learn to create games or interactive projects. In their foundations hours for the certificate, students develop fundamental knowledge and skills in game art and design, programming, and understanding games in a social context. Strand hours allow students to specialize, exploring one or more of these areas in greater depth. This program culminates in a hands-on creative project, where students create a game or interactive project, either independently or as part of a team.

Total Hours Required: 22

Requirements

Requirements are listed in the table below. Additional requirements may follow the table, so be sure to read the entire page. Some required courses listed below may also satisfy [General Education](#) requirements, including [Core Curriculum](#). Students should also review the [University's Undergraduate Minor and Certificate Requirements and Policies](#).

Code	Title	Hours
Hours chosen from: Forum Seminar		1
BDP 101.3	Exploring Digital Arts and Media	
Approved hours		
Hours chosen from: Concepts and Techniques		3
Arts and Entertainment Technologies majors should take an additional Strand course instead of a course from this category.		
AET 312	Games and Interactivity	
Hours chosen from: Approved list		
Hours chosen from: Programming Foundations		3
Computer science majors should take an additional Strand course instead of a course from this category.		
C S 303E	Elements of Computers and Programming	
C S 313E	Elements of Software Design	
Hours chosen from: Approved list		
Hours chosen from: Games in Social Context		3
Radio-Television-Film majors should take an additional Strand course instead of a course from this category.		
RTF 331P	Topics in New Communication Technologies	
RTF 347F	Topics in Media Studies	
Hours chosen from: Approved list		
Hours chosen from: Strand		9
AET 334E	Video Game Art Pipeline	

C S 324E	Elements of Graphics and Visualization	
RHE 312	Writing in Digital Environments	
RTF 344M	Topics in Special Applications of Digital Media Production	
Hours chosen from: Approved list		
Approved Hours chosen from: Creative projects, research, or internship Connecting Experiences (see advisor)		3
BDP 320K	Connecting Research Experience	
BDP 320L	Connecting Research Experience	
BDP 325K	Connecting Internship Experience	
Total Hours		22

Additional Requirements and Policy

- A three to four page essay in which students reflect on what they have learned and accomplished through their experience is required. The essay is reviewed and must be approved by a member of the faculty panel in order to complete the certificate requirements
- To create an interdisciplinary experience, students must choose courses from a variety of disciplines. Only one of the strand courses may come from the student's major department(s) or from same as with the student's major department(s). The certificate as a whole must represent a variety of disciplines; the advisor can help ensure that the coursework will meet the certificate requirements for interdisciplinarity.
- In courses taken for a letter grade, the student must obtain a grade of at least C-.
- A cumulative certificate GPA of at least 2.0 is required.
- Only one BDP course, including connecting experience, may be taken pass/fail. Any exceptions will be considered by the faculty panel on an individual basis.
- The student may be able to count courses toward the certificate that are not listed, if enough of the course content relates to the BDP topic. Consult with the advisor to petition a course to count towards the certificate.
- All students must complete one Independent or Team-Based Creative Project Connecting Experiences in which they incorporate programming, design, and art elements to create a game. Students have the option of completing an additional research or internship experience.