BCIT GIS - Frequently Asked Questions

Our faculty and staff have compiled a list of frequently asked questions. Please click the link for answers to the following questions. If you have further questions after reviewing our answers, please contact the **GIS program assistant.**

Contents

BCIT and GIS

Where is BCIT? What is it like there?

The GIS program is delivered on BCIT's campus in Burnaby British Columbia which is part of metro Vancouver. Vancouver is consistently named one of the best cities in the world to live, and the surrounding region has outstanding natural beauty, year-round outdoor activities, a temperate climate, and numerous cultural and social events.

Is there a lot of GIS activity in British Columbia and the Metro Vancouver region?

Yes, there are GIS user and professional groups, software and consulting firms, and a diverse GIS industry, including environmental, forestry, geology, utility, and business companies, and municipal/regional/federal government and Indigenous organizations.

What will I be able to do once I have completed the program?

You will be able to use GIS software, hardware and peripheral devices, customize GIS software, develop and design GIS databases, analyze GIS data, write software to convert GIS data formats and write utility programs, use image analysis software and integrate images and other types of GIS information, discuss and use GIS theory to make decisions concerning GIS implementation, manage a GIS, train GIS users, implement and complete a GIS project, compare and discuss GIS software products.

What type of work do the GIS graduates do?

Most GIS graduates are working for either private industry (forestry, GIS vendors, natural resource exploration, real estate, business geographies, computer systems) consulting companies (environmental, engineering, forestry, mapping, scanning, software) or government agencies (municipal, provincial, federal).

The graduates are developing GIS databases, using GIS to analyze data and

predict the result of planned changes, managing GIS projects, planning the acquisition of GIS technology, developing GIS custom systems and training GIS users.

Why choose to study GIS at BCIT?

The BCIT GIS programs are renowned for their intensive workload and technical content. The BCIT GIS courses are developed in consultation with leading employers. Courses do not consist of simple pre- packaged software vendor training but are each uniquely designed to help you learn to solve problems and work independently. The best way to learn something is by doing it. Yes, you will have lectures but most of your time will be spent directly applying what you've learned. Our GIS Advisory Committee provides direct input to curriculum development to ensure that you'll be at the forefront of the latest developments in your industry. BCIT instructors have years of practical expertise and bring an insider's perspective of their industry knowledge and experience that will benefit you in the classroom and after you graduate.

What is the content of the GIS program?

The program starts by covering computer systems, GIS theory and GIS software. This is followed by more advanced GIS theory and software, and related GIS topics such as digital mapping, remote sensing, and database systems. The course concludes with GIS management and acquisition issues. A major GIS project or practicum is undertaken during the second part of the course to help students use all their GIS knowledge and skills and to involve students with the GIS industry.

How did BCIT decide which courses should be in the GIS program?

The courses in the GIS program are selected and designed based on ongoing input from the Program Advisory Committee, government, and the GIS industry. The main goal is to provide students with current relevant skills and knowledge needed in the GIS industry.

Can I take GIS courses without applying to a GIS program?

Yes, you can try our courses that do not have prerequisites (GIST 7010, 7100, 7108, 7111, 7128, 8118) before applying to the Advanced Certificate or ADP or BTech program but you should apply as soon as you have decided to take a program as your admission is not guaranteed.

All Students

What are the options for studying GIS at BCIT?

Advanced Certificate in GIS

- Option 1: over 16 months (e.g., Fall, Winter, Spring, Fall) as a flex (part-time) student with all courses taken online.
- Option 2: over up to four years as a flex (part-time) student with all courses taken online.

Advanced Diploma in GIS (ADP)

- Option 1: over nine months as a full-time student at the BCIT Burnaby Campus
- Option 2: over three years entirely as an online student
- Option 3: over up to five years entirely as an online student

Bachelor of Technology in GIS (BTech)

- Option 1: over two years with the first year as a full-time student at the BCIT Burnaby Campus and the second year as an online student
- Option 2: over four years entirely as an online student
- Option 3: over up to seven years as flex (part-time) student with all courses taken online.

