ABOUT THIS DEGREE PROGRAM

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
In this specialization, you’ll gain big data and analytic software development skills that address the complexity of examining large and varied data sets as well as uncover hidden patterns in information. You’ll understand how predictive analytic measures and machine learning tools are applied to help drive quick decision-making in industry.

IS THIS PROGRAM FOR YOU?
Interested in a career in software development and helping business and society tackle problems requiring analysis of large volumes of data, then this program focused on big data and analytics may be a good fit for you.

CAREER OPPORTUNITIES
Graduates of DeVry’s Software Development degree program with a specialization in Big Data and Analytics may consider, but are not limited to, the following careers:
• Data Analyst
• Database Developer
• Data Modeler
• Data Scientist
• Business Intelligence Analyst
• Database Manager
• Data Architect
• Data Warehouse Manager

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
• Acquire, retrieve and store data
• Mine and analyze data
• Use advanced techniques to analyze data
• Program and manage large data systems

QUICK FACTS

120 CREDIT HOURS
minimum credit hours required for graduation

32% GROWTH
nationally from 2018-2028 for Employment of Information Security Analysts1

2 + 8 YEARS + MONTHS
minimum length to graduation2

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.

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.

2 Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at https://www.devry.edu/online-programs.html.
**Bachelor's Degree Program**

**Software Development | Big Data and Analytics**

**ESSENTIALS**

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**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
- NETW211 Fundamentals of Cloud Computing
- SEC285 Fundamentals of Information Security

**PROGRAM**

**INFORMATION SYSTEMS AND PROGRAMMING**

- CEIS236 Database Systems and Programming Fundamentals
- CEIS312 Introduction to Artificial Intelligence and Machine Learning
- CIIS70C Programming with Lab
- CIIS247C Object-Oriented Programming with Lab

**APPLICATION DEVELOPMENT**

- CEIS295 Data Structures and Algorithms
- CIIS321 Structured Analysis and Design
- CIIS339 Object-Oriented Analysis and Design
- CIIS355A 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

**EMBEDDED PROGRAMS**

Looking to obtain two additional credentials with our Big Data degree online? Our exclusive 3-in-1 design allows all courses in our Programming Essentials certificate and Information Technology and Networking associate degree are ingrained within this program. So you can earn a certificate and an associate degree on the way to your bachelor’s degree.

**DEMONSTRATE SKILLS AT EVERY STEP**

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