

FOR APPROVAL

PUBLIC

OPEN SESSION

TO: UTSC Academic Affairs Committee

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DATE: April 22, 2026 for April 29, 2026

AGENDA ITEM: 7

ITEM IDENTIFICATION:

Major Modification: Repointing of Identified Programs Currently Leading to the Honours Bachelor of Science Degree to the New Bachelor of Computer Science Degree, UTSC (for approval)

JURISDICTIONAL INFORMATION:

The UTSC Academic Affairs Committee (AAC) “is concerned with matters affecting the teaching, learning, and research functions of the campus (AAC *Terms of Reference*, Section 4).” Under Section 5.6 of its *Terms of Reference*, the AAC is responsible for the approval of “major and minor modifications to existing degree programs.”

The AAC has responsibility for the approval of major and minor modifications to existing programs as defined by the [University of Toronto Quality Assurance Process](#) (UTQAP, Sections 3.1 and 3.3).

GOVERNANCE PATH:

1. UTSC Academic Affairs Committee [For Approval] (April 29, 2026)

PREVIOUS ACTION TAKEN:

No previous action in governance has been taken on this item.

HIGHLIGHTS:

The Department of Computer and Mathematical Sciences proposes to repoint its existing Specialist and Major programs in Computer Science to the Bachelor of Computer Science (BCS), a new four-year Honours undergraduate degree to be conferred by the University of Toronto (subject to confirmation by the Executive Committee following approval through University governance).

A new Artificial Intelligence and Machine Learning stream within the existing Specialist and Specialist (Co-op) in Computer Science, with an anticipated start date of September 2026, is being advanced through a separate major modification proposal; it will also be repointed from the Honours Bachelor of Science to the BCS.

The proposed repointing reflects the evolution of computer science as a discipline, including areas such as machine learning, quantum computing, cybersecurity, health informatics, data privacy, and the ethical implications of emerging technologies. It also signals to students, graduate programs, and employers that graduates have acquired both depth and breadth in computer science, reflecting the scope and complexity of the discipline today.

No changes are proposed to the structure, curriculum, enrolment plans, resources, tuition, or grant funding associated with the identified programs as a result of this proposal.

The development of this proposal has benefited from extensive consultation, including tri-campus working group discussions with representatives from the Faculty of Arts & Science, the University of Toronto Mississauga and UTSC; student surveys; departmental consultations; and circulation of materials to the Chairs Council and the Scarborough Campus Students' Union.

The identified programs will be repointed effective September 1, 2027. The identified programs will be repointed effective September 1, 2027. Coordination is underway, led by the Department of Computer and Mathematical Sciences in collaboration with the Office of the Registrar, the Dean's Office, and the Academic Advising & Career Centre, to support implementation, including student communications and advising, as well as admissions and student recruitment. Coordination also includes alignment with tri-campus partners on shared elements of implementation and communications.

FINANCIAL IMPLICATIONS:

There are no significant financial implications to the campus operating budget.

RECOMMENDATION:

Be It Resolved,

Subject to approval of the proposed new Bachelor of Computer Science (BCS) by the Executive Committee,

THAT the repointing of the identified programs in the Department of Computer Science and Mathematical Sciences, UTSC, from the Honours Bachelor of Science (HBSc) to the Bachelor of Computer Science (BCS), as described in the attached proposal, be approved effective September 1, 2027.

DOCUMENTATION PROVIDED:

1. Proposal - Major Modification to Repoint Identified Programs Currently Leading to the Honours Bachelor of Science to the new Bachelor of Computer Science Degree, Department of Computer and Mathematical Sciences (April 9, 2026)



University of Toronto

Major Modification Proposal: Significant Modifications to Existing Undergraduate and Graduate Programs

Program being modified: Please specify what program and which components of that are being modified; e.g., Specialist in History; Master of Environmental Science	• Specialist in Computer Science ○ Comprehensive Stream ○ Information Systems Stream ○ Software Engineering Stream ○ Entrepreneurship Stream ○ Artificial Intelligence and Machine Learning Stream (pending approval; anticipated start date is September 2026) • Specialist (Co-operative) in Computer Science ○ Comprehensive Stream ○ Information Systems Stream ○ Software Engineering Stream ○ Entrepreneurship Stream ○ Artificial Intelligence and Machine Learning Stream (pending approval; anticipated start date is September 2026) • Major in Computer Science • Major (Co-operative) in Computer Science
Program of Study Code(s):	• Specialist and Specialist (Co-operative) in Computer Science ○ Comprehensive Stream (SCSPE0510) & Co-op (SCSPE0510C) ○ Information Systems Stream (SCSPE0455) & Co-op (SCSPE0455C)

	○ Software Engineering Stream (SCSPE0795) & Co-op (SCSPE0795C) ○ Entrepreneurship Stream (SCSPE0805) & Co-op (SCSPE0805C) ○ Artificial Intelligence and Machine Learning Stream & Co-op (no Program of Study code yet as these two streams are currently in development through a separate proposal and have yet to proceed through governance) • Major in Computer Science (SCMAJ1688) & Major (Co-op) in Computer Science (SCMAJ1688C)
Proposed major modification:	The identified programs, which currently lead to the Honours Bachelor of Science degree, are being repointed to the new Bachelor of Computer Science (BCS) degree. NOTE: this change is pending approval of a proposal being brought forward to University governance in the 2025-26 governance year, from the Faculty of Arts and Science, University of Toronto Mississauga, and UTSC, to introduce the BCS as a degree that is conferred by the University of Toronto
Department/unit (if applicable):	Department of Computer and Mathematical Sciences
Faculty/division:	University of Toronto Scarborough
Dean's office contact:	Maggie Cummings, Special Advisor on Academic Programming & Curriculum Development (saprogramming.uts@utoronto.ca) Kevin Mak, Manager, Academic Program Reviews & Quality Assurance (kevin.mak@utoronto.ca)
Proponent:	Michael Molloy, Interim Chair, Department of Computer and Mathematical Sciences (michael.molloy@utoronto.ca)
Version date: Please update as you edit this proposal.	April 9, 2026

Framework for UTQAP Major Modifications

The [University of Toronto Quality Assurance Process](#) (UTQAP) supports a structured approach for creating, reflecting on, assessing and developing plans to change and improve academic programs and units in the context of institutional and divisional commitments and priorities.

The University of Toronto (U of T), in its [Statement of Institutional Purpose](#) (1992), articulates its mission as a commitment "to being an internationally significant research university, with undergraduate, graduate, and professional programs of excellent quality." Thus "quality assurance through assessment of new program proposals and review of academic programs and units in which they reside is a priority for the University...."

The quality of the scholarship of the faculty, and the degree to which that scholarship is brought to bear in teaching are the foundations of academic excellence. More generally, all of the factors that contribute to collegial and scholarly life — academic and administrative complement, research and scholarly activity, infrastructure, governance, etc. — bear on the quality of academic programs and the broad educational experience of students. ([Policy for Approval and Review of Academic Programs and Units](#) (2010))

The University's approach to quality assurance is built on two primary indicators of academic excellence: the quality of the scholarship and research of faculty; and the success with which that scholarship and research is brought to bear on the achievement of Degree Level Expectations. These indicators are assessed by determining how our scholarship, research and programs compare to those of our international peer institutions and how well our programs meet their Degree Level Expectations.

The University of Toronto embraces academic change as a critical part of maintaining and enhancing programs of outstanding quality through a process of continuous improvement. Proposals for major modifications are vehicles of academic change.

Major Modification Proposal

A major modification to an existing program is a restructuring of a program, a merger of or the creation of new elements within existing programs, or a renewal of a program in order to keep it current with its academic discipline or improve student academic experience.

This template should be used to bring forward all proposals for major modifications to **existing** undergraduate and graduate programs for governance approval under the [University of Toronto Quality Assurance Process](#) (UTQAP). In cases where it is unclear whether a proposed change in a program is a new program, a major modification, or a minor modification, a determination will be made by the Vice-Provost, Academic Programs in consultation with the divisional Dean and the academic unit.

This template aligns with UTQAP requirements and will help to ensure that all evaluation criteria established by the Quality Council are addressed in bringing forward a proposal. Divisions may have additional requirements that should be integrated into the proposal. Examples of major modifications are provided in [UTQAP 3.1](#). See the [VPAP website](#) for more information on major modifications.