What is the Online GIS program option?

You can complete the entire chosen credential entirely online. This means you never need to attend the BCIT campus. You will complete identical course material and computer practical work as an on-campus student. Each online course is organized in a similar manner: you can use your computer to listen to lectures, connect to the BCIT computer servers, use GIS software and complete GIS software assignments just as you would in a BCIT campus computer lab,

discuss questions with other class members, connect up with your instructor in virtual office hours when the instructor can help with problems and demonstrate software or access your computer to help you. You do not install GIS software on your home computer so you can use a MAC (must be able to run a Windows 10/11 environment), Windows, or UNIX operating system machine.

Why choose to study entirely Online?

You do not live near the BCIT Burnaby (British Columbia, Canada) campus or you have a job and want to study part-time.

What are the differences between the Advanced Certificate, the GIS Advanced Diploma, and the Bachelor of Technology in GIS?

The **Advanced Certificate** in GIS is designed for a person with a full-time career, who needs to add some GIS knowledge to their existing skill set, but not be a major component of their job.
The **Advanced Diploma** is intended for students who already have a degree or diploma and are expecting to use GIS as a major component of their job.
The **BTech** is intended for technology graduates who wish to attain a baccalaureate credential.

The Advanced certificate introduces the GIS technology where the Advanced Diploma goes into technical depth.
The technical content of the ADP and BTech programs is identical although BTech students must select the project course.

The BTech also consists of additional management and Liberal Arts courses and requires six months approved GIS work experience before graduation.

How does the BCIT GIS program differ from a GIS master's degree?

Most GIS master's degrees focus mainly on GI science and theory. At BCIT we provide a tightly structured, comprehensive education and training program in GIS technology, designed to prepare you for a career in GIS.

What qualifications do I need to get in?

All three credentials have the same entry requirements. Please refer to the **Advanced Certificate entrance requirements** or **ADP entrance requirements or BTech entrance requirements** .

Typically, students have a Degree in Geography, Geology, Environmental Science, or Engineering, or a Diploma in Forestry, Survey, Computer Science, Engineering, or Urban Planning. Other backgrounds are also acceptable. For example, past students had degrees or diplomas in such areas as biology, physics, economics, mining, photogrammetry, or archaeology.

I have an associate degree. Do I qualify for entry?

Students with an associate degree may be admitted to the program. Please refer to the **Advanced Certificate entrance requirements** or **ADP entrance requirements or BTech entrance requirements**. Please contact **Program Advising** with admissions related questions.

I don't have a degree or a diploma. Do I qualify for entry?

If you have two years or more of university study from an accredited institution and the credits that you have earned are equivalent to an associate degree, then you may be admitted to the program. Please contact **Program Advising** with admissions related questions.

What computer background do I need?

You must be a competent Personal Computer (PC) user and be able to use Windows operating systems, and 'office' programs (word-processing, spreadsheets), with confidence. You should have at least introductory level programming skills. You do not need to be a 'computer expert' but should have an aptitude for computers, enjoy working with computers and learning computer software. You should be 'web literate' and be able to create simple web pages with an HTML editor.

What are the English language entrance requirements?

Students applying to a GIS program must meet **BCIT's general English language entrance requirements.** Please contact **Program Advising** with admissions related questions.

What do I need to submit for my application?

The application is all online and all documents you need are listed on the **Admission & Registration** Pages.

Is there a January intake?

Full-time students can only start their studies in September each year. Flex (part-time) students can start their studies in September, January, or April of each year. See the suggested schedules section for more details.

Can I get credit for equivalent courses I have completed at University or College?

Yes, if approved by the GIS Department.

Once you have been admitted into the Program you can complete a **Course Credit/Exemption [PDF]** form. You will need to submit supporting documentation, such as a course outline and other documents supporting equivalent course content, for the Department to assess a transfer credit.

How do I do this?

