Agile Development

Associate Certificate Part-time School of Computing and Academic Studies

Overview

The Agile Development program includes data modelling and best practices in business analysis for IT systems design. Gain hands-on experience using Agile, Scrum, Kanban and Lean techniques, online in real time. Agile methods focus on building teams with interpersonal communication skills. This program will prepare you for two certification exams.

Delivery: blended. See details.

About the program

- Learn Agile frameworks and communication skills needed for many aspects of project management, consulting, and development
- Work in small groups, communicate technical system specifications in writing, and practice oral presentations in a team environment
- Develop foundational computer science skills in data modelling, business analysis, and IT systems design
- Focus on Scrum methods to improve efficiency
- Use Kanban to accommodate frequent changes
- Practice Lean development to eliminate waste

See Program Details [1] to learn more.

Agile Development Associate Certificate is for students who

- Enjoy working in small teams and on tight timelines
- Want to embrace Agile Frameworks and methods for incremental and iterative approaches to projects
- Are mature and have prior work and/or post-secondary experience
- Are able to devote 10+ hours per week outside of class to complete homework, reading and assignments for each
 course learn more about workload and attendance expectations in our <u>Computing Flexible Learning Student</u>
 <u>Guide [2]</u>

Please check the Entrance Requirements [3].

What grads can do

- Model business data using Unified Modeling Language (UML) and Enhanced Entity Relationship (EER) diagrams for Business Process Management (BPM)
- Define functional requirements with Use Case Modelling and Workflow Analysis
- Construct a cost benefit analysis to determine the feasibility of a project
- Create and present a business system design with implementation and support documentation
- Use Agile Frameworks and the Scrum methods to improve teamwork and collaboration
- Implement Lean/Kanban techniques to reduce time and costs while focusing on goals with the Dynamic Systems Development Method
- Help their organizations save time and money over traditional methods in a wide range of sectors and environments
- Challenge the Professional Scrum Master™(PSM 1) and Certified Scrum Product Owner® (PSPO1) certification exams.

Start with just one course COMP 1630 [4]

Entrance Requirements

• COMP 1002 [5] or equivalent knowledge

Students are required to use computers and have significant English reading, writing, and speaking skills. Specific prerequisites or equivalent knowledge are required for each course.

The Associate Certificate in Agile Development program is aimed at students with previous post-secondary education and work experience.

This program is not designed for students just out of high school. Those students should consider completing a Computing Diploma or Degree in order to be well-positioned in the job market.

Full-time students who have completed the Computer Systems Technology, CST or the Computer Information Technology, CIT diplomas from BCIT will have (partial credit or advanced standing) in this program including earned credit for <u>COMP 1630 [6]</u>.

Part-time BCIT students who have completed a variety of Computing PTS credentials may have credit for specific courses. Depending on electives chosen in the CST/PTS Diploma, those students may also earn this Agile Associate Certificate simultaneously.

Entrance requirements

Notice to applicants: As part of our ongoing commitment to ensure students are best prepared for their studies, Flexible Learning programs will be adopting English Language Proficiency standards (Categories 1, 2, and 3) as part of their declaration requirements effective April 2025.

Declarations submitted for program intakes beginning **April 1, 2025** or later will be evaluated using the English Language Proficiency (ELP) requirement below.

English language proficiency: <u>Category 2 [7]</u> – English Studies 12 (67%) or equivalent

International applicants

This program is not available to international students. View available programs [8]

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 <u>PDF files [9]</u>.
- 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 2833 [12] before declaring your intent to complete this program.

Scheduled Intakes

Ongoing Flexible Learning (Part-time Studies) intakes: January, April, and September. [13]

Costs & Supplies

All Computing Flexible Learning programs are course-by-course registration. Course tuition and books for this program are around \$3,500 depending on if eBooks are chosen.

Specific textbooks are required for COMP 1630 and COMP 2831, which also have lower-cost eBook options.

Students register and pay for available courses online, by clicking on the green block 'Add to Cart'. Follow the directions to obtain a BCIT student number if you do not already have one.

Note: Please register early to avoid disappointment, our COMP courses are very popular and fill well in advance.

Tuition fees

Flexible Learning (Part-time Studies) tuition is charged on a course-by-course basis. Please see the <u>Flexible Learning</u> Tuition & Fees [14] page for more information.

