Full-Stack Web Development

Diploma Full-time School of Computing and Academic Studies

Overview

The Full-Stack Web Development (FSWD) Diploma program features an interdisciplinary learning environment to prepare you for a career as a web developer. FSWD focuses on the technical tools to build web applications and provides core competencies such as teamwork and communication. You'll be supported by a coach to prepare you for life after FSWD.

Delivery: in person. See details.

This two-year full-time program offers hands-on experience, equipping you with the skills needed to work on all layers of web technology and preparing you for the many opportunities in this fast-growing and high-demand field.

Project experience with designers in a separate program enables FSWD graduates to bring a unique perspective and ability that industry requires and needs: the capacity to work effectively within a collaborative, interdisciplinary team environment.

About the Program

The FSWD Diploma is offered at the Downtown Campus [1] and features industry-driven project-based learning, working with a real client [2] , small classes, and new state-of-the-art flexible learning spaces.

The program includes the following topics:

See the Program Details [3] to learn more about what you can expect from FSWD, and how you can prepare for a career as a web developer.

Who should complete the FSWD Diploma?

This program might be for you if you:

- Love a great website and want to be a part of making the web even better
- Enjoy working with people and in teams
- Have a knack for troubleshooting and problem-solving
- Thrive in a multifaceted context that includes programming, user experience, and design
- Want a stable professional career with strong opportunities for growth

If any of these sound like you, please check the Entrance Requirements [4] to ensure you can apply and start your new web development career!

What Full-Stack Web Development grads can do

By earning your FSWD Diploma, you'll be honing your web development skills and gaining knowledge of various industry-recognized technologies, preparing you for positions in multiple industries and locations.

Web developers are in a fast-growing job category, with continued projected high growth nationally. They're listed in the "high demand" category for BC, with over 2300 openings predicted over the next ten years, according to BC's Labour Market Outlook.

You also have the option to continue your education with BCIT's Bachelor of Technology in Technology Management [5] . Other laddering options might also exist but could require bridge courses.

Learn more about the opportunities awaiting you on the Graduating and Jobs page [6] .

Entrance Requirements

Application processing

This program has multiple application deadlines [7] and may fill after each deadline date.

Start date	Applications open	Deadline
September	October 1*	March 1* (early)
		April 30* (final)

*or next business day

We recommend that you apply early [8] . All supporting documents must be submitted by the application deadline.

Indigenous applicants: Read about Indigenous student support [9] available for the Full-Stack Web Development program.

Entrance requirements

Admission to this program is highly competitive. In 2022, BCIT admitted 1 in 4 applicants. Successful applicants substantially exceeded the entrance requirements in both English and math with an average above 89%.

Competitive Entry: Two-step process

Preference will be given to applicants with:

- Academic grades above the minimum

Step 1: Meet the following entrance requirements

- **English language proficiency:** Category 2 [10] – English Studies 12 (67%) or equivalent

- **Math: one** of the following:
    - Pre-Calculus 12 (67%) or
    - Foundations of Math 12 (73%) or
    - Other acceptable BC and Yukon courses [11]

Read more about how to meet BCIT's entrance requirements [12]

Step 2: Department assessment

Admission is competitive and will be offered to the most qualified applicants. The competitive calculation formula takes the average of the applicant's secondary or post-secondary English and math scores. Make sure to advise Admissions of your highest grades.

A waitlist of eligible applicants, ranked in competitive order, will be kept in the event that a seat becomes available prior to the end of the first week of term. The waitlist is cleared once the program intake is full and closed; unsuccessful applicants must re-apply to be considered for the next intake. Unsuccessful students may wish to upgrade their math and English before re-applying.

International applicants

This program is available to international applicants. A valid study permit [13] is required prior to starting the program.

Students enrolled in this program must complete the mandatory work component to qualify for graduation. A co-op work permit is required prior to starting the work component.

Apply to program

To submit your application:

- Include proof of meeting all entrance requirements.
- Convert all transcripts and supporting documents to PDF files [14] .
- Have a credit card ready to pay the application fee.