Only courses taken within 5 years and with a B+ (76%) minimum grade will be considered. A 5-year recency requirement is in place for all GIS courses. Often the course outline is not enough. You must provide documentation supporting greater than 80% equivalent material. You should look at the course outline, learning objectives, and schedule and make a table matching your course(s) to BCIT courses. **BCIT course outlines** with schedules and learning

outcomes are online.

You may use one or more courses to match one of the GIST courses, however you may not use one of your courses to request exemption from multiple GIST courses.

Course credit is only assessed once you have been admitted in to one of the GIS programs.

Can I get credit for work experience?

You can apply for a **Prior Learning Assessment & Recognition** (PLAR) for the GIST course(s) in question.

How do I do this?

You should look at the course outline and learning objectives and make a table matching your experience to BCIT courses. **BCIT course outlines** and learning outcomes are online.

You would then submit a request to the department (full-time to the Program Head or flex (part-time) students to the Flex (part-time) Coordinator) detailing why you are eligible (with details and examples) for a PLAR.

Depending on the course and instructor the PLAR could be an exam, a portfolio OR other methods. See the **Prior Learning Assessment & Recognition** website for options:

The PLAR is 50% of the current course fee (subject to change). The PLAR fee is non-refundable regardless of the result. Payment is required prior to processing the assessment.

PLAR is only assessed once you have been admitted in to one of the GIS programs.

How do I choose between a Capstone Project a GIS Project or a GIS Practicum?

Advanced Certificate students must complete a Capstone Project. The Capstone Project is the final course of the credential. In the course the student, with consultation with the course instructor, develops a project plan and completes the capstone project over a single term.

Advanced Diploma students can choose between a project or a practicum.

BTech students must complete a project.

The GIS Project typically involves applied research or development, in consultation with an Industry 'sponsor' the project is completed either at BCIT Burnaby campus or your study location for online students.

The GIS Practicum is workplace placed, where you will be involved with a company's GIS work.

The project or practicum is determined and planned in the GIST 7120 Planning course in the fall term of your final year.

The Project is executed in the GIST 8125 course in the following winter (and or spring) term(s), or the practicum is completed in the GIST 8126 course in the following winter (and or spring) term(s).

The Capstone project is planned and executed in GIST 8150 and the final course of the Advanced Certificate.

You are strongly encouraged to start thinking about project topics or practicum workplaces that interest you.

However, it is not essential to have a project or practicum before coming into the program. The GIS faculty are in contact with industry representatives and

may have some suggested projects and or practicums to assist you. Most students find their own project or practicum after entering the program.

Can I continue if I fail a course?

Yes. You can repeat courses.
BCIT Policy 5103 - Student Evaluation (PDF) permits a maximum of three attempts to successfully complete each course within a credential.

Full-time students may be able to take a distance an online course and your graduation may be delayed. If the failed course is a prerequisite for other courses, you will have to first complete it successfully. However, you may still be able to carry on with other courses.

Program Abandonment

Students approved for a flex (part-time) 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 reapply for a current credential. BCIT cannot guarantee that courses taken prior to this reapplication will be credited towards the current credential.

Full-time Students: ADP or BTech

How many students are in the full-time programs?

The full-time programs have a capacity of 45 students.

Do I have to select courses when registering (like university)?

No, full-time students are automatically registered for all the courses offered in the nine-month academic year.

Flex (part-time) students register on a course-by-course basis. Please refer to **Key Registration Dates Flex (part-time)Studies** web page to ensure you know when registration for each term opens. The part time courses fill fast.

How long will the GIS ADP or BTech take me to complete on a full-time basis?

ADP Students: Nine or ten months. Classes begin in September. If you choose a project or 'gradual' mode practicum, you will complete your course work by the end of May. 'Block' mode practicum students complete at the end of June.

BTech. Degree Students: A minimum of two years. The first year is the same as the full-time ADP as above except that you must take the project option. The second year consists of six online courses (some may have an on-campus option as well) plus acquiring six months of relevant GIS work experience.

