BACHELOR OF ARTS IN GAME DESIGN AND DEVELOPMENT

Program Contact: Elena Bertozzi (elena.bertozzi@qu.edu) 203-582-7998

The Bachelor of Arts in Game Design and Development is a pre-professional program that prepares students for a variety of career options including many types of interactive media, the highly competitive game design industry, or the pursuit of additional study at the graduate level. This is an applied, interdisciplinary major that focuses on the meaningful application of game technologies in the commercial entertainment industry and the application of those skills to serious topics regarding the environment, healthcare and education including STEM and STEAM (science, technology, engineering, arts and math) initiatives. Students acquire a solid foundation in critical thinking and writing, foundations of design, user behavior and systems thinking, as well as an understanding of the cultural impacts of games. They develop specialized technical skills and competence in game design including coding, content development, outcomes assessment and quality assurance. The major provides students with skills that are readily applied to the real world and the curriculum supports and enables experiential learning opportunities such as internships, study abroad and collaborations with external partners.

There are a total of 42 credits in the major. The major has 11 required courses. Students build a core skillset and learn to collaborate with others in Game Labs where cross-disciplinary teams build complete polished games. Students choose which areas they wish to specialize in by taking two classes from any one of the concentrations and one elective from any other concentration. Concentrations include: Programming, Spatial Technology, Game Design, Art, Performance, Management/Production and Writing. In the senior year, the program culminates in a capstone experience when students take the Senior Project and Seminar.

A grade of C- or better is required in all game design and development courses and prerequisites. Students with a GPA of less than 2.00 will be put on probation. After two semesters on probation, students will be advised to change majors.

It is recommended that students majoring in Game Design and Development pursue a minor, or double major, or take courses in a complementary discipline such as graphic interactive design or computer science.

All majors are required to participate in some form of experiential learning: study abroad, internship or academic/professional product collaboration.

Students majoring in Game Design and Development must meet the following requirements for graduation:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>University Curriculum</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Modern Language Requirement</td>
<td>3-6</td>
</tr>
<tr>
<td>GDD 101</td>
<td>Introduction to Game Design</td>
<td></td>
</tr>
<tr>
<td>GDD 110</td>
<td>Introduction to Visual Design for Games</td>
<td></td>
</tr>
<tr>
<td>GDD 140</td>
<td>Creativity and Computation</td>
<td></td>
</tr>
<tr>
<td>GDD 200</td>
<td>Introduction to Game Development</td>
<td></td>
</tr>
<tr>
<td>GDD 201</td>
<td>Professionalism Practice for Game Design</td>
<td></td>
</tr>
<tr>
<td>GDD 210</td>
<td>Game Lab I: Team Projects</td>
<td></td>
</tr>
<tr>
<td>GDD 211</td>
<td>Game Lab II: Team Projects</td>
<td></td>
</tr>
<tr>
<td>GDD 311</td>
<td>Game Lab IV: Team Projects 2  or GDD 390 Internship</td>
<td></td>
</tr>
<tr>
<td>GDD 410</td>
<td>Game Lab V: Team Projects</td>
<td></td>
</tr>
<tr>
<td>GDD 411</td>
<td>Game Lab VI: Team Projects</td>
<td></td>
</tr>
<tr>
<td>GDD 495</td>
<td>Senior Project and Seminar I</td>
<td></td>
</tr>
</tbody>
</table>

Concentrations 9

With the recommendation of the student’s adviser and/or the program director, students select two courses from their primary concentration and one elective from any other concentration.

Spatial Technology

GDD 310 | Game Lab III: Team Projects                |
GDD 314 | VR/AR Development for Games                |
GDD 316 | Advanced Topics in Game Development        |
GDD 401 | Animation and Cinematics                    |

Art

GDD 102 | Drawing for Games and Animation            |
GDD 202 | Game Art Pipeline I                        |
GDD 302 | Game Art Pipeline II                       |
GDD 333 | 3D Sculpture: Creatures and Characters      |
GDD 401 | Animation and Cinematics                    |
GDD 402 | Technical Art Production, Game Art III      |

Management/Production

GDD 215 | eSports Management                         |
GDD 380 | The Business of Games                      |
ENT 290 | Creating Digital Businesses                |
ENT 310 | Creativity and Innovation Management       |

Writing

DR 350 | Playwriting: The Ten-Minute Play           |
EN 201 | Creative Writing                           |
EN 202 | Introduction to Creative Nonfiction        |
EN 205 | Introduction to Fiction Writing            |
EN 301 | Advanced Fiction-Writing Workshop          |
EN 302 | Advanced Creative Nonfiction               |
EN 303 | The Art of Audio Narrative                 |
FTM 372 | Screenwriting                              |
GDD 220 | Games for All                              |
GDD 250 | Interactive Storytelling and Narrative      |

Performance

DR 160 | Acting I                                   |
DR 181 | Improvisational Acting                     |
GDD 207 | Digital Music Composition for Games         |
Bachelor of Arts in Game Design and Development

GDD 370  Acting and Directing for Game Design
GDD 405  Game Audio Design
GDD 303  The Art of Audio Narrative
GDD 403  Professional Apprenticeship

Game Design
GID 110  Design Research and Methods
GDD 175  Special Topics in Game Design
GDD 220  Games for All
GDD 301  Game Design Tools and Processes
GDD 333  3D Sculpture: Creatures and Characters
GDD 350  Board Game Design
GDD 394  History of Video Games
GDD 395  Critical Game Studies Seminar
GDD 396  Games, Learning & Society

Programming
CSC 111  Data Structures and Abstraction
CSC 215  Algorithm Design and Analysis
GDD 316  Advanced Topics in Game Development
CSC 205  Introduction to Discrete Mathematics (MA 205)
MA 205  Introduction to Discrete Mathematics (CSC 205)
SER 120  Object-Oriented Design and Programming
SER 225  Introduction to Software Development
SER 305  Advanced Computational Problem Solving

Free Electives  23-26
Total Credits  114-120

1  All students must complete the University Curriculum (http://catalog.qu.edu/academics/university-curriculum/) requirements.
2  Participating in the QU in LA Program or study abroad can also fulfill this requirement.
3  Students wishing to take courses from this list must complete any prerequisites required by individual departments/programs or schools.

