



Computer Science Technology – 420.B0

Preparing the student to enter the workforce and/or continue on to University.

Program Objectives

1. Keep up to date with ever changing technology, including mobile development. Develop applications for connected objects.
2. Contribute to the development of Information Technology Systems and meet the needs of businesses. Analyze, develop, test, document, and integrate applications into systems.
3. Maintain existing software, by making changes, and act as a resource for users.
4. Create and administer web sites, and small networks.
5. Develop transactional Web applications. Provide e-commerce solutions including shopping carts and search engine optimization (SEO)
6. Provide both hardware and software technical support to users.
7. Collaborate on the design of applications and assist with software implementation.

Work Environment

1. The work environment will usually be a business department within enterprises of all sizes.
2. The computing environment will be an enterprise client-server network with database and other servers sharing data, software and hardware with client computers.
3. Quite often, the sixth (final semester) stage/internship leads to employment

Possible jobs

1. Software Developer/Programmer (includes mobile and gaming)
2. Network Administrator
3. Webmaster (programming, administration, e-commerce)
4. Technical support



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Frequently Asked Questions

1) *What are the prerequisites for this program?*

- Secondary 5 Diploma
- Math requirement: "CST 5" OR "TS 4" OR "SN 4"

If you are missing the Math requirement, you can still apply to the program with a letter indicating that you will be taking the Math equivalent at John Abbott or elsewhere during the summer.

Conditional entry upon successful completion of the math course may be granted depending on grade received as well as the number of applicants.

2) *What if I don't have all the prerequisites?*

"Pathways" is a one-year program at John Abbott where students can complete missing prerequisites. Students can also take courses such as English, Humanities and Physical Education to lighten the workload in future semesters.

3) *Is Computer Science a technology program?*

Yes, it is a 3-year technology program. The program prepares students to enter the workforce upon completion of the 3-year DEC. In their final semester, students are placed on a stage/internship (3 days per week, unpaid) which could potentially become full time employment.

4) *How many students apply and how many do you accept?*

Every year the number of applicants varies. However, in the last few years we have received over 100 applications and have accepted 60 of them.

5) *What is the average high school grade of admitted students?*

Every year the average varies. However, the students who were accepted into the Computer Science program had an overall average of at least 75%.