Learn more about how to apply [16]

Scheduled Intakes

September each year.

myCommunication

Within two business days of submitting your completed application, BCIT will send a message to your personal and myBCIT email addresses. All correspondence regarding your application will be posted to your online myCommunication [17] account at my.bcit.ca [18] . We will send you an email when a new message is posted. It is important to watch for these emails or regularly check your account online.

You can expect to receive communication concerning the status of your application within four weeks.

Costs & Supplies

Learn about BCIT entrance awards [19] , including support for Indigenous students [20] entering computing programs.

Tuition fees

Use our tuition estimator [21] to find tuition and fees for this program.

For more information on full-time tuition and fees, visit:

- Full-Time Studies Tuition & Fees [22]
- International Tuition & Fees [23]

Books & supplies

Books are expected to cost $500 to $800 per term.
(General estimated cost, subject to change)

Bring Your Own Device (BYOD)

Bring Your Own Device (BYOD) at BCIT is an initiative that enables BCIT students to access campus resources at any time through your own device, and to use their own computers for course work. **The Full-Stack Web Development Diploma at the Downtown BCIT Campus is a participant in this programs and requires all students to bring their own Windows-compatible laptop to school each day.**

Please refer to this Preferred Laptop Specifications [PDF] [24] .

Financial assistance

Financial assistance may be available for this program. For more information, please contact Student Financial Aid and Awards [25] .

Courses

Class hours

Monday to Friday, 8:30am - 5:30pm

Program matrix

Level 1 (15 weeks)		Credits
COMM 1116	**Business Communications 1**	4.0
COMP 1171	**Web Development 1**	3.0
COMP 1320	**Introduction to Software Development**	5.0
COMP 1340	**Introduction to Operating Systems Administration**	4.0
MATH 1320	**Mathematics for Computing**	4.0
MDIA 1106	**Design 1**	3.0
MDIA 2190	**Photoshop**	3.0
Level 2A (15 weeks)		**Credits**
ACIT 2811	**UX/UI Development**	3.0
COMM 2116	**Communications for Business and Web**	5.0
COMP 2131	**Web Development 2**	4.0
COMP 2311	**Agile Software Development**	4.0
COMP 2340	**Collaboration Tools**	2.0

COMP 2350	Web Database Technologies	4.0
COMP 2523	Object Oriented Programming 1	5.0

Level 2B (5 weeks)		Credits
IDSP 2380	Web Projects 1	6.0

Level 3 (15 weeks)		Credits
BLAW 3205	Internet and IT Law	3.0
COMP 1350	Web Administration	3.0
COMP 3330	JavaScript Frameworks and Server	5.0
COMP 3514	Web C# Application Development	4.0
IDSP 3380	Web Projects 2	6.0
MDIA 2106	Design 2	4.0
MKTG 1352	Digital Marketing	3.0

Level 4 (15 weeks)		Credits
ACIT 4770	Legal and Ethical Issues in IT	2.0
COMP 4514	ASP.NET Core MVC for Web Apps	4.0
COMP 4515	Server-Side Web Scripting with PHP	5.0
IDSP 4380	Web Projects 3	6.0
MDIA 2025	Digital Portfolio Development	3.0
VENT 4000	Entrepreneurship	3.0

Total Credits:		110.0

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 [54] to find out.

Program Details

This Diploma covers the knowledge and skills needed by full-stack web developers to create, modify, and maintain full web applications, including server configuration, front-end development, back-end development, data management, and web architecture design. The FSWD Diploma also provides valuable interdisciplinary training in a unique cross-program format.

