

# Introduction to Full-Stack Web Development

Microcredential Part-time [School of Computing and Academic Studies](#)

## Overview

The Introduction to Full-Stack Web Development microcredential covers both back-end Node.js and front-end React.js for web app development. If you've completed Web Development Foundations (WDF), this is your next step. Then move on to the Applied Web Development (AWD) Associate Certificate.

Delivery: in person. [See details](#).

## About the program

- Introduction to Full-Stack Web Development is a second-level microcredential that follows on from the [Web Development Foundations \(WDF\)](#) [1]
- Experience server-side programming with [COMP 3012](#) [2]: Back-End Web Development with Node.js, an open-source environment for building fast and scalable web applications.
- Then move on to [COMP 3013](#) [3]: Front-End Web Development with React.js, another open-source JavaScript library that simplifies building interactive user interfaces with reusable HTML code.
- These hands-on applied courses focus on the best practices to develop websites to industry standards.
- **Please note:** These courses are bring your own device (BYOD) if on campus. Online sections require a PC with a web camera/microphone, and high-speed internet connection.

See [Program Details](#) [4] to learn more.

## Is this microcredential for you?

- You already have a solid understanding of web coding and scripting with HTML5, CSS3, and JavaScript from [COMP 1850](#) [5] and [COMP 2132](#) [6] or are able to prove equivalent knowledge
- You want to learn advanced JavaScript libraries for faster and more elaborate Full Stack web development
- You're able to devote 10+ hours per week outside of class to complete homework and assignments – learn more about workload and attendance expectations in our [Computing Flexible Learning Student Guide](#) [7]

Please check the [Entrance Requirements](#) [8].

## What grads can do

- After completing both badges from COMP 3012 and COMP 3013, apply for the microcredential "Introduction to Full-Stack Web Development"
- Use the two most popular JS libraries for rapid application development
- Continue to additional courses in web development, such as [COMP 3015](#) [9]: Web Application Development with PHP, as well as [COMP 1011](#) [10]: UX/UI Development, and ladder to an Associate Certificate, including Applied Web Development ([AWD](#)) [11], as well as the Computer Systems Technology ([CST FLEX](#)) [12] Diploma

BCIT Computing provides students with career-ready skills

## Entrance Requirements

- Completion of [COMP 1002 \[13\]](#) or equivalent knowledge of PC file management.
- Completion of [COMP 1850 \[14\]](#) and [COMP 2132 \[15\]](#) or equivalent knowledge of HTML5, CSS3 and JavaScript.
- High-speed internet access for online sections and homework.

Please note: [COMP 3012 \[16\]](#) and [COMP 3013 \[17\]](#) are BYOD (bring your own device) courses. You are required to bring a current model laptop PC to class. Minimum requirements are an i5 or higher equivalent processor, with at least 8 GB of RAM, and a minimum of 256 GB of storage.

## Application processing

Ongoing throughout the year.

## Recommended for success

- English skills at a Grade 12 level or [equivalent \[18\]](#).
- Math skills at a Grade 12 level or [equivalent \[19\]](#).
- Post-secondary education or work experience in business or computing.

## International applicants

This program is available to international applicants. A valid [study permit \[20\]](#) is required prior to starting the program.

## Apply to program

Formal application to the microcredential is not required. Upon successful completion of the [courses](#), email the [program contact](#) with your full name, student number, and mailing address to be issued a microcredential.

## Scheduled Intakes

Ongoing Flexible Learning (Part-time Studies) intakes: [January, April, and September. \[21\]](#)

## Costs & Supplies

Each COMP course tuition fee in this program is around \$600. Please budget approximately \$1,200 for total tuition for these two courses.

[COMP 3012 \[22\]](#) and [COMP 3102 \[23\]](#) are bring your own device courses (BYOD). They both require a current model laptop PC with an i5 or higher equivalent processor, at least 8 GB of RAM, and minimum 256 GB of storage.