Courses

Program matrix

Check <u>current availability of courses [15]</u> for this program.

1. Required Courses	:	Credits
COMP 1630 [16]	Relational Database Design and SQL	5.0
COMP 2831 [18]	Business Analysis and Systems Design	4.0
COMP 2833 [20]	Agile Scrum Methods	4.0
COMP 2836 [22]	Agile Product Owner	4.0
2. Complete 1.5 credits from the following list of electives:		Credits
COMP 1288 [24]	IT Project Management Fundamentals	1.5
XCOM 3840 [26]	Technical Presentations	1.5
Total Credits:		18.5

Check <u>current availability of courses [28]</u> 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 <u>Transfer Equivalency Database [29]</u> to find out.

Program Details

This program starts with COMP 1630 in order to introduce students to data modelling, group work and IT systems.

After completing the core courses in Relational Database Design with SQL, plus Business Analysis and Systems Design, students may then complete the **Agile** courses in sequence.

Due to prerequisites and scheduling, it is not possible to fast track this credential in less than one year. Each course in this series has prerequisites.

Students are **not permitted** to register in COMP 2831 or COMP 2833 or COMP 2836 concurrently. These courses build on top of each other sequentially.

- COMP 2831 must be completed prior to COMP 2833.
- COMP 2833 must be completed prior to COMP 2836.
- COMP 2836 is the last course in the program after all other courses have been completed.

COMP 2833 students receive significant preparation to challenge Professional Scrum Master, PSM Certification from Scrum.org for an additional fee.

The foundations of this program include group work, the communication of technical system specifications in writing, and oral presentations in a team environment.

Attendance, group work, and participation in the online components are mandatory.

Computer hardware and Internet requirements

Students must provide a current model PC desktop or laptop with a webcam, microphone and have high-speed internet access. 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 course.

COMP PTS courses may not be offered every term. <u>Please email the department</u> for schedule planning or if you have any questions.

Program length

The time limit to complete the Associate Certificate in Agile Development is three years.

Grading

Students will be given a grade for each course based on the listed competencies. In some cases each course carries a mark for individual work; most courses require teamwork, as well as an individual test. The passing grade for each course in this program is 60%.

Assignments, exams and presentations will be used in the evaluation of students. All assignments must be completed and submitted in order to pass each course.

Program delivery

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

Flexible learning (Part-time studies), course by course delivery in computer labs and classroom on evenings and weekends. COMP courses in this program use a combination of blended learning with face to face and online delivery. Each course has detailed prerequisites, and in most cases, courses in this program cannot be completed concurrently.

Program location

Most COMP courses are offered at the Burnaby and Downtown Campuses. The Agile specific courses, COMP 2833 and 2836, are typically scheduled only at the Downtown Campus.

Courses may be offered at the following locations:

<u>Burnaby Campus [30]</u> 3700 Willingdon Avenue Burnaby, BC

<u>Downtown Campus [31]</u> 555 Seymour Street Vancouver, BC

Online Learning [32]

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.

<u>BCIT Policy 5103 - Student Evaluation [PDF] [33]</u> permits a maximum of three attempts to successfully complete each course within a credential.

Graduating & Jobs

Student satisfaction rate: 94%

*BC Student Outcomes Data Viewer (Data from 2021 to 2023)

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 <u>BC Student Outcomes [34]</u> website.

To view these results, you may need to have the Adobe Acrobat Reader [35] installed in your Web browser.

• Agile Development [36]

Apply for graduation

Upon successful completion of all program requirements, complete an <u>Application for BCIT Credential [PDF] [37]</u> 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

Edward Rubuliak, Chief Instructor
Joanne Atha, Computing PTS Coordinator
Kevin Cudihee, Computing Flexible Learning Program Head
Donna Turner, Associate Dean, BCIT Computing

Advisory committee

This credential was developed by Kevin Cudihee, Program Head for BCIT Computing Flexible Learning, in conjunction with Ed Rubuliak, Chief Instructor.

Agile course concepts and development was led by Ed Rubuliak. Systems Analysis and Database courses were developed and are delivered by Ed Rubuliak, Frank Wegener, Glen Elliott, Pauline Panek, Mark Bacchus and Benjamin Yu.

