



Bachelor's Degree Program

COMPUTER INFORMATION SYSTEMS

Specialization: **Web Game Programming**

TECHNOLOGY
SOFTWARE AND INFORMATION SYSTEMS

ABOUT THIS DEGREE PROGRAM

TECH CORE

A Foundation in Technology

This program is anchored with Tech Core, curriculum designed to help you build a foundation of interdisciplinary skills you'll need for today's Internet of Things (IoT) economy. You'll learn relevant skills in

operating systems, programming, hardware, connectivity and security – giving you a hands-on foundation in engineering technology, information technology and software and information systems.

A Program to Fuel Your Future

Learn protocols and techniques necessary to develop online games so they work on PCs, tablets and smartphones. You'll also learn to about a variety of game development topics, including basic game design, layout and controls.

Is This Program for You?

Want to pursue a career in computer information systems and interested in learning how to build a game from scratch using web-based technologies? Then this program may be a good fit for you.

CAREER OPPORTUNITIES

Graduates of DeVry's Computer Information Systems degree program with a specialization in Web Game Programming may consider, but are not limited to, the following careers:

- Back-end Java Programmer
- Computer Programmer
- Computer Systems Analyst
- HTML5 Game Developer
- Website Designer

WHAT YOU'LL LEARN

Essentials

- Communicate methods and findings
- Collaborate in dynamic work environments
- Solve complex problems
- Analyze numerical data
- Apply appropriate technologies

Tech Core

- Produce, secure, operate and troubleshoot small enterprise networks
- Network, secure and deploy digital devices and sensors into the IoT ecosystem
- Solve technical problems using an algorithmic approach and basic programming and coding methods
- Install and configure operating systems using command-line interface (CLI)

Program

- Use advanced programming techniques
- Develop applications
- Analyze and design software systems
- Develop web-based interfaces and designs

Specialized

- Create web-based games
- Utilize OO strategies to design games
- Deploy advanced web techniques
- Design online game

QUICK FACTS

124
CREDIT HOURS
minimum credit hours required for graduation¹

9%
GROWTH
nationally from 2016-2026 for Employment of Computer Systems Analysts²

2 + 8
YEARS MONTHS
minimum length to graduation³

TWO IN ONE

2-IN-1

Earn an extra credential with our unique 2-in-1 design. All courses in our, Information Technology & Networking Associate degree are embedded within this program. So you can earn an associate degree on the way to your bachelor's.

PORTABLE IOT KIT

You can simulate the Internet of Things (IoT) experience wherever you are. With our portable IoT Kit, you'll get hands-on experience in how IoT technologies work in the real world. Your kit will include digital devices, sensors and other tools you will use to build relevant IoT systems.

IoT KIT

UP TO \$300

CERTIFICATION EXAM REIMBURSEMENT

We reimburse qualified students up to \$300 for the cost of one industry certification exam attempt across a wide range of fields.

“My professors have been awesome. They are patient and really explain the material and are willing to work with students if they need assistance.”

- Katherine G.,
2016 DeVry Graduate, Computer Information Systems

DeVry University

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¹127 for students enrolled at a Pennsylvania location

² <https://www.bls.gov/ooh/computer-and-information-technology/computer-systems-analysts.htm>. Data reflects a national projected percentage change in employment from 2016-2026 and may not reflect local economic conditions.

³Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at <https://www.devry.edu/degree-programs.html>.



ESSENTIALS

47
CREDIT HOURS

Communication Skills

- ENGL112¹ Composition
- ENGL135 Advanced Composition
- ENGL216 Technical Writing
- SPCH275 Public Speaking

Humanities²

- ETHC232 Ethical and Legal Issues in the Professions
- LAS432 Technology, Society, and Culture

Social Sciences

- ECON312 Principles of Economics
- SOCS185 Culture and Society
- SOCS325³ Environmental Sociology

Mathematics and Natural Sciences

- MATH114 Algebra for College Students
- MATH221 Statistics for Decision-Making
- PHYS204 Applied Physics with Lab

Personal and Professional Development

- CARD405 Career Development
- COLL148 Critical Thinking and Problem-Solving

¹ Students enrolled at a New Jersey location take ENGL108 in lieu of this course.

² Students enrolled at a Pennsylvania location must take HUMN451 as part of this requirement.

³ Students enrolled at a Nevada location must take POLI332 in lieu of this requirement.

TECH CORE

21
CREDIT HOURS

Tech Core

- CEIS101 Introduction to Technology and Information Systems
- CEIS106 Introduction to Operating Systems
- CEIS110 Introduction to Programming
- CEIS114 Introduction to Digital Devices
- NETW190 Fundamentals of Information Technology and Networking I
- NETW200 Fundamentals of Information Technology and Networking II
- SEC285 Fundamentals of Information Security

PROGRAM

40
CREDIT HOURS

Information Systems and Programming

- CEIS236 Database Systems and Programming Fundamentals
- CIS170C Programming with Lab
- CIS247C Object-Oriented Programming with Lab

Application Development

- CIS321 Structured Analysis and Design
- CIS339 Object-Oriented Analysis and Design
- CIS355A Business Application Programming with Lab
- CIS363B Web Interface Design with Lab
- CIS407A Web Application Development with Lab
- WBG310 Interactive Web Page Scripting with Lab

Senior Project

- CEIS392 Product, Project, and People Management
- CEIS494 Senior Project I
- CEIS496 Senior Project II

Technology Career Preparation

- CEIS299 Careers and Technology
- CEIS499 Preparation for the Profession

SPECIALIZED

16
CREDIT HOURS

Web Game Programming

- WBG340 Programming Multimedia for the Web with Lab
- WBG370 Game Development with Lab
- WBG410 Dynamic Website Development and Database Integration with Lab
- WBG450 Multiplayer Online Game Development with Lab