

COMPUTER INFORMATION SYSTEMS

Specialization: Web Game Programming



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
- Software Developer
- Mobile Game Programmer
- HTML5 Game Developer

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

22%
GROWTH
nationally from 2019-2029 for Employment of Software Developers²

2 + 8
YEARS MONTHS
minimum length to graduation³

**THREE
IN
ONE**

3-IN-1

Earn two extra credentials with our unique 3-in-1 design. All courses in our Programming Essentials Certificate and Information Technology & Networking associate degree with a specialization in Information Systems and Programming are embedded within this program. So you can earn a certificate and an associate degree on the way to your bachelor's.

**IoT
PROJECTS**

WORK WITH IOT TECHNOLOGIES & SYSTEMS

Immerse yourself in the Internet of Things (IoT) world and obtain hands-on experience with IoT, cloud, software and security technologies and systems.

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.

**DIVERSITY,
EQUITY &
INCLUSION**

BE AN ACTIVE PART OF AN INCLUSIVE FUTURE

Customize your curriculum by choosing Diversity, Equity and Inclusion (DE&I) course alternates for your Communication Skills, Humanities and Social Science courses. These options highlight relevant topics to help empower you to promote an inclusive workplace.

¹ 127 for students enrolled at a Pennsylvania location

² <https://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm?view=full>. Growth projected on a national level. Local growth will vary by location.

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

Computer Information Systems | Web Game Programming

ESSENTIALS

47
CREDIT HOURS

COMMUNICATION SKILLS¹

ENGL112 ²	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing

Select one

SPCH275	Public Speaking
SPCH276	Intercultural Communication ☼

HUMANITIES^{3,4}

LAS432	Technology, Society, and Culture ☼
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Select one

ETHC232	Ethical and Legal Issues in the Professions
ETHC334	Diversity, Equity and Inclusion in the Workplace ☼

SOCIAL SCIENCES

ECON312	Principles of Economics
SOCS185	Culture and Society ☼

Select one

SOCS325 ⁵	Environmental Sociology
SOCS350	Cultural Diversity in the Professions ☼

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

☼ This icon indicates Diversity, Equity & Inclusion Courses

¹14 for students enrolled at a New Jersey location.

²Students enrolled at a New Jersey location take ENGL108 in lieu of this course.

³Students enrolled at a Pennsylvania location must take HUMN451 as part of this requirement.

⁴9 for students enrolled at a Pennsylvania location.

⁵Students 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
NETW191	Fundamentals of Information Technology and Networking
NETW211	Fundamentals of Cloud Computing
SEC285	Fundamentals of Information Security

PROGRAM

40
CREDIT HOURS

INFORMATION SYSTEMS AND PROGRAMMING

CEIS150	Programming with Objects
CEIS209	Intermediate Programming
CEIS236	Database Systems and Programming Fundamentals
CEIS312	Introduction to Artificial Intelligence and Machine Learning
CIS355A	Business Application Programming with Lab

APPLICATION DEVELOPMENT

CIS363B	Web Interface Design with Lab
CIS407A	Web Application Development with Lab
WBG310	Interactive Web Page Scripting with Lab

CAREER PREPARATION

CEIS299	Careers and Technology
CEIS499	Preparation for the Profession
MGMT404	Project Management
TECH460	Senior Project

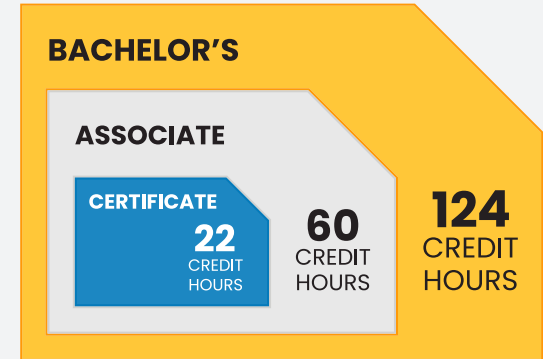
SPECIALIZED

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
WGD235	Web Animation

Demonstrate Skills at Every Step



EMBEDDED PROGRAMS

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