Program Structure by Term

Program Goals

Upon successful completion of the FSWD Diploma, students will be able to:

- Build front-end web applications using tools such as HTML, CSS, JavaScript, and modern frameworks
- Build web applications using formats such as the Model-View-Controller (MVC) pattern
- Build back-end RESTful applications using modern scripting and programming languages and frameworks
- Install, configure, run, and manage web servers and resources through command-line interfaces
- Build, administer, and use modern database management systems, and incorporate the data within web applications
- Develop software in accordance with best practice for design, implementation, and testing and deployment
- Apply modern, best-practice front-end UX, UI, and design techniques
- Build prototypes and full-stack full web applications in teams, including front-end and back-end development based on user requirements and needs
- Communicate effectively in written and oral English and use presentation tools effectively in a business, sales or technical setting
- Create web applications that follow legal, ethical, and security best practices
- Prepare to market and sell web applications according to best current practice
- Manage and collaborate on team projects using popular technical tools such as version control and communication tools and modern methodologies such as Agile and Scrum

Student Support

BCIT is committed to providing assistance to all its full- and part-time students with permanent or temporary, visible or non-visible disabilities. Current and future students who may need support to overcome the limits and barriers encountered during their studies are encouraged to contact BCIT's Accessibility Services [55] to attend an information session or to arrange an interview with one of the institute's Vocational Rehabilitation Specialists.

Students and industry connect in BCIT Tech Collider
[56]

Program length

This is a full-time, two-year diploma program.

Students who need extra time will typically complete the program within three years.

Program delivery

In person: This program is delivered on campus.

Program location

Downtown Campus [57]
555 Seymour Street
Vancouver, BC

Graduating & Jobs

Employment

Web development is a fast-growing employment category, with continued projected high growth and demand in BC and beyond. Web developers are employed across multiple industries throughout the private and public sectors. They may also be self-employed.

Furthering Education

Graduates of this diploma program may apply for acceptance into BCIT's Bachelor of Technology Degree in Technology Management [58]. With bridging, laddering to other BCIT degrees, such as the Bachelor of Science in Applied Computer Science [59], and BTech in Forensic Investigation (Digital Forensics and Cybersecurity option) [60], may also be possible.

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 [61] website.

To view these results, you may need to have the Adobe Acrobat Reader [62] installed in your Web browser.

- Full-Stack Web Development [63]

Faculty, Advisors & Staff

Full-time Faculty

Jeremy Holman, Program Head

Armaan Dhanji, Instructor

Darinka Aguirre Amador, Instructor

Douglas Lu, Instructor

Frederic Guo, Instructor

Joao Molinari, Instructor

Julian Fekety, Instructor

Nader Abou Chakra, Instructor

Rafi Mohammad, Instructor

Sam Lee, Instructor

Sam Meech-Ward, Instructor

Stephen Scheibel, Instructor

Tomoko Okochi, Instructor

Administration

Ron Terencio, Program Coordinator

Advisory committee

BCIT is well-respected by employers for its ties to the industry. In Computing, this connection is formalized through a Program Advisory Committee (PAC) [64] comprised of experts in a range of roles from a cross-section of companies. The department consults regularly to ensure program currency and relevance.

Contact Us

Prospective Student Inquiries

Email: program_advising@bcit.ca

Current Student Inquiries

Email: fswddiploma@bcit.ca

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/about/visit/campuses-directions/downtown/
[2] https://www.bcit.ca/computing-academic-studies/industry-sponsored-student-projects/about-the-issp-program/
[3] https://www.bcit.ca/programs/full-stack-web-development-diploma-full-time-7540dipma/#details
[4] https://www.bcit.ca/programs/full-stack-web-development-diploma-full-time-7540dipma/#entry
[5] https://www.bcit.ca/programs/technology-management-bachelor-of-technology-part-time-8350btech/
[6] https://www.bcit.ca/programs/full-stack-web-development-diploma-full-time-7540dipma/#graduating
[7] https://www.bcit.ca/admission/how-to-apply/application-steps/applicant-priority/#multiple
[8] https://www.bcit.ca/admission/contact-us/ask-us/frequently-asked-questions/#three
[9] https://www.bcit.ca/computing-academic-studies/computing/indigenous-student-support/
[10] https://www.bcit.ca/admission/entrance-requirements/english-language-proficiency/#category2
[11] https://www.bcit.ca/admission/entrance-requirements/equivalencies/bc-yukon-high-school/#math12
[12] https://www.bcit.ca/admission/entrance-requirements/
[13] https://www.bcit.ca/international-students/permits-visas-status/study-permits/
[14] https://www.bcit.ca/admission/how-to-apply/submitting-transcripts-supporting-documents/#documents
[15] https://apply.educationplannerbc.ca/bcit
[16] https://www.bcit.ca/admission/how-to-apply/
[17] https://www.bcit.ca/admission/after-you-apply/communicating-with-bcit/
[18] https://my.bcit.ca/
[19] https://www.bcit.ca/financial-aid/awards-scholarships-bursaries/entrance-awards/
[20] https://www.bcit.ca/computing-academic-studies/computing/indigenous-student-support/
[21] https://www.bcit.ca/admission/tuition-fees/estimator/?ref=catalogue