How should I prepare for the full-time program?

There are three areas that have been identified by the GIS faculty and industry advisors: computer programming, web site skills and math.

Computer Programming:
Computer programming is emphasized strongly in the BCIT GIS program. Students who arrive unprepared usually find the programming and GIS customization courses a great deal of work, which affects other studies. Regardless of your current abilities and experience, you should develop your skills as much as possible before you start the program. You should know programming concepts and program design before starting GIS studies at BCIT, but you do not have to know any programming language as this is covered in your course work. However, you are encouraged to start learning a programming language. The GIS program covers many programming languages. The primary

language is Python.

Recommended Steps:

Complete a Python tutorial such as the **Non-Programmer's Tutorial for Python**
Instructions for downloading and installing Python are provided.

Web Site Skills

You will be using the Web a great deal. You will also be developing your own web pages in September to present your resume and project. You should learn how to create simple web pages using HTML before you arrive in September.

Recommended Steps:

Complete an HTML tutorial from one of the many available on the web, for example, the **HTML basics** .

Mathematics Skills

We strongly advise you to refresh your skills in basic algebra, trigonometry, statistics, and analytical geometry (e.g., polar and rectangular coordinates, equation of a straight line, distance between two points). You will find this helpful in several courses.

Recommended Steps:

Review your math skills for example from **Purple math** by reading the pertinent preliminary and beginning algebra topics.

What programming courses should I take to prepare for the full-time program?

GIST 7010 which is available online.

Flex (part-time) Students – ADP, BTech, Adv Cert

Can I complete the entire program through online and distance learning?

Yes, all courses are available online.

How long will the GIS program take me to complete on a flex (part-time) basis?

This depends on your educational background and on how many courses you take each semester. It is possible to complete the ADP in three years or the BTech in four years or the Advanced Certificate in 16 months (1.33 years) as a distance and online student.

This Online schedule commits you to at least 30 hours per week of course work between September and the end of June each year and is only suitable for a student with a part-time job. Students who are working full-time should be able to complete the flex (part-time) ADP in four years or BTech in five years or the Advanced Certificate in three years.

When are the flex (part-time) GIS courses offered?
 Please see the section for the specific credential below.

Where is the flex course schedule?

Flex (part-time) students are responsible for planning a course schedule and registering for courses. When reviewing course descriptions, pay special attention to the prerequisites.

Please refer to **Key Registration Dates Flex (part-time)Studies** web page to ensure you know when registration for each term opens. The part time courses fill fast.

Consult with the GIS Flex (part-time) Coordinator for additional advice.

Are there suggested schedules of courses?

Yes. Please see the section for the specific credential below.

Can I get exemption credit for flex (part-time) courses if I take the full-time program later?

Yes, if you have recently (within 5 years) successfully completed the course with a good mark and the course is part of the program.

Can I get credit for flex (part-time) course tuition fees if I take the full-time program later?

No.

Which courses should flex (part-time) students do first?

Generally, you should start with GIST courses numbered at the 7-thousand level. You need to complete most 7-thousand level courses before the 8-thousand level courses. Most students start with GIST 7100 - Fundamentals of GIS to get the GIS theory, GIST 7128 - ArcGIS to get some hands-on GIS software, and GIST 7010 - GIS Programming to start practicing coding which is used in many other courses,

Is there a limit on how many courses a flex (part-time) student can take in a semester?

No - but a limit of two is suggested for those students who are working full-time.

Do I need to have my own computer?

Yes. Windows (preferred), Android, or Mac (running a minimum windows 11 environment, but this is not recommended as per the specs needed below) and with high speed, reliable Internet access. A desktop or laptop computer is required. A tablet or smart phone is not enough. Our GIS program software runs in a Windows environment through a CITRIX interface (AppsAnywhere), so the student needs to know how to work in a Windows environment, minimum Windows 11.

What are the required minimum computer specs?

Network

The **first requirement** is a high speed and extremely stable internet connection. Several courses require live access to data/systems in the cloud e.g. AGOL, AWS, Azure, Google Compute, etc.

