



**Edison College Canada**  
SINCE 1973  
LEARN TODAY, LEAD TOMORROW

# Software Development Diploma

52 Weeks Program





**Program Duration:**  
Theory: 52 Weeks / 1040 Hours



**Delivery Methods:**  
In-Class or Online



**Campus Location:**  
Victoria, British Columbia

## Program Description

The Software Development Diploma Program is a 52-week course designed to prepare students with the necessary knowledge and innovative training to have a successful career post-graduation.

In this Software Development Diploma, students will learn industry standards and procedures, web development, and network and design fundamentals, as well as scripting languages. The graduates of this program will be eligible to work in the IT departments, software development firms, data analysis companies, and many other related industries.

## Workplace Settings

- Software Developer
- Computer Programmer
- Software Engineer
- Software Development Engineer
- Systems Analyst
- Web Technician
- Database Administrator

## Estimated Salary

Software  
Development  
**\$100,006**

AVERAGE ESTIMATED  
EXPERIENCED WAGE PER YEAR

\*This estimate is based on available employment data at the time. Actual salary will be based on numerous factors.  
Source: Job Bank.



# Admission Requirements

- **High School Graduate or equivalent OR mature student status (19 years or older prior to starting the program)**
- **Meet one of the following English Language Proficiency requirements:**
  - Minimum Grade 10 English (Domestic Students).
  - Overall IELTS 5, OR CLB Level 5, OR Duolingo score of 75-80.





## Courses

### **Amazon Web Services**

This course will help students to develop their cloud computing knowledge and familiarise students with Amazon Web Services (AWS). Students will learn the framework of AWS and common applications of AWS in a business setting. This course will also introduce students to the different levels of AWS certifications and will help prepare them for the AWS certification exams.

### **.NET Framework**

.NET is a software development framework that runs in the Microsoft Windows environment and is widely used in the industry. The .NET framework allows the integration of several programming languages to develop Windows forms and web applications. Building on the fundamental coding knowledge, students will be introduced to and gain experience with the .NET framework using Microsoft Visual Studio.

### **Computer Programming with C, C++, C#**

C, C++, and C# are some of the most widely adopted languages in coding. These codes and the logic they are based on will help students lay a solid foundation for coding. Students will learn the purpose and application of each language while also having hands-on experience coding their own programs using these languages. Through the hands-on experience, students will be introduced to debugging and troubleshooting coding errors.

### **Fundamentals of Object-Oriented Software Design**

Students will be introduced to object-oriented programming principles and an overview of object-oriented languages in this course. Students will acquire knowledge on the methodology and class relationships within the object-oriented design, along with its advantages and disadvantages. Additionally, this course will cover best practices in object-oriented syntax and workflow for modern businesses.

## **HTML and CSS**

Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) are the default languages used for website pages. This course will enrich the students' understanding of UI and UX design and web development by working with HTML and CSS. Students will receive hands-on experience, building their own websites using HTML and CSS in conjunction with previous knowledge of scripting languages such as JavaScript.

## **Java, JavaScript and JQuery**

Java, and its variations, are some of the most in-demand and versatile programming languages in the industry. This course will teach the students the programming concepts of all the variations of Java and their relations with object-oriented design. The course will also demonstrate the application of Java in solving complex real-world problems. Students will be given hands-on opportunities for creating computer programs with Java and solving novel IT problems using the language.

## **Programming Fundamentals**

Computer programming is crucial for software development. In this course, students will be introduced to the fundamentals of programming. This course will also develop students' mathematics and logic skills about computer programming. Lastly, students will be introduced to the modern computer operating systems, such as Linux, and the challenges in modern information technology.

## **Python**

Python is a popular language in object-oriented programming and is a must-have language for many software development positions today. This course will build on the syntax and logical foundation of Java and introduce students to the high-level programming language of Python. Students will also be provided with real-world examples of the applications of Python and have hands-on experience coding this language.

## **Introduction to Team Communications**

This course will develop team communication and project coordination skills in an IT setting. Students will also be introduced to roles within a typical IT project team and how to communicate technical information effectively and accurately between team members. Real-world examples will be used to demonstrate to the students how modern technology companies and IT teams function.

## **UX and UI Fundamentals**

This course introduces the fundamental theories behind user interface and design. Using real-world implementations of UX and UI designs, the course will provide students with knowledge about interface layouts, usability testing, navigation principles, and visual designs. Additionally, students will also be introduced to the best UX and UI design practices for business success.

## **Introduction to Web Development**

This course gives students an introduction to web programming. Students will develop an understanding of the communication between design, web, and script languages. Students will highlight the current tools and the various programming languages used for web development. Building on the knowledge from previous courses, this course will demonstrate how web applications can be integrated into various IT sectors.

## **Introduction to Databases**

Students in this course will be introduced to the different types of databases, their relations with information technology, and a variety of database management services and systems used in the industry. Special emphasis will be put on relational databases. Students will also learn to plan and build relational database structures through modern business scenarios.

## **Introduction to IoT and Networking**

This course will explore the concepts of the Internet of Things (IoT) by demonstrating relations between computer interfaces and the devices they control. This course will give insights into the functions of computer architecture, networking, and controlling device function within a network. Students will also learn about cloud computing and its applications in IoT and networking. Students will be introduced to industry-leading cloud computing services and the advantages and limitations of each service.

## **Microsoft Azure**

Microsoft Azure, commonly referred to as Azure, is a cloud computing service commonly used in the industry along with AWS. Students will learn the fundamentals of working with Microsoft Azure and its applications in a business setting. This course will introduce students to the certification path for Microsoft Azure and help prepare students for the Microsoft Azure Fundamentals certification exams.

## **PHP**

PHP is a programming language that integrates well with HTML and databases and is widely used to build dynamic web applications. This course will expand upon the students' understanding of web development, integrating previous course knowledge of database and SQL into web development. Students will have the opportunity to further develop their projects from previous courses and see how different codes can be integrated.

## **SQL**

Structured Query Language (SQL) is the universal language for managing data held in a relational database management system. Students will learn how to manipulate and extract data within existing relational database systems. Students will also be challenged to plan, create, and maintain their relational database using SQL. Additionally, this course will introduce students to NoSQL variants such as Hadoop.



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