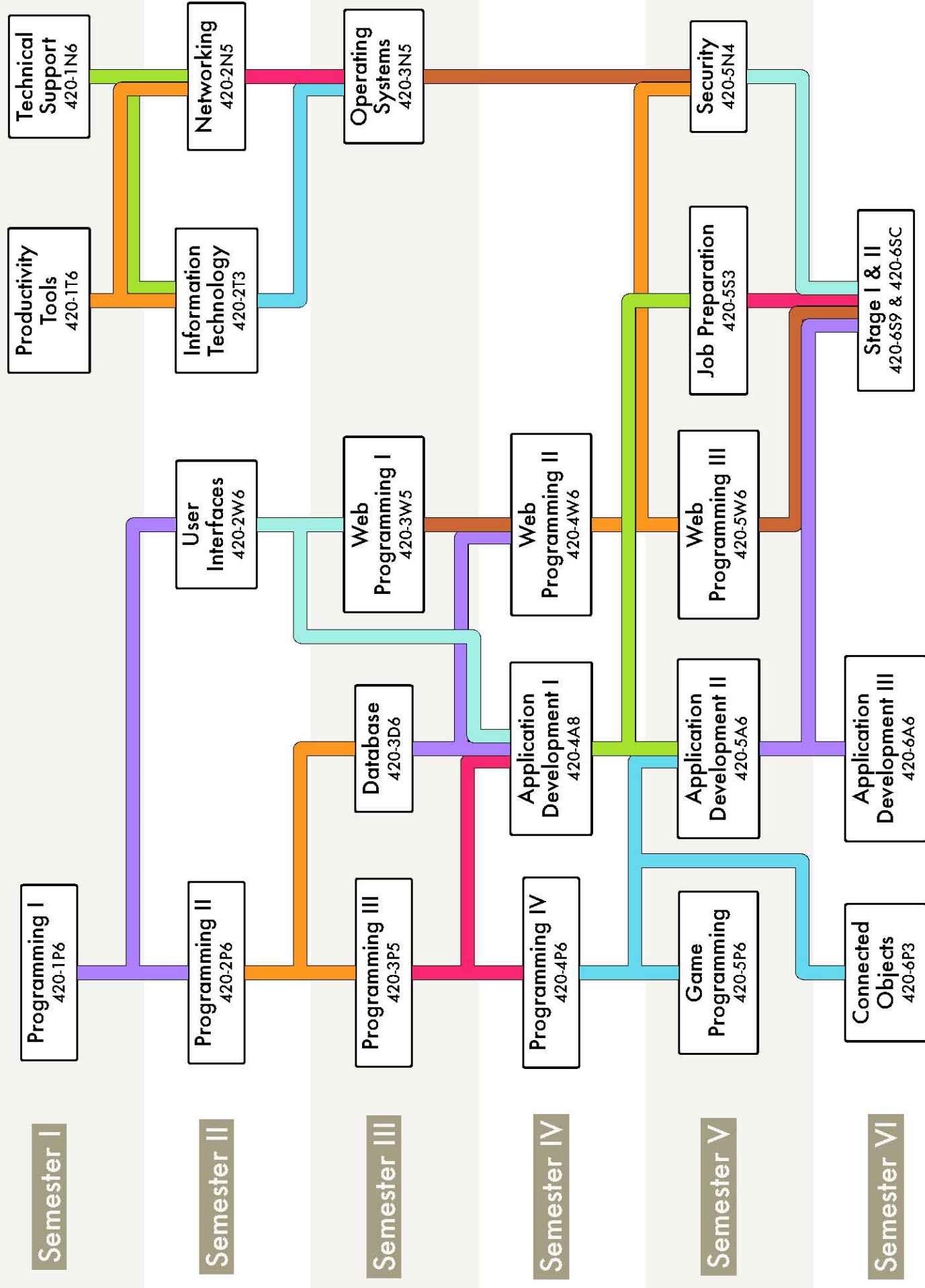
6) *Why take this program instead of the 2-year science program?*

This program takes 3 years instead of the standard 2-year pre-university program. Pre-university programs often involve math, chemistry, physics and biology. If the student has no interest in these courses, the Computer Science program will offer a very strong foundation in programming, database and networking that will give the student a **head start** at university. Also, if for any reason, a student doesn't continue on to university, a Computer Science DEC **prepares the student to enter the workforce**.

7) *Do the graduates get jobs?*

Absolutely. More than 85% of students entering the job market find employment. Often students are faced with the dilemma of having to forfeit a good job in order to go to university. Average starting salaries for new graduates vary between \$19 - \$22/hour. Some employers offered as high as \$60000/year. There are more jobs available than graduates.

John Abbott College - Computer Science Technology (420.B0)





Computer Science Technology – 420.B0

Path to University

The Computer Science program at John Abbott College allows students to pursue university studies. Students can undertake undergraduate studies in Computer Science, Software Engineering, Computer Engineering, Information Technology Engineering or any other program, provided they meet the admission prerequisites. Interested students have the opportunity to undertake mathematics requirements prior to university.

Graduates who have successfully completed these enriched mathematics courses can take advantage of the **DEC-BAC** agreements with:

Concordia University: the Department of Computer Science and Software Engineering give our graduates advanced standing up to **13 credits**.

Bishop's University: graduates are granted up to **27 credits** of advanced standing towards a Bachelor of Science program with a Major in Computer Science or a Bachelor of Arts program with a Major information Technology.

Memorial University: graduates of the program can complete a Bachelor of Technology degree in one academic year. This university program can be completed at their campus or on-line.