VPN

The **second requirement** is the installation of the [BCIT VPN](). The VPN must be up-to-date, configured and working properly. Several core software packages require live access to BCIT on-premises-servers e.g. license servers, a variety of databases and web servers.

Computer OS

There are **not** a lot of choices for OSes as many of the apps run solely on Windows, so the **third requirement** is:

- Windows 11 compiled for x64 AKA 64bit
- Drivers/Hypervisor
  - DirectX 12+
  - OpenGL 4.5+
  - WSL V2
- CPU throttling must be **disabled**; power settings must be set to high performance.

Software requirements

- Microsoft .NET Desktop Runtime 8.0.0 or [higher]()
- [Microsoft Edge WebView2]()

Hardware

Several applications are resource intensive, therefore, the following minimum hardware levels are the **fourth requirement**:

CPU

- x64 instruction set AMD 64 Bit or Intel 64 Bit
- 8+ cores

RAM

- 32+ GB

DISC

- 500 GB
- SSD

GPU

- 6 GB video RAM, delicate (not shared)
- NVIDIA GPU with CUDA compute capability or 6.1 (deep learning functionality)
- Compatible video card: [CUDA GPU Compute Capability | NVIDIA Developer](#)

Further Rationale for this Specification, to run the following products locally:

- ArcGIS Pro
  - Deep learning
- Docker Desktop
  - Various containers
- Apache Spark with Sedona
- QGIS
- VSCode

While working with datasets such as:

- LiDAR
- 20 million rows of observation points

One will need a stable and properly specified system.

Important supporting articles:

CPU Throttling

[How to manage Power Throttling on Windows 10](#)

[How Can You Fix CPU Throttling Issues On Windows - MiniTool](#)

ArcPro

[ArcGIS Pro 3.5 system requirements](#)

[Deep learning in ArcGIS Pro](#)

AutoCAD

[System requirements for AutoCAD 2023 including Specialized Toolsets](#)

Are all courses in the program offered through flex (part-time) studies?

Yes. However, not all courses will be offered every term. See section for typical semester course offerings below.

How do I register for an 8000-level course through flex (part-time) studies?

All 8000-level courses, excluding 8118, require permission from the department. Students must be accepted in a GIS program to receive approval to take 8000-level courses. To get permission, email your request with your Student Number to register for the course to the **GIS program assistant.**

Can flex (part-time) students switch to the full-time program?

Yes. Domestic students please email **Admissions** or international students email **International Admissions**. to request to switch from flex (part-time) to full- time with an application fee waiver. Remember to email early as the full-time programs are often filled early in the year. You will be placed on a wait list if the program is full, and you might have to wait another year.

Courses you completed as a flex (part-time) student will count as credits towards the equivalent full-time course. Tuition is not credited.

If I am at another University and I wish to take a GIS course via the Western Deans' Agreement through Flex (part-time) Studies, how

does that work?

Western Dean's Agreement (WDA) Procedures for BCIT GIS Courses:
- Pre-registration forfeits the use of the fee waiver under the WDA.
- The use of the fee waiver under the WDA is not eligible for GIS online courses. The fee waiver can be applied to the on-campus courses only.
- WDA Students are provisional registrants until there are empty seats in the course.
- Registration will not be processed until two (2) business days prior to course start date.
- WDA Students do not count toward the minimum number of students required to ensure that the course runs.

Flex Students – Advanced Certificate

Can I complete the entire program through online and distance learning?

Yes, all courses are available online.

How long will the GIS Advanced Certificate program take me to complete on a Flex basis?

This depends on your educational background and on how many courses you take each semester. It is possible to complete the ADVANCED CERTIFICATE in 16 months as an online student.
This Online schedule commits you to at least 30 hours per week of course work between September and the end of June each year and is only suitable for a student with a part-time job. Students who are working full-time should be able to complete the Flex ADVANCED CERTIFICATE in three years.

