

SOFTWARE DESIGN AND SOLUTIONS



ABOUT THIS PROGRAM

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:

- Digital Devices
- Coding
- Operating Systems

IS THIS PROGRAM FOR YOU?

Are you interested in how software is designed and operated? Or how to test and design software for all types of devices? In this certificate program, students will be exposed to the complete software development life cycle and have the opportunity to contribute to it.

A PROGRAM TO FUEL YOUR FUTURE

Engage in course material exploring topics like data structures and algorithms, and software engineering to help prepare you to work on various types of software system. Learn the skills needed to program software using industry recognized programming languages like Python. Learning these two programming languages will help prepare you to learn new languages during the course of your career.

CAREER OPPORTUNITIES

Graduates of DeVry's Software Design and Solutions certificate program may consider, but are not limited to, entry level opportunities in positions, such as:

- Software Applications Developer
- Mobile App Developer

QUICK FACTS

42
CREDIT HOURS
minimum credit hours
required for graduation

14
COURSES



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.

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



MINIMUM
COMPLETION TIME*

**1 year
4 months**

OR

NORMAL
COMPLETION TIME**

2 years

ACCELERATE ON YOUR SCHEDULE

Choose the schedule that best fits your goals and commitments. You can earn your **Undergraduate Certificate** in as little as **1 year 4 months**.

Or, follow a normal schedule and complete your program in 2 years.

* Minimum completion time does not include breaks and assumes 3 semesters of year-round, full-time enrollment in 8-12 credit hours a semester per 12-month period.
** Normal completion time includes breaks and assumes 2 semesters of enrollment in 8-12 credit hours per semester per 12-month period.

Software Design and Solutions

PROGRAM COURSES

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

CEIS236 Database Systems and Programming Fundamentals

APPLICATION DEVELOPMENT

CEIS295 Data Structures and Algorithms

SOFTWARE DEVELOPMENT

CEIS200 Software Engineering I

CEIS320 Introduction to Mobile Device Programming

CEIS400 Software Engineering II

CEIS420 Programming Languages and Advanced Techniques

CAREER PREPARATION

CEIS298 Introduction to Technical Project Management

CEIS499 Preparation for the Profession

WHAT YOU'LL LEARN

ESSENTIALS

- Solve complex problems
- Analyze numerical data

TECH CORE

- Network, secure and deploy digital devices and sensors in the IoT ecosystem
- Script and write components of an application or program
- Install and configure operating systems using Command Line Interface (CLI)

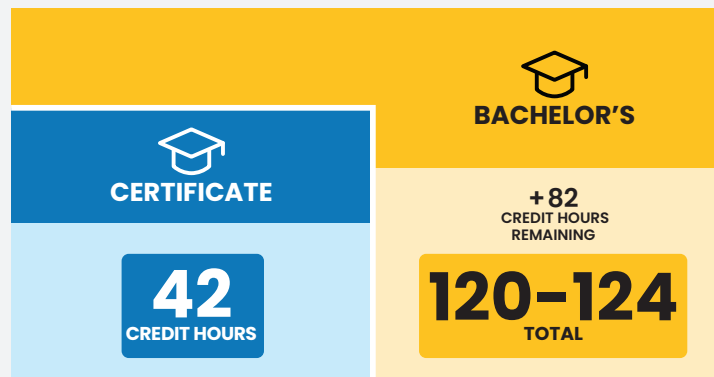
PROGRAM

- Implement well-defined procedures in code
- Program and manage large data systems
- Solve technical problems using an algorithmic approach and basic programming and coding methods

SPECIALIZED

- Design and develop applications
- Utilize software engineering practices in application development
- Utilize advance programming techniques for application development

Earn a credential at every step.



HOW DO CREDENTIALS STACK?

The Software Design and Solutions certificate program can serve as a steppingstone to our Software Development bachelor's degree program with a specialization in Software Design and Programming or our Computer Information Systems bachelor's degree program with a specialization in Software Programming.*

If you choose to continue on with your education, all credits apply to your bachelor's degree. Build your confidence – and your resume – when you start your journey at DeVry.**

*The figures displayed represent the minimum credit hours required for graduation. Additional coursework may be necessary to complete program requirements.
**At the time of application to the next credential level, an evaluation of qualifying transfer credits will occur and the most beneficial outcome will be applied. Future programmatic changes could impact the application of credits to a future program. Refer to the academic catalog for details.

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