Development and Approval Steps	Date (e.g., of final sign off, governance meeting, inclusion in reports)
Dean's office sign-off	January 23, 2026
VPAP sign-off	February 20, 2026
Unit-level approval (if required)	January 6, 2026 (for the new Bachelor of Computer Science degree proposal)
Faculty/divisional governance	April 29, 2026 UTSC Academic Affairs Committee
Faculty/division submits final proposal to VPAP	[date]
Included in Major Modification Report to AP&P	[date]
Included in Major Modification Report to Quality Council	[date]

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1 Executive Summary

Please provide a brief summary of the change(s) being proposed.

Response:

The Faculty of Arts & Science (A&S), the University of Toronto Mississauga (UTM), and the University of Toronto Scarborough (UTSC) have brought forward a separate proposal, in this governance year, to introduce the **Bachelor of Computer Science (BCS) degree** as a new four-year Honours undergraduate degree to be conferred by the University of Toronto. Pending approval of the new degree by University governance, through this proposal we will be **repointing the existing Specialist and Major programs in Computer Science, offered by the Department of Computer and Mathematical Sciences (CMS)** in the University of Toronto Scarborough to the new degree. These programs (and their streams), which currently point to the Honours Bachelor of Science (HBS), are:

- Specialist in Computer Science
 - Comprehensive Stream (SCSPE0510)

- Information Systems Stream (SCSPE0455)
 - Software Engineering Stream (SCSPE0795)
 - Entrepreneurship Stream (SCSPE0805)
- Specialist (Co-operative) in Computer Science
 - Comprehensive Stream (SCSPE0510C)
 - Information Systems Stream (SCSPE0455C)
 - Software Engineering Stream (SCSPE0795C)
 - Entrepreneurship Stream (SCSPE0805C)
- Major in Computer Science (SCMAJ1688)
- Major (Co-op) in Computer Science (SCMAJ1688C)

A new stream in Artificial Intelligence and Machine Learning within the existing Specialist and Specialist (Co-op) in Computer Science, with an anticipated start date of September 2026, is being brought forward through a separate major modification proposal in this governance year; it too will be repointed from the Honours Bachelor of Science to the new BCS degree.

The repointing will take effect on September 1, 2027. The changes to the programs and streams will first be captured in the 2027-28 UTSC Academic Calendar, in which the programs and streams will be indicated as “(Bachelor of Computer Science)” programs, rather than “(Science)” programs, pointing to the HBSc.

As discussed in the proposal to introduce the new degree to the University of Toronto, the BCS reflects how the discipline of computer science has greatly expanded over the last 60 years to include new areas of study including machine learning, quantum computing, cybersecurity, health informatics, data privacy, and ethical concerns of the new technologies. Given the growth and evolution of computer science, the HBSc no longer communicates accurately the depth and breadth of computer science training that students at UTSC receive. Students now acquire deep technical knowledge and tremendous breadth within computer science that they can leverage across industries and contribute meaningfully to the creation of technological innovation. Repointing the identified programs in this proposal to the BCS degree responds to evolution of the discipline of computer science, recognizes expertise in the discipline, and keeps UTSC and U of T at the leading edge of the discipline.

No other changes are being made to the existing programs (or their streams) as a result of this proposal. This includes no changes being made to the programs’ learning objectives, program level learning outcomes (PLOs), structure/design, admissions criteria or enrolment

requirements, methods of assessment, program mode of delivery, experiential learning opportunities, faculty supporting the program, staff support, infrastructure including academic home, space or equipment, or resources required for ongoing academic support (e.g., library, academic advising, etc.), as a result of this proposal.

There will be no changes to existing **enrolment** plans of UTSC or the identified programs as a result of this proposal. Admission caps, which define the flow of students into the identified programs being repointed to the BCS, will not change. Hence the anticipated number of students that will be awarded the new degree corresponds to current trends in total program enrolment and graduation numbers.

There will be no changes to resources required to support the identified programs, as they will be unchanged by this proposal. Resources that will be deployed in the implementation and startup phases will be provided by the Department of Computer and Mathematical Sciences, in collaboration with the Office of the Registrar and the Dean's Office.

Tri-campus meetings have been held since March 2026 to coordinate communications related to admissions and student recruitment, Academic Calendar content for 2026-27 and 2027-28, and overall implementation. In addition, the Dean's Office met with the Department of Computer and Mathematical Sciences in early April to provide context and gather input on tri-campus alignment for student communications.

2 Effective Date

Please indicate when students may first be enrolled in the changed program or new option. If creating something new within a program, please state when the new option will first be reviewed and through which unit.

Response:

The programs are to be repointed effective September 1, 2027.

The repointing of the identified programs (and their streams) will first be captured in the 2027-28 UTSC Academic Calendar (anticipated release date is May 2027). The first date that students completing the identified programs in this proposal will first graduate with the Bachelor of Computer Science degree is June 2028.

There will be a transition period for in-progress students who were admitted to UTSC and the identified programs before September 1, 2027. During the transition period:

- Students in any of the Specialist programs being repointed to the new degree will be able to choose to graduate with either the Honours Bachelor of Science (HBSc) or the new BCS degree.
- Students in any of the Major programs being repointed to the new degree will be able to choose to graduate with the Honours Bachelor of Arts (HBA), the Honours Bachelor of Science (HBSc) or the new BCS degree.

However, students who are newly admitted to UTSC for September 2027 onward, who enrol in any of the identified programs will graduate with the new degree (BCS). Students who combine one Major in Computer Science, with one Major in the Arts or Sciences may be eligible to receive either an HBA or HBSc rather than the BCS, in accordance with the BCS Degree Requirements (see Appendix D for a full explanation of program combinations and associated degree options).

Detailed transition plans are outlined in **Section 6** (Impact of Change).

3 Current Calendar Copy with Changes Tracked or Highlighted

Insert calendar copy, including the program description, with all changes tracked or highlighted.

Response:

The programs' admission and completion requirements are not changing as a result of this proposal, however a few minor editorial adjustments have been made to ensure consistent language. These changes respond to the proposed introduction of a new stream in Artificial Intelligence and Machine Learning within the existing Specialist and Specialist (Co-op) in Computer Science, which is currently being developed through a separate major modification proposal, and is being brought forward for approval in this governance year.

Currently, the following programs and streams are indicated as "Science" programs in the UTSC Academic Calendar, in this format:

- SPECIALIST PROGRAM IN COMPUTER SCIENCE - Comprehensive Stream (SCIENCE) - SCSPE0510
- SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Comprehensive Stream (SCIENCE) - SCSPE0510C
- SPECIALIST PROGRAM IN COMPUTER SCIENCE - Entrepreneurship Stream (SCIENCE) - SCSPE0805
- SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Entrepreneurship Stream (SCIENCE) - SCSPE0805C
- SPECIALIST PROGRAM IN COMPUTER SCIENCE - Information Systems Stream (SCIENCE) - SCSPE0455
- SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Information Systems Stream (SCIENCE) - SCSPE0455C
- SPECIALIST PROGRAM IN COMPUTER SCIENCE - Software Engineering Stream (SCIENCE) - SCSPE0795
- SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Software Engineering Stream (SCIENCE) - SCSPE0795C
- MAJOR PROGRAM IN COMPUTER SCIENCE (SCIENCE) - SCMAJ1688
- MAJOR (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE (SCIENCE) - SCMAJ1688C

Following approval of this proposal, effective 2027-28, the programs will be listed in this format in the UTSC Academic Calendar:

- SPECIALIST PROGRAM IN COMPUTER SCIENCE - Artificial Intelligence and Machine Learning Stream (BACHELOR OF COMPUTER SCIENCE) - POST code to be confirmed
- SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE – Artificial Intelligence and Machine Learning Stream (BACHELOR OF COMPUTER SCIENCE) - POST code to be confirmed
- SPECIALIST PROGRAM IN COMPUTER SCIENCE - Comprehensive Stream (BACHELOR OF COMPUTER SCIENCE) - SCSPE0510
- SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Comprehensive Stream (BACHELOR OF COMPUTER SCIENCE) - SCSPE0510C
- SPECIALIST PROGRAM IN COMPUTER SCIENCE - Entrepreneurship Stream (BACHELOR OF COMPUTER SCIENCE) - SCSPE0805
- SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Entrepreneurship Stream (BACHELOR OF COMPUTER SCIENCE) - SCSPE0805C

- SPECIALIST PROGRAM IN COMPUTER SCIENCE - Information Systems Stream (BACHELOR OF COMPUTER SCIENCE) - SCSPE0455
- SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Information Systems Stream (BACHELOR OF COMPUTER SCIENCE) - SCSPE0455C
- SPECIALIST PROGRAM IN COMPUTER SCIENCE - Software Engineering Stream (BACHELOR OF COMPUTER SCIENCE) - SCSPE0795
- SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Software Engineering Stream (BACHELOR OF COMPUTER SCIENCE) - SCSPE0795C
- MAJOR PROGRAM IN COMPUTER SCIENCE (BACHELOR OF COMPUTER SCIENCE) - SCMAJ1688
- MAJOR (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE (BACHELOR OF COMPUTER SCIENCE) - SCMAJ1688C

Full Calendar entries for the Specialist and Specialist (Co-op) streams, and the Major and Major (Co-op) programs (excluding the new Artificial Intelligence and Machine Learning stream, which is being proposed through a separate major modification that will be brought forward to governance for approval in this governance year), along with all editorial changes, are included in Appendix A.