When are the Flex GIS Advanced Certificate courses offered?

See the table below for typical offerings of courses for the Advanced Certificate.

			Fall	Winter	Spring	department approval to register	Prerequisites
Tech	GIST 7128	ArcGIS 1: Introduction	x	x			
	GIST 7100	Fundamentals of GIS	x	x	x		
	GIST 8118	GIS Remote Sensing	x	x	x		
	GIST 8128	ArcGIS 2: Data Management & Analysis	x	x	x	x	7128
	GIST 7160	GIS and Big Data	x	x	x	x	7100 and 7128
	GIST 8140	Mapping and Cartography	x	x			7100
Project	GIST 8150		X	X	X	X	Completion of all courses

PLEASE NOTE: These GIST course offerings are subject to change. Courses

may be canceled due to low enrollment.

Where is the Flex course schedule for the Advanced Certificate?

Flex students are responsible for planning a course schedule and registering for courses. When reviewing course descriptions, pay special attention to the prerequisites.

Please refer to **Key Registration Dates Flex Studies** web page to ensure you know when registration for each term opens. The Flex courses fill fast.

Are there suggested schedules of courses?

Yes. The following tables show sample schedules of studies. Note: all samples start in the fall term.

Part-Time Student: Advanced Certificate four term schedule (16 months)

	Fall	Winter	Spring
Year 1	7100	8118	7160
	7128	8128	8140
Year 2	8150		

wait list: At BCIT Flex courses do not have waitlists. The courses are first register and pay get a seat.

Flex Students – ADP – Advanced Diploma in GIS

Can I complete the entire program through online and distance learning?

Yes, all courses are available online.

How long will the GIS ADP program take me to complete on a Flex basis?

This depends on your educational background and on how many courses you take each semester. It is possible to complete the ADP in two years as a distance and online student.
This Online schedule commits you to at least 30 hours per week of course work between September and the end of June each year and is only suitable for a student with a part-time job. Students who are working full-time should be able to complete the Flex ADP in four years.

When are the Flex GIS ADP courses offered?

See the table below for typical offerings of courses for the ADP.

			Fall	Winter	Spring	department approval to register	Prerequisites
Tech	GIST 7010	GIS Programming 1	x	x	x		
	GIST 7100	Fundamentals of GIS	x	x	x		
	GIST 7108	Fundamentals of Mapping	x		x		
	GIST 7109	Mapping Using Microstation (*equiv to 7111 FTS*)					No longer offered still counts if you have completed
	GIST 7111	CAD for GIS	x	x	x		
	GIST 7128	ArcGIS 1: Introduction	x	x			
	GIST 7130	GIS Computing and the Internet	x		x		Previous programming experience required OR 7010 must be taken concurrently
	GIST 7132	GIS Database Systems 1	x				7010* (* may be taken concurrently)
	GIST 8010	GIS Programming 2		x	x	x	7010
	GIST 8100	Technical Issues in GIS	x	x	x	x	7100 and 7130
	GIST 8106	Spatial Analysis	x		x	x	7010 and 8128
8107 or 8117	GIST 8107	GIS Digital Mapping and Cartography	x	x	x	x	7108
8107 or 8117	GIST 8117	Cartography and GeoVisualization	x	x		x	7108
	GIST 8118	GIS Remote Sensing	x	x	x		
	GIST 8128	ArcGIS 2: Data Management & Analysis	x	x	x	x	7128
	GIST 8132	GIS Database Systems 2		x	x	x	7132
	GIST 8138	ArcGIS 3: Customization and Modelling			x	x	8010* and 8128 (* may be taken concurrently)
Mgmt							
	GIST 8110	Management Issues in GIS			x	x	most tech courses
	GIST 8109	Geospatial Systems Management	x	x		x	7130
AND/OR	TMGT	See website for list of course					
Project							

	GIST 7120	GIS Planning and proposal	x			x - Must be in final year of courses	most tech courses NEW Fall 2023
	GIST 7122	GIS Project/Practicum Proposal (GIST *7122 + TMGT7102 + 7142 = GIST 7120)*	x			x - Must be in final year of courses	Must contact department. and have completed TMGT pre-Fall 2023
	GIST 8125	GIS Project		x	x	x - Must be in final year of courses	7120 and most tech courses the previous fall (or legacy GIST 7122)
OR	GIST 8126	GIS Industry Practicum		x	x	x - Must be in final year of courses	7120 most tech courses the previous fall (or legacy GIST 7122)

PLEASE NOTE: These GIST course offerings are subject to change. Courses may be canceled due to low enrollment.

