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 Developers¹

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 EMIGA.

- CompTIA Security+
- CompTIA Network+
- CompTIA Project+
- CompTIA Cloud Essentials+
- 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 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.



Computer Information Systems | Web Game Programming

ESSENTIALS

SPCH275

CREDIT HOURS

COMMUNICATION SKILLS¹

ENGL112 ²	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing

HUMANITIES

LAS432 Technology, Society, and Culture

Public Speaking

ETHC232 Ethical and Legal Issues in the Professions

SOCIAL SCIENCES

ECON312	Principles of Economics
SOCS185	Culture and Society
SOCS325 ³	Environmental Sociology

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

TECH CORE

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 Techn	ology
	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

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
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CEIS499 Preparation for the Profession

MGMT404 **Project Management**

TECH460 Senior Project

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 Deve	lopment with Lab
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WBG410 Dynamic Website Development and Database

Integration with Lab

WEB460 Advanced Web Application Development with Lab

WGD235 Web Animation

Demonstrate Skills at Every Step

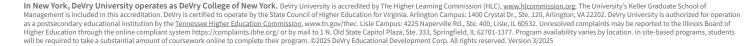


EMBEDDED PROGRAMS

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.







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 Nevada location must take POLI332 in lieu of this requirement.