4 Academic Rationale and Program Objectives

4.1 Program Objectives

- a) State the program's objectives.

Response:

There are **no changes** to the programs' objectives for any of the identified programs as a result of this proposal.

4.2 Academic Rationale

In a **single** response, please describe the academic rationale for the proposed changes, referring to the calendar copy above, and considering the changes relative to the criteria below.

- b) Discuss consistency of the program's [objectives](#) with the institution's [mission](#) and U of T's/the division's/unit's [academic plans](#), [priorities](#) and commitments, including consistency with any implementation plans developed following a previous review.
- c) Appropriateness of degree or diploma nomenclature given the program's objectives
- d) Evidence that the following have been substantially considered in the context of developing the changes to the program and its associated resources:
 - 1. [Universal design principles](#) and/or the potential need to provide mental or physical disability-related accommodations, reflecting the University's [Statement of Commitment Regarding Persons with Disabilities](#).
 - 2. Support for student well-being and sense of community in the learning and teaching environment, reflecting the work of the [Expert Panel on Undergraduate Student Educational Experience](#) and the commitment to establishing a Culture of Caring and Excellence as recommended by the Presidential and [Provostial Task Force on Student Mental Health](#).
 - 3. Opportunities for removing barriers to access and increasing retention rates for Indigenous students; for integrating Indigenous content into the curriculum in consultation with Indigenous curriculum developers; and for addressing any discipline-specific calls to action, reflecting the commitments made in [Answering the Call: Wecheehetowin: Final Report of the Steering Committee for the University of Toronto Response to the Truth and Reconciliation Commission of Canada](#).
 - 4. Opportunities for removing barriers to access and increasing retention rates for Black students; for promoting intersectional Black flourishing, fostering inclusive excellence and enabling mutuality in teaching and learning, reflecting the commitments made in the [Scarborough Charter](#) and consistent with the recommendations of the [Anti-Black Racism Task Force Final Report](#).
 - 5. Opportunities for fostering an equitable, diverse, and inclusive teaching and learning environment, reflecting the values articulated in existing institutional documents such as the [Statement on Equity, Diversity, and Excellence](#), the [Antisemitism Working Group Final Report](#), the aforementioned reports, and future institutional reports related to equity, diversity and inclusion.
- e) If appropriate, please discuss unique curriculum or program innovations, creative components, significant high impact practices related to the proposed change.
- f) Provide a statement on the way in which the proposed major modification will improve the student experience (required).

Response:

In a separate but related proposal, the Faculty of Arts & Science (A&S), the University of Toronto Mississauga (UTM), and the University of Toronto Scarborough (UTSC) are proposing to introduce the Bachelor of Computer Science degree as a new four-year honours undergraduate degree that is conferred by the University of Toronto.

Pending approval of the proposal to introduce the BCS, and through this proposal, the Specialist and Specialist (Co-op) in Computer Science (and their streams; including the new stream in Artificial Intelligence and Machine Learning that is being proposed through a separate major modification that will be brought forward for approval in this governance year), and the Major and Major (Co-op) in Computer Science, offered by UTSC, which currently point to the Honours Bachelor of Science (HBSc), are being repointed to the BCS.

The discipline of computer science encompasses both the theory and practice of computing, including hardware and software development, computing systems, algorithms, and artificial intelligence. It prepares students to design and analyze systems, reason about computational problems, and engage with emerging technologies. In the broadest sense, Computer Science is concerned with the study of computation and applications of computing and its development has been stimulated by collaborations across the disciplines.

While a relatively young field, Computer Science has expanded rapidly in depth and breadth over the past 60 years as both technology and applications have evolved. Early applications of computing focused on their ability to perform robust mathematical calculations and data processing (being less error-prone than humans), for example with codebreaking, physics simulations, weather forecasting, and ballistics. As technology advanced, there was an explosion of computation in both everyday lives and industry. Personal computers (and later, devices like smartphones and virtual reality) changed how people interact with computing devices, which caused the field to evolve to consider how people interact with technology, how to design efficient algorithms for everyday use, and how to design software for various forms of hardware. The creation of the Internet was also transformative in allowing new forms of communication across distances, opening new forms of commerce and entertainment, and posing new challenges (e.g., with computer systems to handle the vast volume of Internet traffic; with cybersecurity).

The history of computer science education at the University of Toronto mirrors the evolution of the field. The Arts & Science Calendar entry for Computer Science from 1971 emphasized the

application of computer science to other disciplines: “computers are being used in a wide variety of areas, and students often study computing primarily in order to use computer techniques in their own specialties.” The roster of courses was small and the scope narrow, with a strong emphasis on the mathematical foundations of the field. At UTM and UTSC at this time, courses in computer science were offered by the mathematics department. UTSC offered three such courses – an introduction to computing, problem solving with computers, and programming languages and their applications. UTM also offered three courses – computer programming; programming languages and applications; and computer organization and assembly – language programming.

Today, the discipline has greatly expanded to include new areas including machine learning, quantum computing, cybersecurity, health informatics, data privacy, and ethical concerns of the new technologies. The array of courses in the field of computer science at the University of Toronto Scarborough (UTSC) reflects this seismic transformation. At UTSC, the Department of Computer and Mathematical Sciences (CMS) offers 40 distinct courses ranging from the foundational building blocks, such as theory of computation, computer organization, data structures, databases and web applications, software design, and software tools and systems programming, to an extensive selection of more advanced courses in areas including programming on the web, human-computer interaction, machine learning and data mining, computational complexity, algorithm design, robotics and automated systems, blockchains, network security, innovation and entrepreneurship, and artificial intelligence.

Current programs also illustrate the tremendous scope of the computer science discipline. CMS offers four tailored streams in computer science – a comprehensive stream, software engineering, entrepreneurship, and information systems, and is developing a fifth stream that focuses on artificial intelligence and machine learning.

Currently at U of T, the degree that recognizes program students’ expertise in this field is the Honours Bachelor of Science. However, given the growth and evolution of the discipline of computer science, the Honours Bachelor of Science no longer communicates accurately the depth and breadth of computer science training that students receive.

The Bachelor of Computer Science is the appropriate degree for the identified programs to point to because it signals to students, graduate schools, employers, and other stakeholders that its recipients have acquired a great depth of education in Computer Science that is far beyond its nascent curricula, which focused on “learning to code” as it applied to advancing

research in other disciplines. Students now acquire deep technical knowledge and tremendous breadth within computer science that they can leverage across industries and contribute meaningfully to the creation of technological innovation. Repointing the identified programs (and their streams) in this proposal to the new Bachelor of Computer Science degree therefore responds to evolution of the discipline of computer science, recognizes expertise in the discipline, and keeps UTSC and U of T at the leading edge of it.

The programs (and streams) identified in this proposal are being repointed to the BCS degree based on the following characteristics:

- They all provide sufficient breadth and depth in computing. As such, the Minor in Computer Science is not included in the proposal since it does not provide the same levels of depth and breadth of learning.
- They all result in students being able to:
 - acquire a strong foundation in core areas of computer science, including but not restricted to theory, systems and software engineering, algorithms and data structures, and applications.
 - master methodologies in all core areas of computer science, along with accompanying tools through exercises, problem solving, and guided project work.
 - apply their technical knowledge of a wide range of topics within computer science to solve a problem; be it a research question, an industry need, or a technical issue arising from a novel application of computer science.
 - develop an understanding of the limits of technical solutions through practical experience in software projects and guided study courses, and be exposed to open problems in multiple areas of computer science.
 - develop excellent written and oral communication skills, enabling them to present their ideas clearly and concisely, adjusting the level of technical detail to suit different audiences, and collaborate effectively as part of a team to develop and communicate complex solutions.
- All programs (and streams) require foundational courses in computer science and calculus (i.e., CSCA08H3 Introduction to Computer Science I, CSCA48H3 Introduction to Computer Science II, CSCA67H3 Discrete Mathematics, MATA22H3 Linear Algebra I for Mathematical Sciences, MATA31H3 Calculus I for Mathematical Sciences, and MATA37H3 Calculus II for Mathematical Sciences), as well as multiple B- and C-level computer science courses.

