

# COMPUTER SCIENCE TECHNOLOGY

420.B0



3 YEARS

[www.dawsoncollege.qc.ca/computer-science-technology](http://www.dawsoncollege.qc.ca/computer-science-technology)

## If you would like to:

- Solve new and challenging problems every day
- Feel a builder's pride and satisfaction
- Use your creativity
- Figure out logic games and riddles
- Work in virtually any industry

Then the **Computer Science Technology Program** could be for you.

“ I walked out of this program with hands-on coding experience and strong knowledge of industry-standard concepts. It opened so many doors for me!

— Trevor E.

The Computer Science Technology Program equips students with the most in-demand skills needed for a career in software development or other information technology fields. In our state-of-the-industry labs, your hands-on learning experience will cover web applications, mobile apps, business software, automation tools and machine learning. Dawson's Computer Science teachers pride themselves on incorporating the latest technology in their courses. The program concludes with an internship, which helps launch students into a successful career.

## What will you learn?

- To create state-of-the-art software systems, including web, mobile and cloud-based applications
- To use multiple programming languages in various operating systems
- To develop analytical and problem-solving skills
- To develop algorithmic and logical thinking
- To be resilient and autonomous
- To spark your curiosity and creativity
- To work and collaborate as part of a team

### Where will this program lead you?

A DEC in Computer Science Technology prepares graduates to work in virtually any industry and in a diversity of roles, such as:

- software developer
- web developer (front and back end)
- mobile software developer
- quality assurance tester
- other computer science related careers

The Computer Science Technology Program also prepares students to pursue university studies in programs related to the field, such as Computer Science, Software Engineering and Computer Engineering.

### What do you need to apply?

- A Diploma of Secondary Studies (DES) or academic background judged equivalent to the DES
- Sec IV Mathematics – Technical and Scientific Option or Science Option 564-426 or 565-426 or Sec V Mathematics, Cultural, Social and Technical Option 563-504

### What else should you know?

- You do not need any programming knowledge to begin this program
- You may qualify for paid summer work terms (called a Work-Study Option or *Alternance travail-études*) after your first and second years
- From work stations to servers to cloud, all computers at Dawson College are networked and equipped with the software tools and components regularly used in industry. Most software programs are also available to students for home use.
- Graduates enjoy advanced standing credits for some university programs while other programs may require out-of-program prerequisite courses

### Application Deadline

March 1

### DID YOU KNOW?

Students entering this program are eligible for *Bourses Perspective* scholarships. These \$1,500 scholarships will be awarded to students after each successful full-time term, for a total of \$9,000 for a three-year program.

Information about how to apply can be found online by searching for “Québec Perspective Scholarship Program” in your browser.

## LIST OF SPECIFIC COURSES

All students must also take General Education courses such as English, French, Humanities and Physical Education, in addition to complementary courses.

### YEAR 1

Term 1	Term 3	Term 5
<ul style="list-style-type: none"><li>▪ Programming I – Java I</li><li>▪ Infrastructure I – Computer System Organization</li><li>▪ Web Applications I – HTML5, CSS3 and Javascript</li><li>▪ Administration</li></ul>	<ul style="list-style-type: none"><li>▪ Programming III – Java III</li><li>▪ Web Applications II – Client-side programming</li><li>▪ Database II – Database Programming</li><li>▪ Mathematics II: Linear Algebra</li></ul>	<ul style="list-style-type: none"><li>▪ Programming V – Simulations</li><li>▪ Mobile development – Android</li><li>▪ Web Applications IV – Scalable Web Applications</li><li>▪ Data Communications &amp; Networking</li></ul>
Term 2	Term 4	Term 6
<ul style="list-style-type: none"><li>▪ Programming II – Java II</li><li>▪ Infrastructure II – Linux I</li><li>▪ Database I – Database Theory and SQL</li><li>▪ Mathematics I: Applied Mathematics for Computer Science*</li></ul>	<ul style="list-style-type: none"><li>▪ Programming IV – Individual Project</li><li>▪ Infrastructure III – Linux II</li><li>▪ Web Applications III – Server-side programming</li></ul>	<ul style="list-style-type: none"><li>▪ Web Applications V – Web Development Project</li><li>▪ Infrastructure IV – Systems Delivery and Operations</li><li>▪ Working in the Profession</li><li>▪ Internship in Industry</li></ul>

\*Under certain circumstances, a student may choose to take Calculus I as a substitution