



### **Course Description**

#### **CAP2048 | Game Development Project | 5.00 credits**

This capstone course is for students majoring in Game Development and Game Animation. Students will work in cross disciplinary teams to develop a working animated game or film. Students will learn how to apply the skills and knowledge they have acquired in a real-world working development environment. Pre-Req: CAP2047 or DIG1302, COP1334 or DIG1111, COP2335 or DIG1437, DIG1430, DIG1710 or DIG1132; Pre/Co-Req: DIG1712 or DIG2113.

### **Course Competencies:**

**Competency 1:** The student will understand game development projects by:

1. Distinguishing game development projects
2. Discussing case studies on game development projects
3. Evaluating different types of projects in game development
4. Creating a game proposal document for a game development project
5. Presenting and justifying the final completed project to the class

**Competency 2:** The student will analyze game development team structures by:

1. Distinguishing different team structures used in game development
2. Working on a team project to develop a game from start to finish
3. Discussing case studies on team game development structures
4. Developing a game in teams from start to finish
5. Subdividing a game development project into parts

**Competency 3:** The student will evaluate game development processes by:

1. Researching different game development processes
2. Applying one of the existing processes to develop a game from start to finish
3. Justifying the game development process that was chosen for the project

**Competency 4:** The student will demonstrate an application of stages of game development by:

4. Distinguishing the stages of game development
5. Developing a game from start to end and working through all the stages of game development

**Competency 5:** The student will demonstrate an understanding of game programming by:

1. Creating a fully working game using all the skills gained in the game programming courses
2. Using all aspects of game programming development including graphics, sound, networking, software analysis, level building and design

**Competency 6:** The student will demonstrate an application of a work environment by:

1. Creating a timeline, and meeting deadlines on their project
2. Using professional scheduling tools to communicate with the project team
3. Preparing progress reports
4. Using existing code from previous projects and publicly available code
5. Giving credits or requesting permission to use codes

### **Learning Outcomes:**

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Use computer and emerging technologies effectively