The proposed change also supports student interest. A survey conducted in Winter 2025, of students in a Computer Science Major or Specialist program across the University tri-campus indicated a high level of support for a Bachelor of Computer Science degree designation over a Bachelor of Science degree designation.

The first survey question asked: “If you had the choice of graduating with the Bachelor of Science or a Bachelor of Computer Science, which degree would you choose?”

At the Faculty of Arts & Science, 575 students responded and 427 (75%) chose the Bachelor of Computer Science. At the University of Toronto Mississauga, 96 students responded and 66 chose the Bachelor of Computer Science (69%). At the University of Toronto Scarborough, 55 students responded and 41 (75%) chose the Bachelor of Computer Science.

5 Program Design

5.1 Admission Requirements

Please describe any proposed changes to admission requirements by considering the changes tracked in the calendar copy relative to the following:

- a) Discuss the appropriateness of the program’s admission requirements given the program’s objectives and program-level learning outcomes.
- b) Sufficient explanation of alternative requirements, if applicable, for admission into a graduate, second-entry or undergraduate program (e.g., minimum grade point
- c) average, additional languages or portfolios, and how the program recognizes
- d) prior work or learning experience).

Response:

There are no changes to the admissions criteria or enrolment requirements for any of the programs identified in this proposal that are being repointed to the new degree. The admissions criteria and enrolment requirements of the identified programs that are currently in place for leading to the Honours Bachelor of Science will be the same once the programs are repointed to the BCS degree.

5.2 Program Structure and Requirements

Addressing the prompts below in **one** response, please discuss any proposed changes to program requirements, including any changes to milestone assessments, by considering the changes relative to the following criteria:

5.3 All Programs

- a) With reference to the change proposed, discuss the appropriateness of the program's structure and the requirements to meet its objectives and program-level learning outcomes, including the structure and requirements of any identified streams (undergraduate), fields or concentrations (graduate).
- b) Appropriateness of the program's structure, requirements and program-level learning outcomes in meeting the institution's applicable undergraduate or graduate Degree Level Expectations.
- c) Please state the mode of delivery and if it is changing, indicate the appropriateness and effectiveness of the proposed mode(s) of delivery (i.e., means or medium used in delivering a program; e.g., lecture format, distance, online, synchronous/asynchronous, problem-based, compressed part-time, flexible-time, multi-campus, inter-institutional collaboration or other non-standard forms of delivery) to facilitate students' successful completion of the program-level learning outcomes.
 1. If changing the mode of delivery of the program to online for all or a significant portion of a program that was previously delivered in-person, please discuss the following:
 - i. Maintenance of and/or changes to the program objectives and program-level learning outcomes
 - ii. Adequacy of the technological platform and tools
 - iii. Sufficiency of support services and training for teaching staff
 - iv. Sufficiency and type of support for students in the new learning environment
 - v. Access
- d) Ways in which the proposed curriculum addresses the current state of the discipline or area of study and is appropriate for the level of the program.
- e) If applicable, details on any new experiential learning that is part of the program, including confirmed and interested partners, duration of experiential learning component in a program, and anticipated number of placements.

Response:

There are no changes to the program design/structure, program-level learning outcomes, completion requirements, experiential learning opportunities, or program mode of delivery for any of the programs being repointed to the new degree. The only exceptions are:

- (1) There will be a few minor editorial adjustments to ensure consistent language. These changes respond to the proposed creation of a new stream in Artificial Intelligence and Machine Learning within the existing Specialist and Specialist (Co-op) in Computer Science with an anticipated start date of September 2026, which is being brought forward through a separate major modification proposal in this governance year.
- (2) The existing minimum 2.0 CGPA requirement to remain in the Specialist programs in Computer Science will be removed from the programs as of the effective start date of the BCS, as students will only need a CGPA of 1.85 to graduate with the new degree.

The degree-level expectations (DLEs) for new BCS degree are identical to those for the HBSc degree at UTSC, and there is no change to the alignment of the PLOs and program design with the DLEs. The Degree Requirements for the BCS at UTSC are provided in Appendix D.

Please refer to Appendix B for the BCS's degree-level expectations.

6 Impact of the Change

- a) Assessment of the impact the proposed modification will have on the program's students and/or other units or divisions.

Response:

There will be no changes to the tuition or grant funding associated with the identified programs in this proposal that will be repointed from the Honours Bachelor of Science degree to the Bachelor of Computer Science degree.

Transition Plan and Options for In-Progress and Incoming Students

- Incoming students in Fall 2027 and later will not require transition support, as they will enter UTSC knowing which POSTs lead to the BCS degree. This information will be

communicated during the recruitment and admission periods, and through the UTSC Academic Calendar, which is published annually in May.

- The repointed programs will first be available on ACORN for enrolment requests during the Round 1 program enrolment period beginning in March 2028. Students enrolled in a combination of Major programs, one of which leads to the BCS, may have the option to choose to graduate instead with the HBA or HBSc, depending upon the combination of programs in which they are enrolled; to request to do so, students would contact the Office of the Registrar. As an example, a student enrolled in the Computer Science Major and the Philosophy Major could choose to graduate instead with the HBA; a student enrolled in the Computer Science Major and the Mathematics Major could choose to graduate instead with the HBSc. The program combinations and degree options are outlined in the BCS Degree requirements, which are provided in Appendix D.
- In-progress students who are already in POSTs that will be repointed to the BCS will receive communications about the new degree and will be moved to the new degree type as the default by the Office of the Registrar. They will be provided with instructions on how to opt out of the BCS in favour of the HBSc/HBA they were originally pursuing, should they wish to do so. Students who remain in their original programs will continue to be subject to the program requirements in place at the time of their admission, including, where applicable, the requirement to maintain a minimum CGPA of 2.0 to remain in the program. Students who transition to the BCS will be subject to the new degree requirements, including the removal of progression requirements effective 2027-28.
- Students admitted to UTSC in Fall 2026 and earlier who are not yet in a POST, or who enter POSTs that lead to the BCS degree, will also receive communications with instructions on how to opt out of the BCS in favour of the HBSc/HBA, since they were admitted to UTSC with the intention of pursuing an HBSc/HBA. These students will be identified by the Office of the Registrar through existing CHOP (Change of POST) processes and graduation checks, ensuring all affected students are aware of their option to choose between the HBSc/HBA and the BCS during the transition period. Students who choose to pursue the BCS will be subject to the new degree requirements, while those who opt to remain in HBSc/HBA programs will be subject to the program requirements in place at the time of their admission.
- Information will be posted on the Office of the Registrar website (including the graduation checklist) to inform students that the BCS will be the default degree for those graduating in 2028 and beyond, and that only students admitted to UTSC in Fall

2026 and earlier may opt to graduate with an HBSc/HBA instead of a BCS by contacting the Office of the Registrar.

- Students that have completed one of the identified programs in this proposal, and have already graduated and been conferred with a degree, will not be permitted to be conferred with the new degree.

Communications Plan

- The 2026-27 UTSC Academic Calendar will include a dedicated section outlining the repointing of programs to the BCS degree, noting that the identified programs will lead to the new degree effective September 1, 2027. While the UTSC Academic Calendar will be published in May 2026, additional details about the BCS degree will be released prior to September 2026 to support tri-campus coordination and minimize confusion.
- The 2027-28 UTSC Academic Calendar will formally include the new degree, and degree requirements. The Degree Requirements for the BCS at UTSC are provided in Appendix D.
- UTSC will ensure that academic advising and recruitment teams understand the new degree and related transition plans and are prepared to support both new and current students.
- Communications staff in the Office of the Registrar will work with the Department of Computer and Mathematical Sciences (CMS) to communicate with students currently in Major, Major (Co-op), Specialist, Specialist (Co-op) programs and streams, as well as those admitted but not yet in a POST. This will include website updates, targeted emails, and social media communications.
- UTSC will collaborate with Marketing and Communications, as well as with CMS to ensure that the Future Students website, printed materials (such as the Viewbook), and social media channels are updated, and that information is shared appropriately through recruitment events (presentations, open houses, school visits, etc.).