Elective substitutions are permitted with prior approval of the program director.

Student Learning Outcomes

Upon completion of the program, students will demonstrate the following competencies:

1. **Computational and Systems Thinking**: Be fluent in at least one programming language and associated game engine to construct fully functional working games.

2. **Critical/Analytical Thinking and Communication**: Play and analyze games using academic research methods, exhibit effective written and verbal communication skills and apply this analysis to the game design process.

3. **Design Process Thinking**: Prototype, reflect critically on workflow and process, incorporate feedback, and iterate.

4. **Creative Thinking and Problem Solving**: Generate inventive, novel and imaginative ideas for game design concepts and nimbly respond to design and implementation challenges.

5. **Multidisciplinary and Diverse Perspective Thinking**: Understand the issues surrounding topics of representation and diversity in game development and be able to discuss them and design games that address them.

6. **Teamwork and Experiential Learning Expertise**: Collaborate with teams of colleagues with different skillsets to produce work using established game development best practices with a clear definition of scope, responsibilities, progress and assessment of results.

Admission Requirements: College of Arts and Sciences

The requirements for admission into the undergraduate College of Arts and Sciences programs are the same as those for admission to Quinnipiac University.

Admission to the university is competitive, and applicants are expected to present a strong college prep program in high school. Prospective first-year students are strongly encouraged to file an application as early in the senior year as possible, and arrange to have first quarter grades sent from their high school counselor as soon as they are available.

For detailed admission requirements, including required documents, please visit the Admissions (http://catalog.qu.edu/general-information/admissions/) page of this catalog.

Shown below is one of many possible paths through the curriculum. Each student's individual academic plan is crafted in consultation with their academic adviser.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDD 101</td>
<td>Introduction to Game Design</td>
<td>3</td>
</tr>
<tr>
<td>GDD 110</td>
<td>Introduction to Visual Design for Games</td>
<td>3</td>
</tr>
<tr>
<td>GDD 140</td>
<td>Creativity and Computation</td>
<td>3</td>
</tr>
<tr>
<td>EN 101</td>
<td>Introduction to Academic Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>FYS 101</td>
<td>First-Year Seminar</td>
<td>3</td>
</tr>
<tr>
<td>GDD 200</td>
<td>Introduction to Game Development</td>
<td>3</td>
</tr>
<tr>
<td>EN 102</td>
<td>Academic Writing and Research</td>
<td>3</td>
</tr>
<tr>
<td>MA course - satisfies UC Foundation Inquiry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>University Curriculum course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>University Curriculum course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**First Year**

Milestones: Earn 30 credits, meet with your adviser at least once a semester and have a GPA of 2.00 or higher.

**Fall Semester**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDD 101</td>
<td>Introduction to Game Design</td>
<td>3</td>
</tr>
<tr>
<td>GDD 110</td>
<td>Introduction to Visual Design for Games</td>
<td>3</td>
</tr>
<tr>
<td>GDD 140</td>
<td>Creativity and Computation</td>
<td>3</td>
</tr>
<tr>
<td>EN 101</td>
<td>Introduction to Academic Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>FYS 101</td>
<td>First-Year Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring Semester**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDD 200</td>
<td>Introduction to Game Development</td>
<td>3</td>
</tr>
<tr>
<td>EN 102</td>
<td>Academic Writing and Research</td>
<td>3</td>
</tr>
<tr>
<td>MA course - satisfies UC Foundation Inquiry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>University Curriculum course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>University Curriculum course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Second Year**

Milestones: Earn 60 credits and a GPA of 2.00 or higher. Meet with your adviser at least once per semester to discuss academic, experiential learning, career and co-curricular opportunities.
### Bachelor of Arts in Game Design and Development

#### Fall Semester
- **GDD 201**  Professionalism Practice for Game Design  3
- **GDD 210**  Game Lab I: Team Projects  3
- Language at the 101 level  3
- University Curriculum course  3
- University Curriculum course  3

#### Spring Semester
- **GDD 211**  Game Lab II: Team Projects  3
- GDD Concentration  3
- Language at the 102 level (Satisfies CAS Language Requirement)  3
- University Curriculum course  3
- University Curriculum course  3

#### Third Year

Milestones: Earn 90 credits and a GPA of 2.00 or higher. Meet with your adviser at least once per semester. Participate in study abroad, complete internship or research opportunities.

- **Fall Semester**
  - **GDD 390**  Internship  1-3
  - GDD Concentration  3
  - University Curriculum course  3
  - University Curriculum course  3
  - Open Elective  3

- **Spring Semester**
  - GDD Concentration  3
  - University Curriculum course  4
  - University Curriculum course  3
  - Open Elective  3
  - Open Elective  3

#### Fourth Year

Milestones: Earn 120 credits and a GPA of 2.00 or higher. Complete possible minor or double major and prepare for graduation.

- **Fall Semester**
  - **GDD 410**  Game Lab V: Team Projects  3
  - Open Elective  3
  - Open Elective  3
  - Open Elective  3
  - Open Elective  3

- **Spring Semester**
  - **GDD 495**  Senior Project and Seminar I  3
  - **GDD 411**  Game Lab VI: Team Projects  3
  - Open Elective  3
  - Open Elective  3
  - Open Elective  2

---

**Total Credits**  118-120