

# SOFTWARE DEVELOPMENT

Specialization: Web and Mobile Application Development



## 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:

- Software Developer - Web Portals & e-Commerce Applications
- Mobile Device Software Developer
- Software Application Developer
- 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

**120**  
CREDIT HOURS  
minimum credit hours required for graduation

**21%**  
GROWTH  
nationally from 2018-2028 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.

**IoT KIT**

### 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.

**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.

<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 2018-2028 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>.

# Software Development | Web and Mobile Application Development

## ESSENTIALS

**50**  
CREDIT HOURS

### COMMUNICATION SKILLS

ENGL112	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing
SPCH275	Public Speaking

### HUMANITIES

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

### SOCIAL SCIENCES

ECON312	Principles of Economics
SOCS185	Culture and Society
SOCS325	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

## 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
CEIS312	Introduction to Artificial Intelligence and Machine Learning
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

### 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

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