# **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 <u>Computer Information Systems degree</u> <u>program with a specialization in Web Game Programming</u> may consider, but are not limited to, the following careers:

- Back-end Java Programmer
- Software Developer
- Mobile Game Programmer
- HTLM5 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+
- Comprix Linux
- CompTIA Network+
- CompTIA Security+
- CompTIA Project+
- CompTIA Cloud+
- PCEP Certified Entry-Level Python Programmer



## **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.



### **ACCELERATE AT YOUR PACE**

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 schedule and complete your program in 4 years.

\*Per 12-month period, assumes completion of 3 semesters, enrollment in 13-19 credit hours per semester and continuous, full-time year-round enrollment with no breaks.

\*\*Per 12-month period, assumes completion of 2 semesters and full-time enrollment in 13-19 credit hours per semester.



# Computer Information Systems | Web Game Programming

# ESSENTIALS COMMUNICATION SKILLS<sup>1</sup> CREDIT HOURS

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 🕏

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
PHYS204 Applied Physics with Lab
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

TECH CORE		CREDIT HOURS	
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 Secur	ity	

### **PROGRAM**

40 CREDIT HOURS

### INFORMATION SYSTEMS AND PROGRAMMING

CEIS150	Programming with Objects	
CEIS209	Intermediate Programming	
CEIS236	Database Systems and Programming	
	Fundamentals	

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CIS313 Al-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	Introdu	ctior	ı to	Tec	hni	cal I	Project Management
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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**

CREDIT HOURS

### **WEB GAME PROGRAMMING**

WBG370	Game Develo	pment 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. At the time of application to the next credential level, an evaluation of qualifying transfer credit will occur and the most beneficial outcome will be applied. Future programmatic changes could impact the application of credits to a future program. Refer to the academic catalog for details.





