GAME DEVELOPMENT, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Description

Game Development is the craft of transforming a concept into an engaging interactive form. This craft is highly interdisciplinary, requiring students to answer questions about the human condition (what makes a game fun), about psychology (what makes an interface engaging), about aesthetics (what makes something pleasing), and about technical considerations (how to implement a game). Students pursuing the Game Development minor are required to explore a variety of disciplines in the breadth component. Often these classes will also be qualified as general education. Disciplinary depth in selected areas is achieved in the depth component. Finally, student teams complete a capstone design class, working in teams to complete a project from concept to implementation.

What is Game Development?

Game development is the art and science of transforming a gaming concept into an engaging interactive product. This requires interdisciplinary thinking: What makes a game fun in terms of design and gameplay perspectives? What makes a story compelling? How do you build game levels that tell stories and challenge players? How should the playable and non-playable characters look? What are the technical requirements needed to pull the story, the design, and the functional mechanics together? And how do you pitch your game like a professional would?

You Might Like This Program If...

- You’re proud to call yourself a gamer.
- You can see yourself coding for Minecraft, mapping new levels for Candy Crush, or writing storylines for Call of Duty.
- You’d like to add a technical component to a liberal arts degree program.

Program Requirements

Requirements for the Minor

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements for the Minor</td>
<td>18</td>
</tr>
</tbody>
</table>

Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAME220</td>
<td>Introduction to Game Design</td>
<td>3</td>
</tr>
<tr>
<td>GAME250</td>
<td>Technical Game Development</td>
<td>3</td>
</tr>
<tr>
<td>GAME480</td>
<td>Game Development Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Courses

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH244</td>
<td>Introduction to the Psychology of Human Factors Engineering (and 6 credits of 100 or 200-level GAME courses)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 6 credits of 400-level GAME courses (excluding GAME 480)

Academic Advising

The objectives of the university’s academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of-class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee’s unit of enrollment will provide each advisee with a primary academic adviser, the information need to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy)

Erie

Richard Zhao
Professor of Computer Science and Software Engineering
154 Burke
Erie, PA 16563
814-898-6144
ruz14@psu.edu

Career Paths

The minor in Game Development can be pursued by students in most Penn State Behrend degree programs. This interdisciplinary minor teaches game programming, design, animation, production, and quality assurance. Above all, the minor offers you coherent and clear knowledge about the video game industry. Penn State Behrend has a comprehensive support system to help you identify and achieve your goals for college and beyond. Meet with your academic adviser often and take advantage of the services offered by the Academic and Career Planning Center beginning in your first semester.

Careers

Interactive entertainment is a growing industry, and one that hires college graduates from nearly every academic discipline. Network engineers and marketers, software developers and psychologists, accountants and arts administrators—all can make a career within the field.

MORE INFORMATION (http://behrend.psu.edu/school-of-engineering/academic-programs/computer-science/curriculum/game-development-minor)

Opportunities for Graduate Studies

The size of the interactive entertainment industry and growing adoption of virtual and augmented reality technology have created many graduate-level educational opportunities. You can further tailor your education with advanced training in such fields as the mechanics of game design,
animation, motion capture, data structure, artificial intelligence, quality assurance, and game marketing.

MORE INFORMATION (http://behrend.psu.edu/school-of-engineering/academic-programs/computer-science/curriculum/game-development-minor)

**Contact**

**Erie**

SCHOOL OF ENGINEERING
242 Jack Burke Research and Economic Development Center
5101 Jordan Road
Erie, PA 16563
814-898-6153
engineering@psu.edu

http://behrend.psu.edu/school-of-engineering