The majority of John Abbott College students pursue university studies after their DEC in Computer Science.

How can I undertake math requirements during my studies?

1. **Substitution:** During the 2nd and 3rd semesters students have the option to substitute the 2 complementary courses with math courses.
2. **Winter Intersession:** Students are allowed to take general education courses between the Fall and Winter semesters. For example: completing an English course (60 hours) leaves room to take a math course (75 hours) in the following semester.
3. **Summer School:** Students with the appropriate prerequisites may take a math course. If the course is not offered at John Abbott, it can be taken at any other CEGEP, such as Vanier or Dawson.

Path to University

Computer Science DEC

University Prerequisites
(Minimum at Concordia University)*



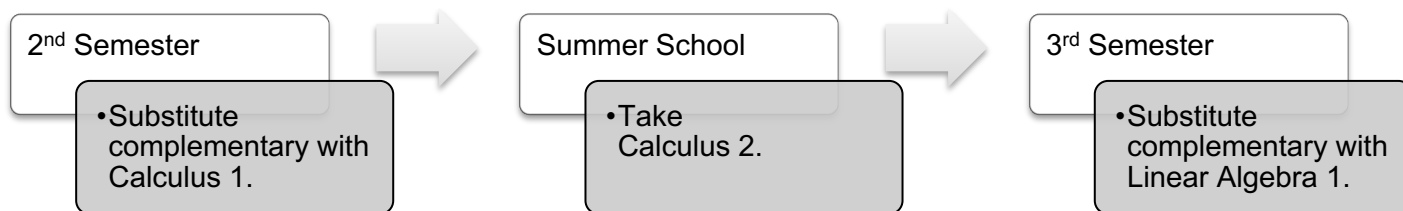
Calculus 1: Science: 201-NYA-05 OR Social Science: 201-103-RE

Calculus 2: Science: 201-NYB-05 OR Social Science: 201-203-RE

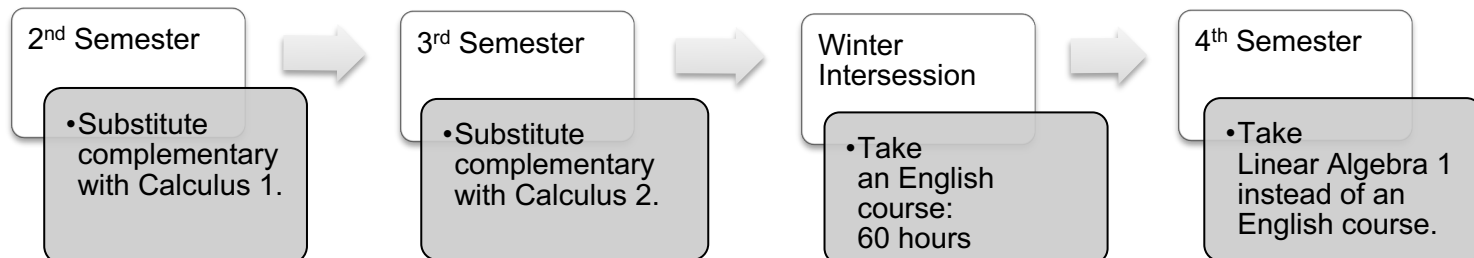
Linear Algebra 1: Science: 201-NYC-05 OR Social Science: 201-105-RE

