Applied Web Development

Associate Certificate Part-time <u>School of Computing and Academic Studies</u>

Overview

The Applied Web Development (AWD) Associate Certificate covers best practices in HTML and CSS to hand-code commercial-quality websites. You'll move on to web development with JavaScript, database, business analysis, and systems design. Electives include UX/UI design, back-end Node.js, front-end React.js, web apps with PHP, and advanced web apps.

Delivery: blended. <u>See details</u>.

About the program

AWD provides graduates with job-ready web development skills, and includes:

- Hand-coding and best practices for Front-End and Back-End Web Development to create significant websites
- Traditional computer science courses: <u>Business Analysis and Systems Design [1]</u>, and <u>Relational Database Design and SQL [2]</u>
- Working in groups to model business processes and communicate requirements before proceeding with design and development
- Documenting a business case and providing a detailed plan for a web-based IT solution
- Electives have an emphasis on advanced JavaScript libraries, and PHP for data-driven web application development, and may include: UX/UI Fundamentals, IT Project Management, Angular and Vue, Back-End Development with Node.js, Front-End Development with React.js, plus PHP and Advanced PHP Web Application Development

See <u>Program Details [3]</u> to learn more.

Is the Applied Web Development program for you?

- You have prior work experience or post-secondary training and want to learn web development skills
- You have formal training in Computing and IT outside Canada but want to retrain for the local job market

Please check the <u>Entrance Requirements [4]</u>.

What grads can do

- Design, develop, deploy, and manage websites to industry standards
- If you have object-oriented programming skills you may also consider laddering further with the Web and Mobile Application (<u>WMA [5]</u>) Development Associate Certificate

AWD provides graduates with job-ready web development skills – start with just one course <u>COMP 1850 [6]</u>

Entrance Requirements

Prerequisites: <u>COMP 1002 [7]</u> or equivalent knowledge of file management using an MS Windows based PC.

- Students are expected to have English and Math skills at a BC high school Grade 12 level or equivalent.
- Participants will be required to make written and verbal presentations, plus be able to work in groups.
- We recommend some other post-secondary education or work experience in either business or computing.

Each course in this program also has prerequisites, be sure that you have the required knowledge and skills before enrolling.

AWD was not designed to be completed in a full-time delivery, as each course has prerequisites and Flexible Learning/PTS scheduling varies from term to term.

Some students capable of a heavy course load over days, nights and weekends may be able to fast-track **AWD** over 3 terms or 1 year, depending on the electives chosen.

Most Flexible Learning students are working, and complete **AWD** with 1 or 2 courses per term.

<u>Please contact the department</u> for course planning details.

International applicants

This program is not available to international students. <u>View available programs [8]</u>

Program declaration

Declaring your Flexible Learning (Part-time Studies) program ensures that BCIT is aware of your intent to complete a program as it is currently outlined and provides you the opportunity to apply for transfer credit.

To submit your declaration:

- Answer all questions completely.
- If required, convert transcripts and documents to PDF files [9] .
- Have a credit card ready to pay the application fee.

Upon approval, a program plan letter will be sent to you confirming your program of study. Please allow approximately eight weeks for processing.

Learn more about program declaration [11]

Note: Please complete COMP 1850 [12] before declaring your intent to complete this program.

Costs & Supplies

Computing Flexible Learning programs are course-by-course registration. There are typically only 7 courses required to complete **AWD.**

Canadian and PR students should budget around $4,000 for tuition and books.

AWD is not currently available to international students who require a study permit. Students on shorter timelines for funding should consider other programs.

Please Note: Due to prerequisites and scheduling it is typically not possible to complete this program in less than 3-4 terms.

The average tuition for each COMP course is around $500-$600 per course and specific textbooks may be required at an additional cost.

Register early to avoid disappointment, COMP courses are very popular and may fill weeks or months in advance.

Students are required have a personal computer with internet access in order to complete homework. Some classes are "Bring your own devices" (BYOD), and if those sections, students will need to bring a current laptop to class.

Courses

Program matrix

Check current availability of courses [13] for this program.

1. Required Courses: (15.0 credits)		Credits
COMP 1630 [14]	**Relational Database Design and SQL**	5.0
COMP 1850 [16]	**Introduction to Web Development**	3.0
COMP 2132 [18]	**Web Development with JavaScript**	3.0
COMP 2831 [20]	**Business Analysis and Systems Design**	4.0
2. Complete 9.0 credits from the following:		**Credits**
COMP 1011 [22]	**UX/UI Development**	3.0
COMP 2052 [24]	**Android and Mobile Application Development Tools**	3.0
COMP 2909 [26]	**Front-End Web Development with Angular and Vue.js**	1.5
COMP 3012 [28]	**Back-End Web Development with Node.js***	3.0
COMP 3013 [30]	**Front-End Web Development with React.js***	3.0
COMP 3015 [32]	**Web Application Development with PHP**	3.0
COMP 4669 [34]	**Advanced Web Applications with PHP**	3.0

*Credit will be granted for only one of:

- COMP 3012 or COMP 2912
- COMP 3013 or COMP 2913

Check Computing Flexible Learning Course and Program Changes [36] for details.