Program Enrolments:

There will be no changes to the existing enrolment plans of UTSC or the Department of Computer and Mathematical Sciences as a result of this proposal. Admission caps, which define the flow of students into all of the identified programs that will be repointed to the new degree will not change. Hence, the anticipated number of students that will be awarded the new degree corresponds to current trends in total program enrolment and graduation numbers,

which are illustrated below.

Enrolment History in programs that will be repointed to the new degree

Table 1 shows enrolments in the respective programs and streams that will be repointed. In total, it is anticipated that roughly 680 students per year will be registered in programs and streams pointing to the BCS degree.

Table 1: UTSC Enrolment (Source: UTSC Office of the Registrar, November 1, 2025 count date)

Program Type	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023	Fall 2024	Fall 2025
Specialist and Specialist Co-op	574	633	644	649	662	609	609	599
Major and Major Co-op	105	97	100	90	80	80	79	80
Grand Total	679	730	744	739	742	689	688	679

Table 2 shows counts of UTSC students graduating with majors or specialists, to be repointed to the Bachelor of Computer Science degree, demonstrating that approximately 240 students per year will be graduating from UTSC having completed one of the repointed programs.

Table 2: Number of UTSC Students Graduating by POST (including spring and fall for each year), 2022-2024.

	2022	2023	2024
MAJ	34	19	32
SPE	220	211	214

Resources Required for Implementation and Communications Steps

As noted above, the Department of Computer and Mathematical Sciences, the Office of the Vice-Principal Academic and Dean, and the Office of the Registrar will work together to update the “Future Students” website, viewbooks, staff training, and so on. In addition, UTSC has a suite of communication tools and techniques to communicate the changes to students, including:

Governance

- Once the new Degree proposal (and Major Modifications to repoint pertinent programs) pass through governance, the Programs and Curriculum Team will work with the Department of Computer and Mathematical Sciences and the Office of the Registrar to prepare content for the 2027-28 UTSC Academic Calendar.
- The Programs and Curriculum Team will work with EASI as needed to modify existing and create new Calendar sections pertaining to degree completion requirements, departmental sections, etc.
- The new BCS degree and the existing HBA and HBSc degree requirements sections of the Calendar will also be updated to include program combinations with BCS. This aims to provide greater clarity for students who may be pursuing a double major in Computer Science and another program area where they will be able to choose between degree offerings.

Office of the Registrar

- Update Degree Explorer
- Focus on student communications through:
 - Updates to UTSC Office of the Registrar website
 - Updates to recruitment materials such as viewbooks, brochures, prospective student/applicant emails, etc.
 - Update to recruitment key messages for prospective student and applicants
 - Update to current student communications templates
 - Social media plan

Department of Computer and Mathematical Sciences (CMS)

- Updates to departmental website, brochures, advising messages, etc.

Academic Advising & Career Centre (AA&CC)

- Updates to departmental website, brochures, advising messages, etc.

7 Resources

Please consider the proposed changes relative to the following:

7.1 Resources: All programs

Given the program's class sizes and cohorts as well as its program-level learning outcomes please discuss:

- a) Participation of a sufficient number and quality of core faculty who are competent to teach and/or supervise in and achieve the goals of the program and foster the appropriate academic environment.

Response:

There are no changes to the faculty delivering the programs identified in this proposal. These programs already benefit from a stable complement of core faculty that support class sizes, student cohorts, and program-level learning outcomes. They are delivered by 26 faculty members (15 teaching-track and 11 tenure-track), of whom 24 hold a PhD in Computer Science or a related technical field. CMS's Computer Science faculty research areas are wide-ranging and include human-computer interaction, computer vision, machine learning, artificial intelligence, natural language understanding, theory of distributed computing, probabilistic computer science, scientific visualization, healthcare informatics, quantum computing, computational complexity theory, and robotics. This collective profile supports high-quality teaching, effective supervision, and maintenance of a modern computing curriculum.

- b) If applicable, discuss the role and approximate percentage of adjunct and sessional faculty/limited term appointments used in the delivery of the program and the associated plans to ensure the sustainability of the program and quality of the student experience.

Response:

No change to the faculty involved in the delivery of the program.

- c) If required, provision of supervision of experiential learning opportunities.

Response:

No change to the provision or supervision of experiential learning opportunities.

- d) Adequacy of the administrative unit's utilization of existing human, physical and financial resources, including implications for the impact on other existing programs at the University.

Response:

No changes to required physical facilities, administrative staff, equipment, or so on, for ongoing support of the repointed programs.

For resources that will be involved in the implementation, startup phase, and communications plan associated with repointing the four programs to the new BCS degree, see Section 6.

- e) Evidence that there are adequate resources to sustain the quality of scholarship and research activities produced by students, including library support, information technology support, and laboratory access.

Response:

No changes to resources required to sustain the quality of scholarship and research activities.

- f) If necessary, additional institutional or divisional resource commitments to support the program in step with its ongoing implementation.

Response:

No changes to resource commitments.

8 Consultation

Describe consultation with internal (e.g., faculty, students, cognate units, etc., as appropriate) and external stakeholders (e.g., alumni, community or professional organizations, etc., as appropriate).

Response:

The current proposal is coming forward in accompaniment to the separate proposal from Arts & Science, UTM and UTSC to create a new degree that will be conferred by the University of Toronto – Bachelor of Computer Science (BCS). The BCS degree proposal itself underwent a lengthy development and consultation process which comes to bear on the current proposal, so consultations on the new degree proposal are outlined first, followed by consultations performed more specifically on the current proposal to repoint UTSC’s Major, Major (Co-op), Specialist, Specialist (Co-op) programs and streams.

In parallel, FAS and UTM are bringing forward major modifications to repoint their computer science and related programs to the new BCS degree to their respective divisional governance bodies for final approval on the same timeline as this proposal. Hence, the tri-campus new degree proposal and three divisional major modification proposals to repoint pertinent programs at each campus are coming forward to governance in concert.

Consultations on the new degree (BCS) proposal:

Concept and new degree proposal development - Tri-Campus working group process:

The BCS new degree proposal was developed through a consultative, tri-campus working group process. The working group was convened in spring 2024 and first met on June 30, 2024 (see Appendix C for working group terms of reference and meeting schedule.) Throughout the Fall of 2024, proponents from Computer Science departments in FAS, UTM and UTSC formed an academic writing group to collaborate on drafting academic rationale and need and demand. The following spring, colleagues from each division's registrarial offices convened as an administrative writing group and began joining working group meetings. By May 2025, the administrative writing group drafted divisional degree completion requirements (see Appendix D for UTSC’s BCS Degree Requirements), which were discussed by the working group at their May 26 meeting. The working group convened again on September 15, 2025, and reviewed drafts of the proposal.

Early consultations with employers on new degree proposal:

While drafting the rationale for the new degree in Fall 2024, a Computer Science writing group, composed of faculty from each division’s computer science department, recommended early consultation with employers about the new degree. In December 2024, a five-question survey was developed and sent out through the Faculty of Arts & Science’s Office of Experiential

Learning and Outreach Support to a list of their current and potential employers. The employers represented industry portfolios including Information Technology: Data Processing, Hosting, and Related Services; and Information Technology: Software and Computer Systems Design. 17 responses were received with nearly all the employers surveyed (16 out of 17) either supportive (9) or ambivalent (7) to the creation of the new degree.

Early consultations with students at UTM, FAS, and UTSC:

Also in Fall 2024, the Computer Science writing group oversaw an early consultation with their departments' students. A five-question survey was developed for students currently enrolled in the Departments' Major and Specialist programs. Between January and February 2025, all three divisions sent out the survey through their respective departments. Student support for the new degree was overwhelmingly positive across all three divisions, as described in Section 4.

Consultations by the UTSC Department of Computer and Mathematical Sciences (CMS):

Informal discussions about the proposed new BCS degree were held with faculty and students throughout the months of November and December 2025. This engagement was augmented by a formal presentation and discussion during a faculty meeting on November 24, 2025. The BCS degree proposal was approved unanimously by the department's Curriculum Committee on January 6, 2026.

Consultations by the UTSC Dean's Office:

The Vice-Dean, Teaching, Learning, and Undergraduate Programs and the Associate Dean, Undergraduate Programs and Curriculum made a brief mention of the tri-campus development of the BCS degree at the October 31, 2025 Chairs' Council, with additional updates planned for the Winter 2026 term. Further details regarding the proposed Bachelor of Computer Science and the accompanying major modification proposal were disseminated to members of the Chairs Council on Monday, January 26, 2026. Members of the Chairs Council were given a deadline of Friday, January 30, 2026, to provide feedback. No questions or comments were received.