Where is the Flex ADP course schedule?

Flex students are responsible for planning a course schedule and registering for courses. When reviewing course descriptions, pay special attention to the prerequisites.

Please refer to **Key Registration Dates Flex Studies** web page to ensure you know when registration for each term opens. The Flex courses fill fast.

Consult with the GIS Flex Studies Coordinator for additional advice.

Are there suggested schedules of courses?

Yes. The following tables show sample schedules of studies. Note: all samples start in the fall term.

A four-year schedule ADP

	Fall	Winter	Spring
Year 1	7100	8118	7111
	7128	8128	7108
Year 2	7010	8010	8106
	7132	8132	8117 or 8107
Year 3	7130	8109	8138
		8100	8110
Year 4	7120	8125 or 8126	8125 or 8126

A three-year ADP

	Fall	Winter	Spring
Year 1	7100	8118	7111
	7128	8128	7108
Year 2	7010	8010	8106
	7132	8132	8117 or 8107
Year 3	7130	8109	8138
	7120	8100	8110
		8125 or 8126	8125 or 8126

A two-year ADP

Sample schedule starting September. ***You must contact the department if you are intending to complete your studies with this schedule***. Please note this is a very challenging option. It requires you to be very proactive and register and pay for courses the moment they are offered for registration (courses fill very fast), you must also have all approvals in advance of registration. Taking more than two courses a semester is only recommended if your do not have a full-time job.

	Fall	Winter	Spring
Year 1	7010	8010	7111
	7100	8118	
	7108		8117 or 8107
	7128	8128	8106
Year 2		8100	8110
	7130	8109	8138
	7132	8132	
	7120	8125 or 8126	8125 or 8126

Program changes

For students registered in the program BEFORE the change to GIST 7120 (Fall 2023). If you have one or two of the TMGT you can continue that track. i.e. take the other TMGT and then GIST 7122. GIST 7122 will only be offered on an as needed basis to complete the credential.

wait list: At BCIT Flex courses do not have waitlists. The courses are first register and pay get a seat.

Flex Students – BTech – Bachelor Technology in GIS

Can I complete the entire program through online and distance learning?

Yes, all courses are available online.

How long will the GIS BTech program take me to complete on a Flex basis?

This depends on your educational background and on how many courses you take each semester. It is possible to complete the BTech minimum of three years as a distance and online student.
This Online schedule commits you to at least 30 hours per week of course work between September and the end of June each year and is only suitable for a student with a part-time job. Students who are working full-time should be able to complete the Flex BTech in six years. The credential must be completed within seven years.

When are the Flex GIS BTech courses offered?

See the table below for typical offerings of courses for the BTech.

			Fall	Winter	Spring	department approval to register	Prerequisites/comments
Tech	GIST 7010	GIS Programming 1	x	x	x		
	GIST 7100	Fundamentals of GIS	x	x	x		
	GIST 7108	Fundamentals of Mapping	x		x		
	GIST 7109	Mapping Using Microstation (*equiv to 7111 FTS*)					No longer offered still counts if you have completed
	GIST 7111	CAD for GIS	x	x	x		
	GIST	ArcGIS 1:	x	x			