Total Credits:	24.0

Check current availability of courses [37] for this program.

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 [38] to find out.

Program Details

Timelines: This program may be completed with as few as 7 courses.

AWD is not available to International students, this program was not designed for full-time delivery or for those on short funding timelines. It was designed for part-time delivery and most students complete AWD in just over two years, part-time, one course at a time.

AWD is based on hand-coding with HTML5 and CSS3 to plan and design web pages design industry standards. The program core includes computer science foundation courses.

Topics include data modelling, entity relationships, relational database design, SQL programming, the Software Development Life Cycle, System Analysis and Systems Design, diagramming tools, use cases, business processes, documentation, group work and presentation skills.

The foundations of web development and hand-coding with HTML5, CSS3 and JavaScript are followed by more advanced web development tools for both server-side and client-side web application development. A variety of technical electives include Android and Mobile, Back-End with Node.js, Front-End with React.js and two levels of PHP. There are also elective options for best practices in UX/UI and IT Project Management.

Most courses are available nights, some on weekends, and others with fast-track options. Delivery was designed for 1-2 courses per term.

Due to prerequisites and scheduling, it is typically not possible to complete **AWD** in any less than 3 terms, with courses during the day, at night and on weekends.

Some students capable of a very heavy course load may be able to fast-track this credential starting with two (2) specific courses during the days, plus the majority of courses at night and on weekends over 1 year.

Keep in mind that the compressed 6-week sections of COMP 1850 and COMP 2132 will have twice the workload and class hours each week.

Computer hardware and Internet requirements

Online students must provide a current model PC desktop or laptop with a webcam, microphone and have high-speed internet access. Internet based COMP courses may use two-way audio and video as well as group work outside of class.

Participants must be computer literate in order to participate and complete each COMP course. For course planning or if you have any questions, please contact the department.

Program delivery

Blended: This program is delivered partly on campus and partly online.

Some COMP courses are delivered entirely online and others are entirely on campus. A few course sections in AWD have a blended delivery with synchronous on campus classes, and others have synchronous online classes, while both options include required asynchronous online components.

Program location

Courses may be offered at the following locations:

Burnaby Campus [39]
3700 Willingdon Avenue
Burnaby, BC

Downtown Campus [40]
555 Seymour Street
Vancouver, BC

Online Learning [41]

Program abandonment

- Students approved for a Flexible Learning (Part-time Studies) program are expected to register and complete courses on a continuous basis.

- A student that has not completed a course from their approved program of study over a period of three consecutive academic terms will be considered to have abandoned the program.

- Throughout the duration of the program, a student is permitted a maximum of five academic terms where they are not required to register and complete a course from their approved program of study. Students who exceed the five term maximum will be considered to have abandoned the program.

- Students who have abandoned their approved program of study and wish to be reinstated will be required to apply for program approval for a current credential. BCIT cannot guarantee that courses taken prior to this reapplication will be credited towards the current credential.

BCIT Policy 5103 - Student Evaluation [PDF] [42] permits a maximum of three attempts to successfully complete each course within a credential.

Graduating & Jobs

Applied Web Development (AWD) is an Associate Certificate from BCIT Computing and delivered through Flexible Learning.

AWD is focused on hand-coding with scripting languages and tools for full-stack; front-end and back-end web development.

Note: The majority of respondents had taken previous post-secondary education.

Graduate employment outcomes

The BCIT student outcomes report presents summary findings from the annual survey of former students administered by BC Stats one to two years after graduation. These reports combine the last three years of available results for the 2021-2023 BCIT Outcomes Surveys of 2020-2022 graduates and for Degree 2019-2021 graduates. The reports are organized into three-page summaries containing information on graduates' labour market experiences and opinions regarding their education. More detailed information can be accessed at the BC Student Outcomes [43] website.

To view these results, you may need to have the Adobe Acrobat Reader [44] installed in your Web browser.

- Applied Web Development [45]

Apply for graduation

Upon successful completion of all program requirements, complete an Application for BCIT Credential [PDF] [46] and submit it to Student Information and Enrolment Services.

Allow approximately six to eight weeks for processing.