[22] https://www.bcit.ca/admission/tuition-fees/full-time-studies/

[23] https://www.bcit.ca/admission/tuition-fees/international-fees/#fulltimetech

[24] https://www.bcit.ca/files/cas/computing/pdf/fswd-byod.pdf

[25] https://www.bcit.ca/financial-aid/

[26] https://www.bcit.ca/outlines/comm1116/

[27] https://www.bcit.ca/outlines/comp1171/

[28] https://www.bcit.ca/outlines/comp1320/

[29] https://www.bcit.ca/outlines/comp1340/

[30] https://www.bcit.ca/outlines/math1320/

[31] https://www.bcit.ca/outlines/mdia1106/

[32] https://www.bcit.ca/outlines/mdia2190/

[33] https://www.bcit.ca/outlines/acit2811/

[34] https://www.bcit.ca/outlines/comm2116/

[35] https://www.bcit.ca/outlines/comp2131/

[36] https://www.bcit.ca/outlines/comp2311/

[37] https://www.bcit.ca/outlines/comp2340/

[38] https://www.bcit.ca/outlines/comp2350/

[39] https://www.bcit.ca/outlines/comp2523/

[40] https://www.bcit.ca/outlines/idsp2380/

[41] https://www.bcit.ca/outlines/blaw3205/

[42] https://www.bcit.ca/outlines/comp1350/

[43] https://www.bcit.ca/outlines/comp3330/

[44] https://www.bcit.ca/outlines/comp3514/

[45] https://www.bcit.ca/outlines/idsp3380/

[46] https://www.bcit.ca/outlines/mdia2106/

[47] https://www.bcit.ca/outlines/mktg1352/

[48] https://www.bcit.ca/outlines/acit4770/

[49] https://www.bcit.ca/outlines/comp4514/

[50] https://www.bcit.ca/outlines/comp4515/

[51] https://www.bcit.ca/outlines/idsp4380/

[52] https://www.bcit.ca/outlines/mdia2025/

[53] https://www.bcit.ca/outlines/vent4000/

[54] https://www.bcit.ca/admission/entrance-requirements/transfer-credit/

[55] https://www.bcit.ca/accessibility/

[56] https://www.youtube.com/watch?v=Sampk5FqDUI

[57] https://www.bcit.ca/about/visit/campuses-directions/downtown/

[58] https://www.bcit.ca/programs/technology-management-bachelor-of-technology-part-time-distance-and-online-learning-8350btech/

[59] https://www.bcit.ca/programs/bachelor-of-science-in-applied-computer-science/

[60] https://www.bcit.ca/programs/forensic-investigation-digital-forensics-and-cybersecurity-option-bachelor-of-technology-full-time-part-time-845jbtech/

[61] https://bcstats.shinyapps.io/so_data_viewer/

[62] https://get.adobe.com/reader/

[63] https://www.bcit.ca/files/ir/gp/7540dipma.pdf

[64] https://commons.bcit.ca/news/2020/02/fariba-pacheleh/

[65] https://www.bcit.ca/international-students/

[66] https://www.bcit.ca/financial-aid/

[67] https://secure.bcit.ca/sis/apply/