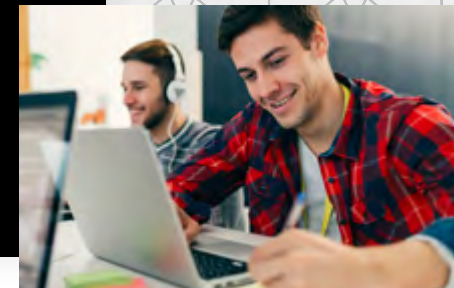


PROGRAMMING ESSENTIALS



ABOUT THIS PROGRAM

IS THIS PROGRAM FOR YOU?

If you want to develop software applications and programs that businesses and consumers use every day, this may be the certificate program for you.

A PROGRAM TO FUEL YOUR FUTURE

Learn the skills needed to write code and create applications using the industry recognized Python programming language. This certificate introduces students to essential coding, programming and computing concepts.

CAREER OPPORTUNITIES

Graduates of DeVry's Programming Essentials certificate program may consider, but are not limited to, the following careers:

Entry level opportunities in positions, such as:

- Coder
- Programmer I
- Information Systems Technician

QUICK FACTS

22
CREDIT HOURS
minimum credit hours
required for graduation

7
COURSES

10
MONTHS
minimum length for graduation¹

TECH CORE

ANCHORED IN TECH CORE

Prepare to be immersed in coursework designed to help you build interdisciplinary skills you'll need for today's Internet of Things (IoT) economy. Project work and activities allow you to develop relevant skills in:

- Programming
- Operating Systems

IoT PROJECTS

WORK WITH IOT TECHNOLOGIES & SYSTEMS

Immerse yourself in the Internet of Things (IoT) world and obtain hands-on experience with IoT, cloud, software and security technologies and systems.

SKILLS FOCUSED

CERTIFICATION EXAM ALIGNED CURRICULUM

Experience elements of our technology curriculum focused on real-world industry standards and prepare for certification opportunities that help validate your knowledge and skills.

- CompTIA Linux+
- CompTIA IT Fundamentals
- PCEP – Certified Entry-Level Python Programmer



EVERY COURSE COUNTS

The Programming Essentials certificate can serve as a stepping stone to our Information Technology and Networking associate degree with a specialization in Information Systems and Programming or bachelor's degrees in Computer Information Systems or Software Development. If you choose to continue on with your education, all credits apply to these credentials, saving you time and money.

¹ Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at <https://www.devry.edu/online-programs.html>.

Programming Essentials

PROGRAM OUTLINE

MATHEMATICS

MATH114 Algebra for College Students

TECH CORE

CEIS101C Introduction to Technology and Information Systems

CEIS106 Introduction to Operating Systems

CEIS110 Introduction to Programming

INFORMATION SYSTEMS AND PROGRAMMING

CEIS150 Programming with Objects

CEIS209 Intermediate Programming

CAREER PREPARATION

CEIS299 Careers and Technology

WHAT YOU'LL LEARN

MATHEMATICS

- Analyze data
- Solve problems

TECH CORE

- Produce, secure, operate and troubleshoot small enterprise networks
- Solve technical problems using an algorithmic approach and basic programming and coding methods
- Install and configure operating systems using command line interface (CLI)

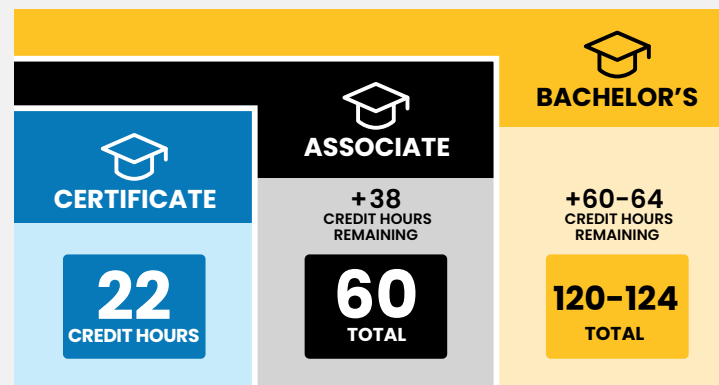
INFORMATION SYSTEMS AND PROGRAMMING

- Design and implement normalized databases using reports, forms and tables
- Create multiple table systems with multimedia presentations
- Develop applications with .NET, Visual Studio and SQL
- Develop menu-driven programs that update, create and delete data from data stores

CAREER PREPARATION

- Apply principles of technology in the building, testing, operation and maintenance of connected and distributed digital-based systems and networks

Earn a credential at every step.



HOW DO CREDENTIALS STACK?

Here's an example: When you earn a Programming Essentials Undergraduate Certificate, all courses you complete in the program apply to your Associate Degree in Information Technology with a specialization in Information Systems Programming. When you complete the associate, all courses stack into either our bachelor's in Computer Information Systems or Software Development with any specialization. Build your confidence – and your resume – when you start your journey at DeVry¹.

¹The figures displayed represent the minimum credit hours required for graduation. 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.

visit [DeVry.edu](https://www.devry.edu) | Call 888.DeVry.04