## Tuition fees

Flexible Learning (Part-time Studies) tuition is charged on a course-by-course basis. Please see the [Flexible Learning Tuition & Fees \[24\]](#) page for more information on domestic and international tuitions.

## Books & supplies

While no textbooks are currently required for this program, students are responsible for providing their own laptop computer that meets the current model and high-speed internet access for homework.

# Courses

## Program matrix

Check [current availability of courses \[25\]](#) for this program.

Required Courses (6.0 credits):	Credits
<a href="#">COMP 3012 [26]</a> <b>Back-End Web Development with Node.js</b>	3.0
<a href="#">COMP 3013 [28]</a> <b>Front-End Web Development with React.js</b>	3.0
<b>Total Credits:</b>	<b>6.0</b>

Check [current availability of courses \[30\]](#) for this program.

## Digital badge information

For information on how to obtain your course and/or microcredential digital badge, please review our [Frequently Asked Questions \[31\]](#) page.

## Transfer credit

Do you have credits from another BC/Yukon post-secondary school? Do you want to know if they transfer to courses here at BCIT? Check out BCIT's [Transfer Equivalency Database \[32\]](#) to find out.

## Program Details

### Earning badges and this microcredential

Starting September 2023, upon successful completion, students may [apply for a digital badge \[33\]](#) for each of COMP 3012 and COMP 3013.

These badges contain embedded data, including the competencies assessed. A badge may be linked to an online resume, website or social media platform.

Please be sure to read our [Computing Flexible Learning Student Guide \[34\]](#) (specifically page 5) for workload expectations. These are post-secondary and for credit courses, so there are attendance requirements and significant homework outside of each class.

The program is typically be completed over two terms. Most students will complete 1 course per term, which is typically an 11 hour per week total time commitment.

However, some students with prior background in Advanced JavaScript and previous versions of Node and React may be able to complete both courses in the same term. This would require attending 2 classes each week with 3-hour lessons per, and completing 16+ hours of homework each week, for 12 weeks.

## Program length

The program can be completed in a single 12-week term or over two terms.

## Grading

The minimum passing grade for each course is 60%.

## Program delivery

In person: This program is delivered on campus.

## Program location

[Downtown Campus \[35\]](#)

555 Seymour Street  
Vancouver, BC

## Continue your education

Completing this microcredential can lead to pathways for Associate Certificates, such as [Applied Web Development \(AWD\) \[36\]](#), or [Web and Mobile Application Development \[37\]](#), and the [Computer Systems \(CST\) FLEX \[38\]](#) Diploma.

## Faculty, Advisors & Staff

BCIT Computing Flexible Learning courses are delivered by subject matter experts with industry experience.

Our web instructor and advisory team includes: Armaan Dhanji, Christian Fenn, Chris Harris, Dave Tanchak, Jeff Parker, Jon Bantados, Lei Zhang, Lynda Williams, Michael Whyte, and Sam Meech-Ward.

Proposals for this program were developed by Cynthia van Ginkel, Business Development Manager for the School of Computing and Academic Studies.

Administrative student support is provided by Karen Lee, with program operations by Joanne Atha, Coordinator for BCIT Computing Flexible Learning. Donna Turner is the Associate Dean for Computing and Technical Professional Programs.

This Introduction to Full-Stack Web Development microcredential was developed as a sub-set of the Applied Web Development Associate Certificate created by Kevin Cudihee, Program Head for BCIT Computing Flexible Learning and Industry Training.

## Contact Us

For course and program details, please email: [cstflex@bcit.ca](mailto:cstflex@bcit.ca)

Check here to apply for [Digital Badges and Microcredentials. \[39\]](#)

Programs and courses are subject to change without notice.

## List of links found on this page

This list includes all links found on this page for your reference.