* <http://www.concordia.ca/academics/undergraduate/computer-science.html>

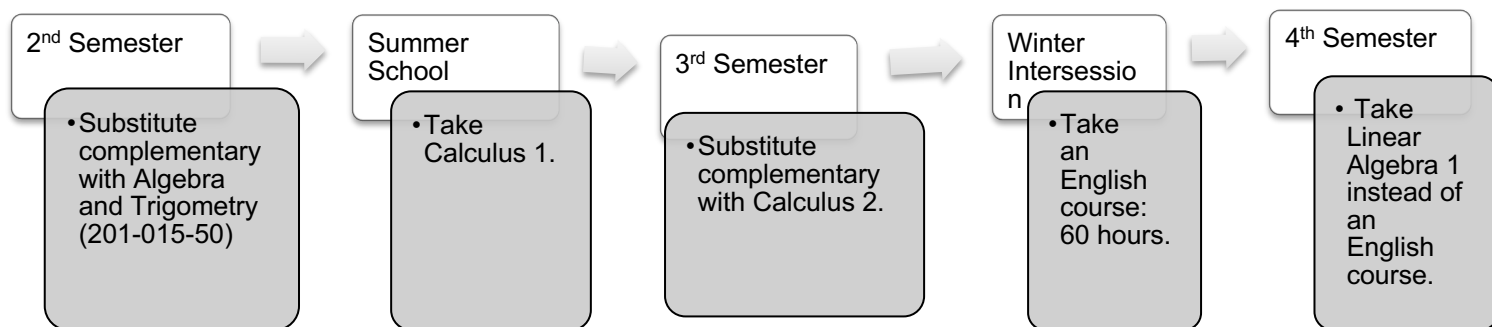
Option A: Student comes in with TS5 OR SN5 Math