	7128	Introduction					
	GIST 7130	GIS Computing and the Internet	x		x		Previous programming experience required OR 7010 must be taken concurrently
	GIST 7132	GIS Database Systems 1	x				7010* (* may be taken concurrently)
	GIST 8010	GIS Programming 2		x	x	x	7010
	GIST 8100	Technical Issues in GIS	x	x	x	x	7100 and 7130
	GIST 8106	Spatial Analysis	x		x	x	7010 and 8128
8107 or 8117	GIST 8107	GIS Digital Mapping and Cartography	x	x	x	x	7108
8107 or 8117	GIST 8117	Cartography and GeoVisualization	x	x		x	7108
	GIST 8118	GIS Remote Sensing	x	x	x		
	GIST 8128	ArcGIS 2: Data Management & Analysis	x	x	x	x	7128
	GIST 8132	GIS Database Systems 2		x	x	x	7132
	GIST 8138	ArcGIS 3: Customization and Modelling			x	x	8010* and 8128 (* may be taken concurrently)
Mgmt							
	GIST 8110	Management Issues in GIS			x	x	most tech courses
	GIST 8109	Geospatial Systems Management	x	x		x	7130
AND/OR	TMGT	See website for list of course					
	BUSA 7250	Management Skills and Applications	*	*	*		Mandatory
Project							
	GIST 7120	GIS Planning and proposal	x			x - Must be in final year of courses	most tech courses NEW Fall 2023

	GIST 7122	GIS Project/Practicum Proposal (GIST *7122* + *TMGT7102* + *7142 = GIST 7120*)	x			x - Must be in final year of courses	Must contact department. and have completed TMGT pre-Fall 2023
	GIST 8125	GIS Project		x	x	x - Must be in final year of courses	7120 and most tech courses the previous fall (or legacy GIST 7122)
Liberal Studies							
	LIBS 7001	Critical Reading and Writing	*	*	*		Mandatory
	LIBS 7002	Applied Ethics	*	*	*		Mandatory
	Electives	6 credits see website					
GIS Work experience	6 months						See website for details

PLEASE NOTE: These GIST course offerings are subject to change. Courses may be canceled due to low enrollment.

Where is the Flex BTech course schedule?

Flex students are responsible for planning a course schedule and registering for courses. When reviewing course descriptions, pay special attention to the prerequisites.

Please refer to **Key Registration Dates Flex Studies** web page to ensure you know when registration for each term opens. The Flex courses fill fast.

Are there suggested schedules of courses?

Yes. The following tables show sample schedules of studies. Note: all samples start in the fall term.

A six-year schedule BTech

	Fall	Winter	Spring
Year 1	7100	8118	7111
	7128	8128	7108
Year 2	7010	8010	8106
	7132	8132	8117 or 8107
Year 3	7130	8109	8138
		8100	8110
Year 4	7120	8125	8125
Year 5	BUSA 7205	LIBS 7002	LIBS elective
	LIBS 7001	LIBS Elective	TMGT elective
Year 6	Work experience	Work experience	Work experience

A three-year BTech

Sample schedule starting September. *You must contact the department if you are intending to complete your studies with this schedule*. Please note this is a very challenging option. It requires you to be very proactive and register and pay for courses the moment they are offered for registration (courses fill very fast), you must also have all approvals in advance of registration. Taking more than two courses a semester is only recommended if your do not have a full-time job.

	Fall	Winter	Spring
Year 1	7010	8010	7111
	7100	8118	
	7108		8117 or 8107
	7128	8128	8106
Year 2	7130	8100	8110
	7132	8109	8138
	7120	8125	8125
		8132	
Year 3	BUSA 7205	LIBS 7002	LIBS elective
	LIBS 7001	LIBS Elective	TMGT elective
AND	Work experience	Work experience	Work experience

Program changes

For students registered in the program BEFORE the change to GIST 7120 (Fall 2023). If you have one or two of the TMGT you can continue that track. i.e., take the other TMGT and then GIST 7122. GIST 7122 will only be offered on an as needed basis to complete the credential.

wait list: At BCIT Flex courses do not have waitlists. The courses are first register and pay get a seat.
Consult with the GIS Flex Studies Coordinator for additional advice.