



# Software Development

SCHOOL FOR ADVANCED DIGITAL TECHNOLOGY

## Overview

Our Software Development diploma program equips you with the skills and knowledge needed to become a versatile full-stack developer. No background in software development or engineering is needed.

You will learn to work on front-end and back-end components of software systems, including web, mobile and desktop applications. You'll become a collaborative team player and critical thinker who has what it takes to stay current with industry trends.

As a student, you will:

- develop secure and user-centric software solutions by integrating user requirements effectively
- gain expertise in the software development lifecycle, including designing, modelling, testing and implementing software solutions
- learn to recognize and apply software architectures, design patterns, frameworks and emerging technologies in software development
- make decisions that impact scalability and maintainability
- learn the basics of software development platforms, operating systems and cloud-based infrastructure
- develop troubleshooting skills, essential to diagnose problems and implement effective solutions
- refine your business communication skills and work ethic
- cultivate professionalism, social responsibility and ethical awareness to thrive in the world of technology
- collaborate with stakeholders to complete a project and problem-solve to meet their needs.

Software developers play an integral role in managing and improving business processes, making decisions that shape how users interact with products, interfaces and applications. As a graduate, you will be ready for various career and professional development opportunities.

Job opportunities include junior software developer or programmer, software tester, quality assurance specialist, database administrator, web developer, or desktop support specialist.

Become part of the next generation of software development professionals. With this diploma, you can contribute practical knowledge and business value to the ever-evolving tech landscape.

## Traits, skills and aptitudes

Software developers are innovative, methodical and directive.

You need:

- logical thinking to analyze complex problems and create and verify solutions
- patience and persistence when developing applications
- attention to detail to avoid errors that cost time and money
- the ability to interpret user needs
- possess basic computer literacies, including the ability to use word processing and communication software
- speaking, listening and writing skills
- interpersonal and teamwork skills.

You should enjoy learning new computer languages and programming styles, solving problems creatively, being precise in your work and taking a structured approach to tasks and projects.

## Academic path

The opportunity to advance your education by transferring into this program or gain credit for previous postsecondary courses may be available.

There may also be opportunities to further your education once you graduate.

Learn more about [program and institution transfer options](#).

## Credentials

Upon successful completion of this program, you'll be awarded a SAIT Software Development diploma.

## Practicum, Co-op and Work Integrated Learning

You can complete an optional work term between your first and second year. This work placement includes full-time paid employment.

# Admission requirements

## Applicants educated in Canada

Applicants must demonstrate [English language proficiency](#) and meet the following requirements or equivalents.

- at least 50% in Math 30-1 or 60% in Math 30-2
- at least 55% in English Language Arts 30-1 or 60% in English Language Arts 30-2.

SAIT accepts [high school course equivalents](#) for admission for applicants educated outside Alberta.

## Applicants educated outside of Canada

All applicants who were educated outside of Canada must demonstrate English Language proficiency and provide proof they meet the program admission requirements with an international document assessment. [Find out what educational documents are accepted and assessment options](#).

SAIT may also accept courses completed at certain [international post-secondary institutions](#).

## Costs

### 2024/25 tuition and fees

The following estimated costs are effective as of July 1, 2024.

#### Domestic Students

Year	Number of semesters	Tuition fees	Additional fees	Total per year
1	2	\$9,630	\$1,608	\$11,238
2	2	\$9,630	\$1,608	\$11,238
Total cost:				\$22,476

The estimated total cost of tuition and fees for domestic students is based on the recommended course load per year.

#### International Students

Year	Number of semesters	Tuition fees	Additional fees	Total per year
1	2	\$23,580	\$1,608	\$25,188

Year	Number of semesters	Tuition fees	Additional fees	Total per year
2	2	\$23,580	\$1,608	\$25,188
<b>Total cost:</b>				<b>\$50,376</b>

The estimated total cost of tuition and fees for international students is based on the recommended course load per year.

## Books and Supplies

Books and supplies are approximately \$1,000 per full-time year.

This is a bring-your-own-device program with a power-user computer hardware and software requirement. See the specific requirements on our [computers and laptops page](#).

The recommended hardware and software requirements are:

- Processor: i7
- RAM: 32GB RAM or greater
- Storage: 512 GB SSD or greater
- Video card: onboard integrated
- Screen size: 15" or greater
- Screen resolution: 1920 x 1080 or greater
- OS: Windows 10 Pro 64-bit with antivirus/malware protection

Find your booklist on the [SAIT Bookstore's](#) website. The booklist will be available closer to the program start date. Can't find your program or course? The bookstore didn't receive a textbook list. Contact your program directly to determine if they're still refining course details or if you're in luck; no textbook purchase is required this term.