On February 4, 2026, the Vice-Dean, Teaching, Learning and Undergraduate Programs emailed the Scarborough Campus Students' Union (SCSU) with a slide deck providing an overview of the new degree proposal and invited any comments or feedback by the end of day on February 9.

The SCSU responded on February 10 expressing their support for the proposed degree and for the repointing of the Computer Science programs to the new degree.

University of Toronto-wide Consultations:

Beyond the three arts and science divisions, the FAS Vice-Dean Academic Planning, along with the UTM Vice-Dean Academic Programs and UTSC Special Advisor on Academic Programming & Curriculum Development, and Chairs of the three computer science departments, held consultations with decanal representatives at the Faculty of Applied Science & Engineering (December 1, 2025) and the Faculty of Information (December 10, 2025). The Faculty of Applied Science & Engineering communicated strong support for the proposal, stating they saw the degree as a good thing for students. The Faculty of Information appreciated the consultation and thought it was a straightforward and clear proposal. They asked if the new degree would cause any changes to the Computer Science course (CSC108H1), which is a required course for Faculty of Information students, but they were reassured that the creation of the new degree has no impact to their students' access to computer science courses. They expressed no concerns about the proposal for the new degree. A tri-campus meeting was held on December 18, 2025 to discuss next steps related to the upcoming submission of the new BCS degree proposal.

Appendix A: Calendar Entries for the Repointed Programs and Streams

Changes from current Calendar content are indicated in red strikethrough for removed text and blue highlight for replacement or new text.

A new Artificial Intelligence and Machine Learning stream within the existing Specialist and Specialist (Co-op) in Computer Science, with an anticipated start date of September 2026, is being advanced through a separate major modification proposal. As a result, some changes shown here reflect that proposal rather than the current submission.

Specialist Program in Computer Science – Comprehensive Stream Entry

SPECIALIST PROGRAM IN COMPUTER SCIENCE - Comprehensive Stream (~~SCIENCE~~ BACHELOR OF COMPUTER SCIENCE) - SCSPE0510

~~Supervisor of Studies:~~ Supervisor of Studies: R. Pancer, ~~(416-287-7679)~~ Email: ~~pancer@utsc.utoronto.ca~~ richard.pancer@utoronto.ca

Program Objectives

This program provides a working knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. It also imparts an appreciation of the discipline's transformative impact on science and society. The program prepares students for further study and for careers in the computing industry. It comprises ~~four~~ **five** streams with different emphases:

The Comprehensive Stream provides a broad and balanced exposure to the discipline. It is the stream best-suited for students planning to pursue graduate study in computer science, but it is also suitable for other career paths.

The structure of the program requirements allows one to easily switch streams until relatively late in the program. Consequently, these streams should not be viewed as rigidly separated channels feeding students to different career paths, but as a flexible structure that provides computer science students guidance in their course selection based on their broad (but possibly fluid) interests.

Enrolment Requirements

Enrolment in the Specialist in Computer Science (all streams) is limited. Students may apply to enter the program after completing 4.0 credits, and must meet the requirements described below:

1. Students already admitted to the UTSC Year 1 Computer Science admissions category:

Required Courses:

Students must have passed the following CSC and MAT courses: [CSCA08H3](#), [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), [MATA31H3](#), and [MATA37H3](#).

Required Grades:

Students ~~that~~ **who** meet all of the following requirements will be admitted to a CS Specialist POST*:

- a. A cumulative grade point average (CGPA) of at least 2.5 over the following courses: [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#);
- b. A final grade of at least B in [CSCA48H3](#); and
- c. A final grade of at least C- in two of the following: [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#).

*Students must select **one** stream of the CS Specialist as follows:

- a. Students can select either the Comprehensive stream or the Software Engineering stream **or the Artificial Intelligence and Machine Learning stream**.
- b. A limited number of students will be admitted to the Information Systems stream, depending on available space.
- c. Admission to the Entrepreneurship stream will be based in part on submission of a Supplementary Application Form (SAF) available on the Department of Computer and Mathematical Sciences [website](#). Applications for admission will be accepted once per academic year, during the April-May POST admissions round.

2. Students admitted to other UTSC Year 1 admissions categories:

Students ~~that~~ **who** have been admitted to either the UTSC Year 1 Math or UTSC Year 1 Statistics admissions categories are eligible to apply for the Computer Science Specialist POST. Admission

will be based on academic performance in the required A-level courses, identified above. The admission requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

Students ~~that~~ who have not been admitted to a UTSC Year 1 CMS admissions category (Computer Science, Mathematics, or Statistics) must achieve a final grade of at least A- in both [MATA31H3](#) and [CSCA67H3](#) **the first time they complete these courses** in order to be eligible to apply for a CS Specialist POST. **This is a strict requirement.** Admission will be based on academic performance in the required A-level courses, identified above. The admission requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

For more information about the admission requirements, please visit the following [CMS webpage](#).

~~To remain in the program, a student must maintain a CGPA of 2.0 or higher throughout the program.~~

Note: Students admitted to the program after second or third year will be required to pay retroactive deregulated program fees.

Program Requirements

The program requirements comprise a core of ~~18~~ 17 courses (~~9.0~~ 8.5 credits), common to all streams and additional requirements which depend on the stream, for a total of 27 courses (13.5 credits) for the [Artificial Intelligence and Machine Learning](#), Comprehensive, Software Engineering, and Entrepreneurship streams, and 29 courses (14.5 credits) for the Information Systems stream.

Note: Many Computer Science courses are offered ~~both at~~ across all three U of T campuses: U of T Scarborough, [U of T Mississauga](#), and at the St. George campus. When a course is offered at ~~both campuses in a given session~~ [more than one campus](#), U of T Scarborough students are expected to take that course at U of T Scarborough. The Department of Computer Science at the St. George campus [and the Department of Mathematical and Computational Sciences at U of T Mississauga](#) cannot guarantee space for U of T Scarborough students in their courses, ~~especially those offered at both campuses.~~

Core (9.0 credits)

1. Writing Requirement (0.5 credit)*

0.5 credit from the following: [ANTA01H3](#), [ANTA02H3](#), [CLAA06H3](#),
([CTLA19H3](#)), [CTLA01H3](#), [ENGA10H3](#), [ENGA11H3](#), [ENGB06H3](#), [ENGB07H3](#), [ENGB08H3](#), [ENGB09H3](#),
[ENGB17H3](#), [ENGB19H3](#), [ENGB50H3](#), ([ENGB51H3](#)), [GGRA02H3](#), [GGRA03H3](#), [GGRB05H3](#),
([GGRB06H3](#)), ([HISA01H3](#)), ([HLTA01H3](#)), ([ACMA01H3](#)), ([HUMA01H3](#)), ([HUMA11H3](#)),
([HUMA17H3](#)), ([LGGA99H3](#)), [LINA01H3](#), [PHLA10H3](#), [PHLA11H3](#), [WSTA01H3](#).

***Note:** It is recommended that this requirement be satisfied by the end of the second year.

2. A-level courses (3.0 credits)

[CSCA08H3](#) Introduction to Computer Science I
[CSCA48H3](#) Introduction to Computer Science II
[CSCA67H3](#) Discrete Mathematics
[MATA22H3](#) Linear Algebra I for Mathematical Sciences
[MATA31H3](#) Calculus I for Mathematical Sciences
[MATA37H3](#) Calculus II for Mathematical Sciences

3. B-level courses (3.5 credits)

[CSCB07H3](#) Software Design
[CSCB09H3](#) Software Tools and Systems Programming
[CSCB36H3](#) Introduction to the Theory of Computation
[CSCB58H3](#) Computer Organization
[CSCB63H3](#) Design and Analysis of Data Structures
[MATB24H3](#) Linear Algebra II
[STAB52H3](#) Introduction to Probability

4. C-level courses (1.5 credits)

[CSCC43H3](#) Introduction to Databases
[CSCC69H3](#) Operating Systems
[CSCC73H3](#) Algorithm Design and Analysis

5. D-level courses (0.5 credit)

[CSCD03H3](#) Social Impact of Information Technology

Comprehensive Stream

This stream requires a total of 27 courses (13.5 credits). In addition to the core requirements 1-

~~5~~4 common to all streams, ~~9~~10 other distinct courses (~~4.5~~5.0 credits) must be chosen to satisfy all of the following requirements:

