

# 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 graduation

**25%**  
GROWTH  
nationally from 2022-2032  
for Employment of  
Software Developers<sup>1</sup>

### SKILLS FOCUSED

#### SKILL FOCUSED CURRICULUM

Elements of our technology curriculum help prepare you to pursue certification opportunities that can validate your knowledge and skills.

- CompTIA Linux+
- CompTIA Network+
- CompTIA Cloud Essentials+
- PCEP Certified Entry-Level Python Programmer
- CompTIA Security+
- CompTIA Project+

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.

MINIMUM  
COMPLETION TIME\*  
**2 years  
8 months**

OR

NORMAL  
COMPLETION TIME\*\*  
**4 years**

## ACCELERATE ON YOUR SCHEDULE

Choose the schedule that best fits your goals and commitments. You can earn your **Bachelor's Degree** in as little as **2 years 8 months**.

Or, follow a normal completion time and complete your program in 4 years.

\*Minimum completion time does not include breaks and assumes 3 semesters of year-round, full-time enrollment in 12-18 credit hours a semester per 12 month period.

\*\*Normal completion time includes breaks and assumes 2 semesters of enrollment in 12-18 credit hours per semester per 12 month period.

<sup>1</sup> [https://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm?view\\_full](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. BLS projections are not specific to DeVry University students or graduates and may include earners at all stages of their career and not just entry level.

# Computer Information Systems | Web Game Programming

## ESSENTIALS

**47**  
CREDIT HOURS

### COMMUNICATION SKILLS<sup>1</sup>

ENGL112 <sup>2</sup>	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing

*Select one*

SPCH275	Public Speaking
SPCH276	Intercultural Communication ☼

### HUMANITIES

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 <sup>3</sup>	Environmental Sociology
SOCS350	Cultural Diversity in the Professions ☼

### MATHEMATICS AND NATURAL SCIENCES

MATH114	Algebra for College Students
TECH204	Everyday Physics
TECH221	Data-Driven Decision -Making

### PERSONAL AND PROFESSIONAL DEVELOPMENT

CARD405	Career Development
COLL148	Critical Thinking and Problem Solving

#### 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 course options – denoted by this icon – highlight relevant topics to help empower you to promote an inclusive workplace.



## 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
NETW212	Introduction to 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
CIS313	AI-Driven Business Application Coding
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

CEIS298	Introduction to Technical Project Management
CEIS499	Preparation for the Profession
MGMT404	Project Management
TECH460	Senior Project

<sup>1</sup>14 for students enrolled at a New Jersey location

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

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

Students enrolled at a New Jersey location must take an additional six semester-credit hours of general education coursework from among the following course areas: communication skills, humanities, social sciences, mathematics and natural sciences. Courses selected in humanities or social sciences should be upper-division coursework (DeVry courses numbered 300-499).

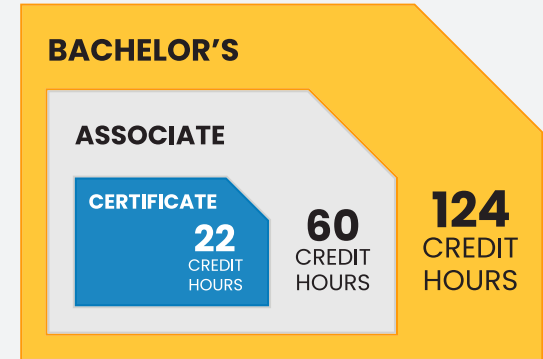
## SPECIALIZED

**16**  
CREDIT HOURS

### WEB GAME PROGRAMMING

WBG370	Game Development with Lab
WBG410	Dynamic Website Development and Database Integration with Lab
WEB460	Advanced Web Application Development with Lab
WGD235	Web Animation

### Demonstrate Skills at Every Step



### EMBEDDED PROGRAMS

With our exclusive 3-in-1 design, you can earn two additional credentials while working toward your bachelor's degree. Every course in our Programming Essentials certificate and Information Technology and Networking associate degree are embedded within this Computer Information Systems degree with a Web Game Programming specialization. So you can earn a certificate and an associate degree on the way to your bachelor's degree.

\*The figures displayed represent the minimum credit hours required for graduation. Additional coursework may be necessary to complete program requirements. Future programmatic changes could impact the ability to earn additional credentials en route to an eligible degree program. Refer to the academic catalog for details.

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In New York, DeVry University operates as DeVry College of New York. DeVry University is accredited by The Higher Learning Commission (HLC), [www.hlcommission.org](http://www.hlcommission.org). The University's Keller Graduate School of Management is included in this accreditation. DeVry is certified to operate by the State Council of Higher Education for Virginia. Arlington Campus: 1400 Crystal Dr., Ste. 120, Arlington, VA 22202. DeVry University is authorized for operation as a postsecondary educational institution by the Tennessee Higher Education Commission, [www.tn.gov/thec](http://www.tn.gov/thec). Lisle Campus: 4225 Naperville Rd., Ste. 400, Lisle, IL 60532. Unresolved complaints may be reported to the Illinois Board of Higher Education through the online compliant system <https://complaints.ibhe.org/> or by mail to 1 N. Old State Capitol Plaza, Ste. 333, Springfield, IL 62701-1377. Program availability varies by location. In site-based programs, students will be required to take a substantial amount of coursework online to complete their program. ©2024 DeVry Educational Development Corp. All rights reserved. Version 5/13/2024