All financial obligations to the Institute must be met prior to issuance of any credential.

Faculty, Advisors & Staff

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

The **AWD** web instructor and advisory team includes Alex Volkov, Andre Coetze, Armaan Dhanji, Ashok Pamu, Christian Fenn, Chris Harris, Dave Tanchak, Ed Rubuliak, Fariba Pacheleh, Frank Wegener, Frederic Guo, Glen Elliott, Jason Wilder, Jeff Parker, Jon Bantados, Lynda Williams, Michael Whyte, Phylis Lo and Sam Meech-Ward.

AWD was created and developed by Kevin Cudihee, Program Head for BCIT Computing, Flexible Learning and Industry Training.

Contact Us

Please email the department for more information.

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/study/courses/comp2831
[2] https://www.bcit.ca/study/courses/comp1630
[3] https://www.bcit.ca/programs/applied-web-development-associate-certificate-part-time-6957acert/#details
[4] https://www.bcit.ca/programs/applied-web-development-associate-certificate-part-time-6957acert/#entry
[5] https://www.bcit.ca/programs/web-and-mobile-application-development-associate-certificate-part-time-6465acert/
[6] https://www.bcit.ca/study/courses/comp1850
[7] https://www.bcit.ca/study/outlines/comp1002201010
[8] https://www.bcit.ca/international-applicants/
[9] https://www.bcit.ca/admission/how-to-apply/submitting-transcripts-supporting-documents/#documents
[10] https://apply.educationplannerbc.ca/bcit
[11] https://www.bcit.ca/admission/how-to-apply/program-declaration/
[12] https://www.bcit.ca/courses/introduction-to-web-development-comp-1850/
[13] https://www.bcit.ca/courses/comp1011,comp1630,comp1850,comp2052,comp2132,comp2831,comp2909,comp3012,comp3013,comp3015,comp4669/

[14] https://www.bcit.ca/courses/relational-database-design-and-sql-comp-1630/
[15] https://www.bcit.ca/outlines/comp1630/
[16] https://www.bcit.ca/courses/introduction-to-web-development-comp-1850/
[17] https://www.bcit.ca/outlines/comp1850/
[18] https://www.bcit.ca/courses/web-development-with-javascript-comp-2132/
[19] https://www.bcit.ca/outlines/comp2132/
[20] https://www.bcit.ca/courses/business-analysis-and-systems-design-comp-2831/
[21] https://www.bcit.ca/outlines/comp2831/
[22] https://www.bcit.ca/courses/ux-ui-development-comp-1011/
[23] https://www.bcit.ca/outlines/comp1011/
[24] https://www.bcit.ca/courses/android-and-mobile-application-development-tools-comp-2052/
[25] https://www.bcit.ca/outlines/comp2052/
[26] https://www.bcit.ca/courses/front-end-web-development-with-angular-and-vue-js-comp-2909/
[27] https://www.bcit.ca/outlines/comp2909/
[28] https://www.bcit.ca/courses/back-end-web-development-with-node-js-comp-3012/
[29] https://www.bcit.ca/outlines/comp3012/
[30] https://www.bcit.ca/courses/front-end-web-development-with-react-js-comp-3013/
[31] https://www.bcit.ca/outlines/comp3013/
[32] https://www.bcit.ca/courses/web-application-development-with-php-comp-3015/
[33] https://www.bcit.ca/outlines/comp3015/
[34] https://www.bcit.ca/courses/advanced-web-applications-with-php-comp-4669/
[35] https://www.bcit.ca/outlines/comp4669/
[36] https://www.bcit.ca/computing-academic-studies/computing/%20part-time-studies/course-program-changes/
[37] https://www.bcit.ca/courses/comp1011,comp1630,comp1850,comp2052,comp2132,comp2831,comp2909,comp3012,comp3013,comp3015,comp4669/
[38] https://www.bcit.ca/admission/entrance-requirements/transfer-credit/
[39] https://www.bcit.ca/about/visit/campuses-directions/burnaby/
[40] https://www.bcit.ca/about/visit/campuses-directions/downtown/
[41] https://www.bcit.ca/flexible-learning/distance-online-learning/
[42] https://www.bcit.ca/files/pdf/policies/5103.pdf
[43] https://bcstats.shinyapps.io/so_data_viewer/
[44] https://get.adobe.com/reader/
[45] https://www.bcit.ca/files/ir/gp/6957acert.pdf
[46] https://www.bcit.ca/files/records/pdf/appl_4_credential.pdf
[47] https://www.bcit.ca/international-students/
[48] https://www.bcit.ca/financial-aid/
[49] https://secure.bcit.ca/sis/apply/