5. Technology, Society, and Ethics course (0.5 credit)

[CSCD03H3 Social Impact of Information Technology](#)

6. Additional required courses (2.5 credits)

[CSCC24H3 Principles of Programming Languages](#)

[CSCC37H3 Introduction to Numerical Algorithms for Computational Mathematics](#)

[CSCC63H3 Computability and Computational Complexity](#)

[CSCD37H3 Analysis of Numerical Algorithms for Computational Mathematics](#)

[MATB41H3 Techniques of the Calculus of Several Variables I](#)

7. Electives from courses on computer systems and applications (1.0 credit)

Choose from:

[CSCC01H3 Introduction to Software Engineering](#)

[CSCC09H3 Programming on the Web](#)

[CSCC10H3 Human-Computer Interaction](#)

[CSCC11H3 Introduction to Machine Learning and Data Mining](#)

[CSCC46H3 Social and Information Networks](#)

[CSCC85H3 Fundamentals of Robotics and Automated Systems](#)

[CSCD01H3 Engineering Large Software Systems](#)

[CSCD18H3 Computer Graphics](#)

[CSCD25H3 Advanced Data Science](#)

[CSCD27H3 Computer and Network Security](#)

[CSCD43H3 Database System Technology](#)

[CSCD58H3 Computer Networks](#)

[CSCD70H3 Compiler Optimization](#)

[CSCD84H3 Artificial Intelligence](#)

CSC320H1 Introduction to Visual Computing

CSC401H1 Natural Language Computing

CSC413H1 Neural Networks and Deep Learning

CSC469H1 Operating Systems Design and Implementation

CSC485H1 Computational Linguistics

CSC488H1 Compilers and Interpreters

8. Electives from courses related to the theory of computing (0.5 credit)

Choose from:

[MATC09H3](#) Introduction to Mathematical Logic

[MATC32H3](#) Graph Theory and Algorithms for its Applications

[MATC44H3](#) Introduction to Combinatorics

[MATD16H3](#) Coding Theory and Cryptography

CSC438H Computability and Logic

CSC448H Formal Languages and Automata

CSC465H Formal Methods in Software Design

9. CSC, MAT, or STA elective (0.5 credit)

Any C- or D-level CSC, MAT, or STA course,

excluding [MATC82H3](#), [MATC90H3](#), [STAC32H3](#), [STAC53H3](#) and [STAD29H3](#).

Specialist (Co-operative) Program in Computer Science – Comprehensive Stream Entry

SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Comprehensive Stream

(~~SCIENCE~~ BACHELOR OF COMPUTER SCIENCE) - SCSPE0510C

Academic Program Advisor: S. Calanza susan.calanza@utoronto.ca

Co-op Program Coordinator: coopsuccess.utsc@utoronto.ca

This program provides a working knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. It also imparts an appreciation of the discipline's transformative impact on science and society. The program prepares students for further study and for careers in the computing industry. It comprises ~~four~~ **five** streams with different emphases:

The Comprehensive Stream provides a broad and balanced exposure to the discipline. It is the stream best-suited for students planning to pursue graduate study in computer science, but it is also suitable for other career paths.

The structure of the program requirements allows one to easily switch streams until relatively late in the program. Consequently, these streams should not be viewed as rigidly separated channels feeding students to different career paths, but as a flexible structure that provides computer science students guidance in their course selection based on their broad (but possibly

fluid) interests.

In addition to their academic course requirements, students must successfully complete the additive Arts & Science Co-op Work Term and Course requirements.

Enrolment Requirements

Enrolment in the Specialist (Co-operative) program in Computer Science (all streams) is limited. Students must have completed the required A-level CSC and MAT courses, and achieved the required grades, described in the Enrolment Requirements for the Specialist in Computer Science.

Note: Co-op students who started in Co-op prior to Fall 2025 are allowed to follow the calendar requirements in effect at that time.

Prospective Co-op Students:

Students who have not yet been admitted into a Co-op Degree POST must submit a co-op program request through ACORN and ensure they meet the minimum enrolment requirements as noted above. These qualifications may include a higher CGPA specific to the co-op program.

Deadlines follow the Limited Enrolment Program Application Deadlines set by the [Office of the Registrar](#) each year. Failure to submit the program request on ACORN will result in the student's application/request not being considered.

Please note that meeting the minimum qualifications does not guarantee enrolment in the Co-op Program of Study or Degree POST. The required CGPA may be higher than the minimum threshold and is dependent on the applicant pool and number of spaces available.

Minimum Qualifications for Prospective Co-op Students:

Credits: Minimum of 4.0 credits to a maximum of 10.0 credits

Required Courses: As noted in the Enrolment Requirements above

Cumulative GPA: 2.75 across all attempted courses.

Current Co-op Students:

Students admitted to a Co-op Degree POST must request a Co-op Program of Study through ACORN.

*Students must select **one** stream of the CS Specialist Co-op. Admission to the Entrepreneurship stream also requires the submission of a Supplementary Application Form

available on the Department of Computer and Mathematical Sciences [webpage](#).

Minimum Qualifications for Current Co-op Students:

Credits: 4.0 credits

Required Courses: Program-specific courses described in the Enrolment Requirements above

Cumulative GPA: 2.50 across all attempted courses.

Academic Program Requirements

Students must complete the program requirements as described in the Specialist Program in Computer Science. To be eligible for their first work term, students must be enrolled in the program, have completed at least 7.0 credits, including all first year required courses ([CSCA08H3](#), [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), [MATA31H3](#), [MATA37H3](#)), and maintain a CGPA of 2.50 or higher. In addition to their academic courses, students must also complete the required Co-op preparation courses.

Planning your Co-op Work Terms & Academics:

Enrollment in a Co-op program requires careful planning of both academics and work terms. Students should consult their Co-op Program Coordinator and Academic Program Advisors, as well as review the standard co-op sequences and course maps available on the Arts & Science Co-op website and Arts and Science Co-op Compass for guidance.

Co-op Work Term Requirements:

Students must successfully complete three Co-op work terms, totaling 12 months in duration, which can be fulfilled through the following options:

- Three 4-month work terms, *or*
- One 4-month work term and one 8-month work term, *or*
- One 12-month work term.

Students must be available for work terms during the Fall, Winter, and Summer semesters, and are required to complete at least one of their work terms in either the Fall or Winter semester. As a result, students must also take courses during the Summer semesters.

Co-op Course Requirements:

Co-op students complete the following Co-op-specific courses as part of their degree

Co-op Preparation Courses (Completed in First Year):

- [COPB50H3](#)
- [COPB56H3/\(COPB51H3\)](#)

Work Term Search Courses:

- [COPB57H3/\(COPB52H3\)](#) - Completed in the semester prior to the first work term
- [COPC98H3](#) - Taken in the semester prior to the second work term
- [COPC99H3](#) - Taken in the semester prior to the third work term

Co-op Work Term Courses:

- [COPC01H3](#) - First work term
- [COPC02H3](#) - Second work term
- [COPC03H3](#) - Third work term

Additional Work Terms & Courses:

After successful completion of three required work terms, students interested in additional work terms will require approval from the Arts & Science Co-op Office. Additional course work will also be required.

- [COPC04H3](#) - Fourth work term
- [COPC05H3](#) - Fifth work term

Note: Co-op courses are taken alongside a full course load and are recorded on transcripts as Credit/No Credit (CR/NCR). These courses have no credit weight and are considered additional credits beyond the 20.0 required degree credits. No additional course fee is charged, as registration is included in the Co-op Program fee.

For information on course codes, fees, status in Co-op programs, and certification of completion of Co-op programs, see the [Co-operative Programs](#) section and the [Arts and Science Co-op](#) section in the *UTSC Calendar*.

Specialist Program in Computer Science – Entrepreneurship Stream Entry

SPECIALIST PROGRAM IN COMPUTER SCIENCE - Entrepreneurship Stream (SCIENCE BACHELOR OF COMPUTER SCIENCE) - SCSPE0805

~~Supervisor of Studies:~~ Supervisor of Studies: R. Pancer, ~~(416-287-7679)~~ Email: ~~pancer@utsc.utoronto.ca~~ richard.pancer@utoronto.ca

Program Objectives

This program provides a working knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. It also imparts an appreciation of the discipline's transformative impact on science and society. The program prepares students for further study and for careers in the computing industry. It comprises ~~four~~ five streams with different emphases:

The Entrepreneurship Stream includes a solid core of computer science and software engineering, while exposing students to the framework and methodologies that underlie the development of innovative technology ideas into viable commercial opportunities. Enrolment into the Entrepreneurship stream will be limited to highly qualified and motivated students, and preference will be given to students enrolled in the Specialist (Co-operative) program.