[1] <https://www.bcit.ca/programs/web-development-foundations-wdf-microcredential-part-time-0841cm/>

[2] <https://www.bcit.ca/courses/back-end-web-development-with-node-js-comp-3012/>

[3] <https://www.bcit.ca/courses/front-end-web-development-with-react-js-comp-3013/>

- [4] <https://www.bcit.ca/programs/introduction-to-full-stack-web-development-microcredential-part-time-0840cm/#details>
- [5] <https://www.bcit.ca/courses/introduction-to-web-development-comp-1850/>
- [6] <https://www.bcit.ca/courses/web-development-with-javascript-comp-2132/>
- [7] [https://www.bcit.ca/files/cas/computingparttime/pdf/computing\\_pts\\_student\\_guide.pdf](https://www.bcit.ca/files/cas/computingparttime/pdf/computing_pts_student_guide.pdf)
- [8] <https://www.bcit.ca/programs/introduction-to-full-stack-web-development-microcredential-part-time-0840cm/#entry>
- [9] <https://www.bcit.ca/courses/web-application-development-with-php-comp-3015/>
- [10] <https://www.bcit.ca/courses/ux-ui-development-comp-1011/>
- [11] <https://www.bcit.ca/programs/applied-web-development-associate-certificate-part-time-6957acert/>
- [12] <https://www.bcit.ca/programs/computer-systems-diploma-part-time-5500pdiplt/>
- [13] <https://www.bcit.ca/courses/applied-computer-concepts-comp-1002/>
- [14] <https://www.bcit.ca/courses/introduction-to-web-development-comp-1850/>
- [15] <https://www.bcit.ca/courses/web-development-with-javascript-comp-2132/>
- [16] <https://www.bcit.ca/courses/back-end-web-development-with-node-js-comp-3012/>
- [17] <https://www.bcit.ca/courses/front-end-web-development-with-react-js-comp-3013/>
- [18] <https://www.bcit.ca/admission/entrance-requirements/english-language-proficiency/>
- [19] <https://www.bcit.ca/admission/entrance-requirements/equivalencies/>
- [20] <https://www.bcit.ca/international-students/permits-visas-status/study-permits/>
- [21] <https://www.bcit.ca/flexible-learning/part-time-courses-programs/flexible-learning-key-registration-dates/>
- [22] <https://www.bcit.ca/courses/back-end-web-development-with-node-js-comp-3012/>
- [23] <https://www.bcit.ca/courses/front-end-web-development-with-react-js-comp-3013/>
- [24] <https://www.bcit.ca/admission/tuition-fees/flexible-learning/>
- [25] <https://www.bcit.ca/courses/comp3012,comp3013/>
- [26] <https://www.bcit.ca/courses/back-end-web-development-with-node-js-comp-3012/>
- [27] <https://www.bcit.ca/outlines/comp3012/>
- [28] <https://www.bcit.ca/courses/front-end-web-development-with-react-js-comp-3013/>
- [29] <https://www.bcit.ca/outlines/comp3013/>
- [30] <https://www.bcit.ca/courses/comp3012,comp3013/>
- [31] <https://www.bcit.ca/explore/microcredentials/>
- [32] <https://www.bcit.ca/admission/entrance-requirements/transfer-credit/>
- [33] <https://www.bcit.ca/explore/microcredentials/>
- [34] [https://www.bcit.ca/files/cas/computingparttime/pdf/computing\\_pts\\_student\\_guide.pdf](https://www.bcit.ca/files/cas/computingparttime/pdf/computing_pts_student_guide.pdf)
- [35] <https://www.bcit.ca/about/visit/campuses-directions/downtown/>
- [36] <https://www.bcit.ca/programs/applied-web-development-associate-certificate-part-time-6957acert/>
- [37] <https://www.bcit.ca/programs/web-and-mobile-application-development-associate-certificate-part-time-6465acert/>
- [38] <https://www.bcit.ca/programs/computer-systems-diploma-part-time-5500pdiplt/>
- [39] <https://www.bcit.ca/explore/microcredentials/>
- [40] <https://www.bcit.ca/international-students/>
- [41] <https://www.bcit.ca/financial-aid/>
- [42] <https://secure.bcit.ca/sis/apply/>