Option B: Student comes in with TS5 OR SN5 Math

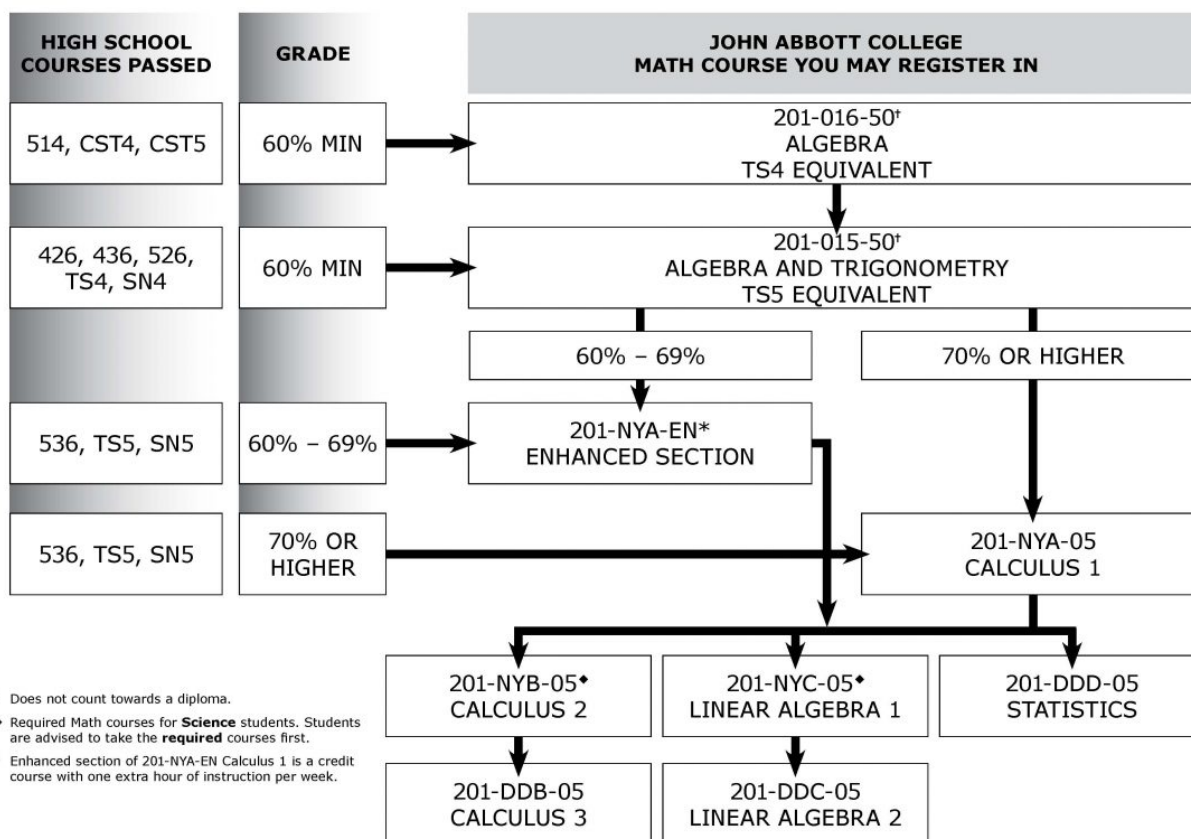


Option C: Student comes in with TS4 OR SN4 Math

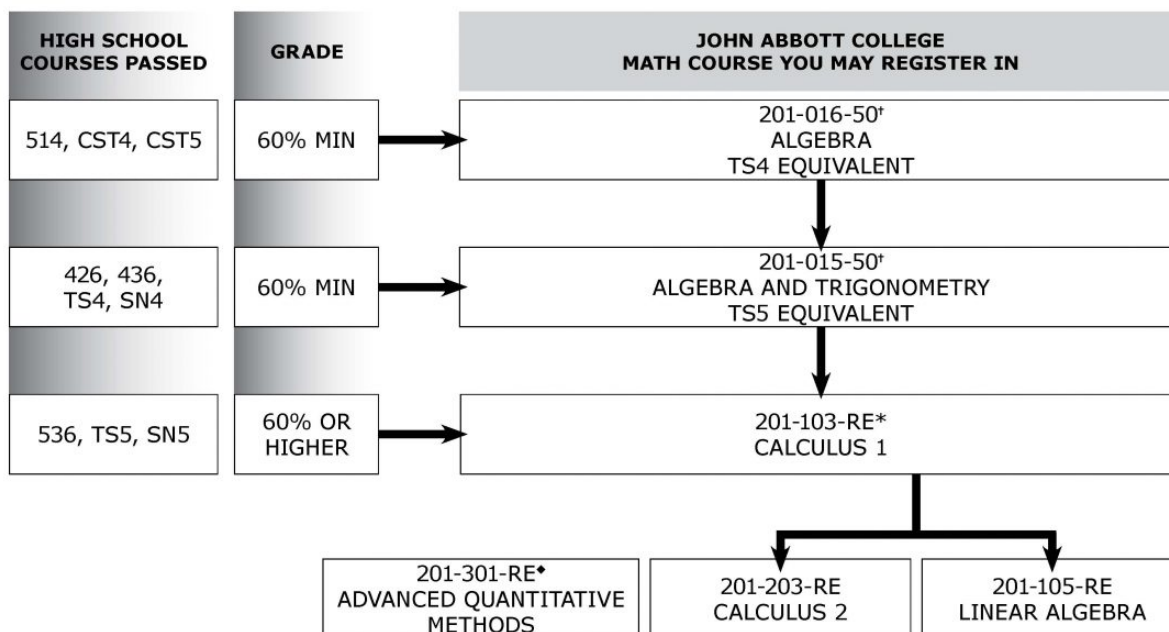


PRE-UNIVERSITY MATHEMATICS SEQUENCE CHART

FOR SCIENCE STUDENTS



FOR SOCIAL SCIENCE & COMMERCE STUDENTS



Course abbreviation	Course title	High school course number
CST4	Cultural, Social and Technical Mathematics	Sec IV
CST5	Cultural, Social and Technical Mathematics	Sec V
TS4	Technical and Scientific Mathematics	Sec IV
TS5	Technical and Scientific Mathematics	Sec V
SN4	Science Mathematics Option	Sec IV
SN5	Science Mathematics Option	Sec V

[†] Does not count towards a diploma.

[♦] This course is recommended for BA Psychology programs in Quebec universities. 360-300-RE Quantitative Methods is a prerequisite.

^{*} Students may be placed in an enhanced section of Calculus 1 with an extra hour of instructions per week. This is a credit course.