The Associate Certificate in Agile Development was approved by the BCIT Computing Program Advisory Committee (PAC); the School of Computing and Academic Studies Quality Committee (SQC); the BCIT Vice President Academic; the BCIT Education Council (Edco) and the BCIT Board of Governors (2015).

Students on Limited Timelines

IMPORTANT NOTICE:

Students who require a minimum course load to retain eligibility for financial aid or international student status have no quarantees that all or any Flexible Learning courses will be available in any given term.

Most Flexible Learning courses fill quickly, so space is not guaranteed or courses may be cancelled before the term starts if there is insufficient interest.

This may impact both the number of courses a student is able to take in any term and the time it takes to complete a part-time credential.

As a result, students may not be able to obtain the minimum credits they need or want in each term to continue in the program.

Agile Development was not designed for a full-time delivery model of less than 1 year, students will need a minimum of 3 or 4 part-time terms to complete this program.

Please Note: Most Computing Flexible Learning credentials cannot be fast-tracked due to prerequisites and scheduling.

Flexible Learning courses are enrolment driven and not guaranteed to run every term. Please make allowances for this minimum time requirement in your funding or study permit applications.

Programs and courses are subject to change without notice.

Contact Us

Please contact BCIT Computing Flexible Learning via email.

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/agile-development-associate-certificate-part-time-5530acert/#details
- [2] https://www.bcit.ca/files/cas/computingparttime/pdf/computing_pts_student_quide.pdf
- [3] https://www.bcit.ca/programs/agile-development-associate-certificate-part-time-5530acert/#entry
- [4] https://www.bcit.ca/courses/relational-database-design-and-sql-comp-1630/
- [5] https://www.bcit.ca/study/courses/comp1002
- [6] https://www.bcit.ca/study/courses/comp1630
- [7] https://www.bcit.ca/admission/entrance-requirements/english-language-proficiency/#category2
- [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/agile-scrum-methods-comp-2833/
- [13] https://www.bcit.ca/flexible-learning/part-time-courses-programs/flexible-learning-key-registration-dates/
- [14] https://www.bcit.ca/admission/tuition-fees/flexible-learning/
- [15] https://www.bcit.ca/courses/comp1288,comp1630,comp2831,comp2833,comp2836,xcom3840/
- [16] https://www.bcit.ca/courses/relational-database-design-and-sgl-comp-1630/
- [17] https://www.bcit.ca/outlines/comp1630/
- [18] https://www.bcit.ca/courses/business-analysis-and-systems-design-comp-2831/
- [19] https://www.bcit.ca/outlines/comp2831/
- [20] https://www.bcit.ca/courses/agile-scrum-methods-comp-2833/
- [21] https://www.bcit.ca/outlines/comp2833/
- [22] https://www.bcit.ca/courses/agile-product-owner-comp-2836/
- [23] https://www.bcit.ca/outlines/comp2836/
- [24] https://www.bcit.ca/courses/it-project-management-fundamentals-comp-1288/
- [25] https://www.bcit.ca/outlines/comp1288/
- [26] https://www.bcit.ca/courses/technical-presentations-xcom-3840/
- [27] https://www.bcit.ca/outlines/xcom3840/
- [28] https://www.bcit.ca/courses/comp1288,comp1630,comp2831,comp2833,comp2836,xcom3840/
- [29] https://www.bcit.ca/admission/entrance-requirements/transfer-credit/
- [30] https://www.bcit.ca/about/visit/campuses-directions/burnaby/
- [31] https://www.bcit.ca/about/visit/campuses-directions/downtown/
- [32] https://www.bcit.ca/flexible-learning/distance-online-learning/
- [33] https://www.bcit.ca/files/pdf/policies/5103.pdf
- [34] https://bcstats.shinyapps.io/so_data_viewer/
- [35] https://get.adobe.com/reader/
- [36] https://www.bcit.ca/files/ir/gp/5530acert.pdf
- [37] https://www.bcit.ca/files/records/pdf/appl_4_credential.pdf
- [38] https://www.bcit.ca/international-students/
- [39] https://www.bcit.ca/financial-aid/
- [40] https://secure.bcit.ca/sis/apply/