



Bachelor's Degree Program

# SOFTWARE DEVELOPMENT

Specialization: **Web and Mobile Application Development**

**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

Develop your skills and techniques for producing effective websites, website navigational models and responsive website content. You'll also learn about developing software, from consumer apps to mobile enterprise solutions, in addition to how cross platform operating systems can be addressed and how wearables, IoT and smart devices can be incorporated into applications.

#### Is This Program for You?

Do you want to be part of creating online and mobile device user experiences? If so, this program may be a good fit for you.

## CAREER OPPORTUNITIES

Graduates of DeVry's Software Development degree program with a specialization in Web Mobile Application Development may consider, but are not limited to, the following careers:

- Mobile Device Software Developer
- Software Application Developer
- Software Developer - Web Portals & e-Commerce Applications
- Software Game Developer
- Software Systems Developer
- Web Program Analyst

## 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

- Design web distributed systems
- Develop applications
- Analyze and design software systems
- Product life cycle management

### Specialized

- Design web-based applications
- Develop responsive multiplatform applications
- Utilize media technologies in application development
- Design mobile device applications

## QUICK FACTS

**121**  
CREDIT HOURS  
minimum credit hours required for graduation

**24%**  
GROWTH  
nationally from 2016-2026 for Employment of Software Developers<sup>1</sup>

**2 + 8**  
YEARS MONTHS  
minimum length to graduation<sup>2</sup>

**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**

#### What are your career goals?

“To create applications that will make a difference. DeVry is helping me by teaching me how to make those applications.”

- *Mayra S.*,  
2017 DeVry Graduate, Computer Information Systems

**DeVry**   
**University**

<sup>1</sup> <https://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm>. Data reflects a national projected percentage change in employment from 2016-2026 and may not reflect local economic conditions.

<sup>2</sup> Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at <https://www.devry.edu/degree-programs.html>.



### ESSENTIALS

50  
CREDIT HOURS

#### Communication Skills

- ENGL112<sup>1</sup> Composition
- ENGL135 Advanced Composition
- ENGL216 Technical Writing
- SPCH275 Public Speaking

#### Humanities<sup>2</sup>

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

#### Social Sciences

- ECON312 Principles of Economics
- SOCS185 Culture and Society
- SOCS325<sup>3</sup> Environmental Sociology

#### Mathematics and Natural Sciences

- MATH114 Algebra for College Students
- MATH221 Statistics for Decision-Making
- MATH233 Discrete Mathematics
- PHYS204 Applied Physics with Lab

#### Personal and Professional Development

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

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

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

<sup>3</sup> 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

38  
CREDIT HOURS

#### Information Systems and Programming

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

#### Application Development

- CEIS295 Data Structures and Algorithms
- CIS321 Structured Analysis and Design
- CIS339 Object-Oriented Analysis and Design
- CIS355A Business Application Programming with Lab
- WEB375 Web Architecture with Lab

#### Information Technology and Networking

- CEIS305 Operating Systems

#### 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

12  
CREDIT HOURS

#### Web and Mobile Application Development

- CIS363B Web Interface Design with Lab
- CIS407A Web Application Development with Lab
- WEB460 Advanced Web Application Development with Lab