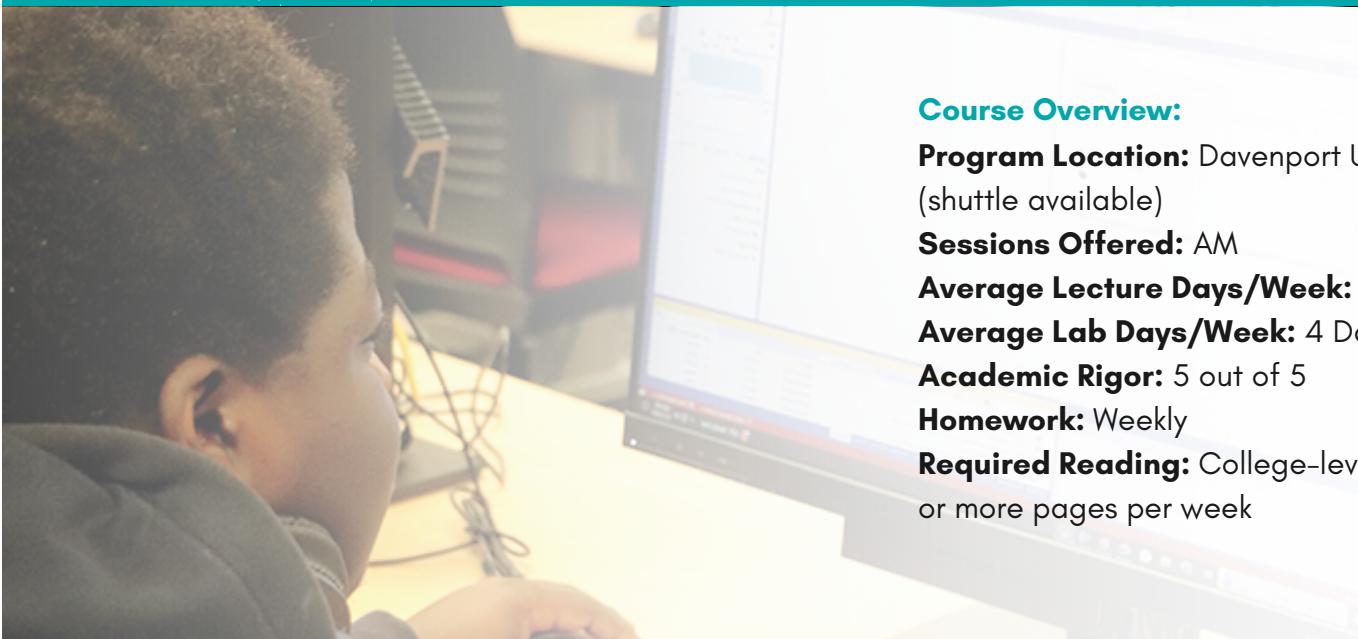


# GAME DESIGN & PROGRAMMING

BUSINESS, MANAGEMENT, MARKETING AND TECHNOLOGY



## Course Description

This comprehensive program encompasses various aspects of business systems and software development. It introduces the systems development life cycle (SDLC) phases and explores their application in addressing common business needs such as inventory, payroll and marketing. Students gain hands-on experience through group projects, site visits or case studies. Additionally, the course covers fundamental programming concepts, object-oriented programming, data structures and problem-solving. It also introduces game development, focusing on methodologies, team roles and project progression. Lastly, the course delves into mobile application development, teaching design, testing and deployment while highlighting the differences between mobile and desktop application design.

## Student Leadership Opportunities

Students have the opportunity for leadership, competition and community service through membership in DECA.

## Success Indicators

- Familiar with basic computer and application skills to solve business problems
- Detailed oriented
- Analytical thinker
- Action oriented
- Dependable
- Effective in a team setting

FOR MORE INFO:  
CONTACT YOUR COUNSELOR,  
CALL 517.483.1596, OR  
VISIT EATONRESA.ORG/CPC



## Course Overview:

**Program Location:** Davenport University  
(shuttle available)

**Sessions Offered:** AM

**Average Lecture Days/Week:** 4-5 Days

**Average Lab Days/Week:** 4 Days

**Academic Rigor:** 5 out of 5

**Homework:** Weekly

**Required Reading:** College-level textbook; 25 or more pages per week

## Learning outcomes include, but are not limited to:

- Understand and apply the five phases of the SDLC.
- Analyze and design solutions for typical business system needs.
- Demonstrate proficiency in fundamental programming concepts.
- Develop problem-solving skills using structured programming techniques.
- Gain hands-on experience with group dynamics in project environments.
- Design and implement game development projects using team roles.
- Apply game development methodologies in real-world scenarios.
- Develop, test, and deploy mobile applications.
- Understand the differences between mobile and desktop application design.
- Strengthen skills in designing systems for practical applications.

## College Credits (12)

- CISP 111 – Requirements Planning and Development (3)
- CSCI 231 – Introduction to Programming (3)
- CSCI 258 – Introduction to Game Design and Theory (3)
- CISP 340 – Mobile Applications Development (3)

Updated 12/2025

# GAME DESIGN & PROGRAMMING



## PROFESSIONAL CAREERS

- Applications Specialist
- Artificial Intelligence Specialist
- Chief Information Security Officer
- Computer Forensics
- Computer Programmer
- Computer Systems Analyst
- Server Support Specialist
- Video Game Programmer

## TECHNICAL CAREERS

- Java Developer
- Media Designer
- Programming/Software Engineer
- Robotics Technician
- Systems Engineer
- Systems Administrator/Technician
- Video Game Designer
- Web Designer/Developer

## ENTRY-LEVEL CAREERS

- Computer Support Intern
- Database Administration Associate
- Help Desk Specialist
- Information Technology Specialist
- Junior Programmer
- Junior Web Developer
- Technology Reviewer
- User Support Specialist

ACADEMICS

EXPERIENCES

PROFESSIONAL SKILLS

PASSION

Education with Purpose.  
**CAREER TREE**®

## Explore Your Future with Career Trees

Career Trees shows how what you learn today can grow into a future career. Each branch represents real jobs and opportunities connected to a specific field, from entry-level roles to advanced professions.

Use the Career Tree to explore your interests, learn what education or training is needed, and plan your next steps after high school. The more you explore, the more you'll see how skills learned now can lead to a strong, rewarding future.

**Scan the QR code below to learn more and watch the program video.**

**SCAN  
ME!**



## Capital Region Technical Early College (CRTEC)

Students enrolled in this program may choose to participate in the CRTEC program. This is a high school-to-college program where students start in grade 11 and end their 13th year with a degree or certification. This program gives students relevant career related experiences.

 **DAVENPORT**  
UNIVERSITY

 **EATON**  
REGIONAL EDUCATION SERVICE AGENCY  
CAREER PREPARATION CENTER

**EXPLORE THE POSSIBILITIES.  
FAST TRACK YOUR FUTURE.**