

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 industry-recognized programming languages like Python and C++. 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 KIT

PORTABLE IOT KIT

You can simulate the Internet of Things (IoT) experience wherever you are. With our portable IoT Kit², you'll get hands-on experience using digital devices, sensors and other tools to build relevant IoT systems.

INDUSTRY ALIGNED

INDUSTRY ALIGNED CURRICULUM

Experience curriculum aligned to real-world industry standards and prepare for certification opportunities that help validate your knowledge and skills.

- CompTIA Linux+
- Microsoft Technology Associate – Python



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>.

² The Portable IoT Kit is a required expense and is not complimentary.

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

CIS170C Programming with Lab

CIS247C Object-Oriented Programming with Lab

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)

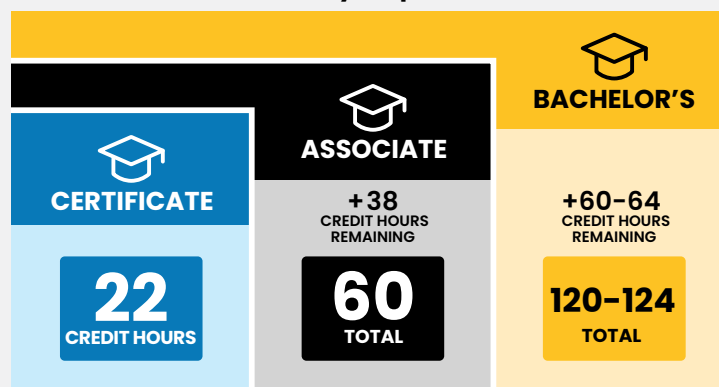
INFORMATION SYSTEMS AND PROGRAMMING

- Design and implement normalized databases using reports, forms and tables
- Create multiple table systems with multimedia presentations
- Develop applications with C#, .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.



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.

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.

visit DeVry.edu | Call 888.DeVry.04

In New York, DeVry University operates as DeVry College of New York. DeVry University is accredited by The Higher Learning Commission (HLC), www.hlcommission.org. Keller Graduate School of Management is included in this accreditation. DeVry is certified to operate by the State Council of Higher Education for Virginia, Arlington Campus: 1400 Crystal Dr., Ste. 120, Arlington, VA 22202. DeVry University is authorized for operation as a postsecondary educational institution by the Tennessee Higher Education Commission, www.tn.gov/thec. Nashville Campus: 3343 Perimeter Hill Dr., Nashville, TN 37211. Unresolved complaints may be reported to the Illinois Board of Higher Education through the online complaint system <http://complaints.ibhe.org/> or by mail to 1 N. Old State Capitol Plaza, Ste. 333, Springfield, IL 62701-1377. Program availability varies by location. In site-based programs, students will be required to take a substantial amount of coursework online to complete their program. ©2020 DeVry Educational Development Corp. All rights reserved. 9/14/20