

## Program Description

Gateway to Technology (or Gateway to Tech) is a 120 hour program for grades 10-12 youth interested in technology that is delivered by Okanagan College two nights per week for 20 weeks. The program helps students gain a better understanding of the tech sector and introduces youth to the careers and occupations in the Information, Communication and Technology sector.

Introduction to Gateway to Technology: <https://youtu.be/aJrFQQQ0jI8>

## Gateway to Tech Outline

### Information Technology (IT) Essentials Camp (60 hrs.)

These workshops cover the fundamentals of computer and career skills for entry level IT jobs. This component includes hands-on lab activities that provide practical experience for youth to help them understand IT fundamentals. Simulation tools help youth hone their troubleshooting skills and allow them to practice what they learn. Youth will get immediate feedback on their learning through the activities.

Key learning outcomes include:

- Introduction to computer components and peripherals
- Introduction to wireless networking
- Introduction to local area network management
- Introduction to computer and Internet security
- Introduction to scripting for network and system administrators

### Introduction to Coding Camp (60 hrs.)

These workshops cover the fundamentals of modern Web Programming, covering Front and Back-End development along with server and database management. The students will create their own websites from scratch using the tools and languages taught in the class and will host the site on their own machine. The students will get immediate feedback on their learning through the activities and quizzes in the class.

Key learning outcomes include:

- Intro to Linux and LAMP - Students will be introduced to the Linux environment and the

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command line. They will learn how to install and use their own LAMP (Linux, Apache, MySQL, NodeJS/PHP) Server software.

- HTML - HTML is the standard markup language for creating Web pages. Students will learn to create web pages from scratch.
- CSS - Cascading Style Sheets is a language that describes the style of an HTML document. Students will learn to beautify their HTML documents.
- JavaScript I – Variables, Control Flow and Loops - JavaScript is a powerful programming language that adds dynamic interactivity to millions of sites on the web. This module will introduce the basics of JavaScript.
- JavaScript II – Arrays, Functions and Objects - This module will delve a bit deeper into more advanced JavaScript programming concepts.
- SQL - SQL (Standard Query Language) is a standard language for storing, manipulating and retrieving data in databases. Students will gain an understanding of what a database is, how to create a database and how to retrieve data from it.

**Total program hours: 120**

## Schedule - TBA

Tuesdays and Thursdays 5:00pm to 8:30pm.

Currently online delivery while *COVID-19* restrictions are in place, or in-person when restrictions are lifted.

## Assessment

Youth are assessed by instructors through a variety of hands-on evaluation, quizzes and projects. Attendance and active participation are expected. A percentage grade will be given at the end of the session.

## Credit

Students will receive high school credits (4 credits) upon completion of the Gateway to Tech training. Students will be provided a statement of completion from Okanagan College.

**Contact** Visit your school's career center to get an application and speak to a career coordinator about how to register.