The structure of the program requirements allows one to easily switch streams until relatively late in the program. Consequently, these streams should not be viewed as rigidly separated channels feeding students to different career paths, but as a flexible structure that provides computer science students guidance in their course selection based on their broad (but possibly fluid) interests.

Enrolment Requirements

Enrolment in the Specialist in Computer Science (all streams) is limited. Students may apply to enter the program after completing 4.0 credits, and must meet the requirements described below:

1. Students already admitted to the UTSC Year 1 Computer Science admissions category:

Required Courses:

Students must have passed the following CSC and MAT courses: [CSCA08H3](#), [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), [MATA31H3](#), and [MATA37H3](#).

Required Grades:

Students ~~that~~ who meet all of the following requirements will be admitted to a CS Specialist POST*:

- a. A cumulative grade point average (CGPA) of at least 2.5 over the following courses: [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#);
- b. A final grade of at least B in [CSCA48H3](#); and
- c. A final grade of at least C- in two of the following: [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#).

*Students must select **one** stream of the CS Specialist as follows:

- a. Students can select either the Comprehensive stream or the Software Engineering stream **or the Artificial Intelligence and Machine Learning stream**.
- b. A limited number of students will be admitted to the Information Systems stream, depending on available space.
- c. Admission to the Entrepreneurship stream will be based in part on submission of a Supplementary Application Form (SAF) available on the Department of Computer and Mathematical Sciences [website](#). Applications for admission will be accepted once per academic year, during the April-May POST admissions round.

2. Students admitted to other UTSC Year 1 admissions categories:

Students ~~that~~ who have been admitted to either the UTSC Year 1 Math or UTSC Year 1 Statistics admissions categories are eligible to apply for the Computer Science Specialist POST. Admission will be based on academic performance in the required A-level courses, identified above. The admission requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

Students ~~that~~ who have not been admitted to a UTSC Year 1 CMS admissions category (Computer Science, Mathematics, or Statistics) must achieve a final grade of at least A- in both [MATA31H3](#) and [CSCA67H3](#) **the first time they complete these courses** in order to be eligible to apply for a CS Specialist POST. **This is a strict requirement.** Admission will be based on academic performance in the required A-level courses, identified above. The admission

requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

For more information about the admission requirements, please visit the following [CMS webpage](#).

~~To remain in the program, a student must maintain a CGPA of 2.0 or higher throughout the program.~~

Note: Students admitted to the program after second or third year will be required to pay retroactive deregulated program fees.

Program Requirements

The program requirements comprise a core of ~~18~~ 17.5 courses (~~9.0~~ 8.5 credits), common to all streams and additional requirements which depend on the stream, for a total of 27 courses (13.5 credits) for the **Artificial Intelligence and Machine Learning**, Comprehensive, Software Engineering, and Entrepreneurship streams, and 29 courses (14.5 credits) for the Information Systems stream.

Note: Many Computer Science courses are offered ~~both at~~ across all three U of T campuses: U of T Scarborough, **U of T Mississauga**, and at the St. George campus. When a course is offered at ~~both campuses in a given session~~ more than one campus, U of T Scarborough students are expected to take that course at U of T Scarborough. The Department of Computer Science at the St. George campus **and the Department of Mathematical and Computational Sciences at U of T Mississauga** cannot guarantee space for U of T Scarborough students in their courses; ~~especially those offered at both campuses.~~

Core (9.0 credits)

1. Writing Requirement (0.5 credit)*

0.5 credit from the following: [ANTA01H3](#), [ANTA02H3](#), [CLAA06H3](#), (CTLA19H3), [CTLA01H3](#), [ENGA10H3](#), [ENGA11H3](#), [ENGB06H3](#), [ENGB07H3](#), [ENGB08H3](#), [ENGB09H3](#), [ENGB17H3](#), [ENGB19H3](#), [ENGB50H3](#), (ENGB51H3), [GGRA02H3](#), [GGRA03H3](#), [GGRB05H3](#), (GGRB06H3), (HISA01H3), (HLTA01H3), (ACMA01H3), (HUMA01H3), (HUMA11H3), (HUMA17H3), (LGGA99H3), [LINA01H3](#), [PHLA10H3](#), [PHLA11H3](#), [WSTA01H3](#).

***Note:** It is recommended that this requirement be satisfied by the end of the second year.

2. A-level courses (3.0 credits)

[CSCA08H3](#) Introduction to Computer Science I

[CSCA48H3](#) Introduction to Computer Science II

[CSCA67H3](#) Discrete Mathematics

[MATA22H3](#) Linear Algebra I for Mathematical Sciences

[MATA31H3](#) Calculus I for Mathematical Sciences

[MATA37H3](#) Calculus II for Mathematical Sciences

3. B-level courses (3.5 credits)

[CSCB07H3](#) Software Design

[CSCB09H3](#) Software Tools and Systems Programming

[CSCB36H3](#) Introduction to the Theory of Computation

[CSCB58H3](#) Computer Organization

[CSCB63H3](#) Design and Analysis of Data Structures

[MATB24H3](#) Linear Algebra II

[STAB52H3](#) Introduction to Probability

4. C-level courses (1.5 credits)

[CSCC43H3](#) Introduction to Databases

[CSCC69H3](#) Operating Systems

[CSCC73H3](#) Algorithm Design and Analysis

~~5. D-level courses (0.5 credit)~~

~~[CSCD03H3](#) Social Impact of Information Technology~~

Entrepreneurship Stream

This stream requires a total of 27 courses (13.5 credits). In addition to the core requirements 1-~~5~~ **4** common to all streams, ~~9~~ **10** other distinct courses (~~4-5~~ **5.0** credits) must be chosen to satisfy all of the following requirements:

5. Technology, Society, and Ethics course (0.5 credit)

[CSCD03H3](#) Social Impact of Information Technology

6. Additional required courses (3.0 credits)

[CSCC01H3](#) Introduction to Software Engineering

[CSCC37H3](#) Introduction to Numerical Algorithms for Computational Mathematics

[CSCC63H3](#) Computability and Computational Complexity

[CSCD01H3](#) Engineering Large Software Systems

[CSCD54H3](#) Technology Innovation and Entrepreneurship

[CSCD90H3](#) The Startup Sandbox

7. Electives from courses in computer science, mathematics, and statistics (1.5 credits)

Choose from:

[CSCC09H3](#) Programming on the Web

[CSCC10H3](#) Human-Computer Interaction

[CSCC11H3](#) Introduction to Machine Learning and Data Mining

[CSCC24H3](#) Principles of Programming Languages

[CSCC46H3](#) Social and Information Networks

[CSCC85H3](#) Fundamentals of Robotics and Automated Systems

[CSCD18H3](#) Computer Graphics

[CSCD25H3](#) Advanced Data Science

[CSCD27H3](#) Computer and Network Security

[CSCD43H3](#) Database System Technology

[CSCD58H3](#) Computer Networks

[CSCD70H3](#) Compiler Optimization

[CSCD84H3](#) Artificial Intelligence

[MATB41H3](#) Techniques of the Calculus of Several Variables I

[STAB57H3](#) Introduction to Statistics

CSC320H1 Introduction to Visual Computing

CSC401H1 Natural Language Computing

CSC413H1 Neural Networks and Deep Learning

CSC469H1 Operating Systems Design and Implementation

CSC485H1 Computational Linguistics

CSC488H1 Compilers and Interpreters

Specialist (Co-operative) Program in Computer Science – Entrepreneurship Stream Entry

SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Entrepreneurship Stream

(~~SCIENCE~~ BACHELOR OF COMPUTER SCIENCE) - SCSPE0805C

Academic Program Advisor: S. Calanza susan.calanza@utoronto.ca

Co-op Program Coordinator: coopsuccess.uts@utoronto.ca

Developed by the Office of the Vice-Provost, Academic Programs

Template updated: July 2024

This program provides a working knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. It also imparts an appreciation of the discipline's transformative impact on science and society. The program prepares students for further study and for careers in the computing industry. It comprises ~~four~~ five streams with different emphases:

The Entrepreneurship Stream includes a solid core of computer science and software engineering, while exposing students to the framework and the methodologies that underlie the development of innovative technology ideas into viable commercial opportunities. Enrolment into the Entrepreneurship stream will be limited to highly qualified and motivated students, and preference will be given to students enrolled in the Specialist (Co-op) Program.

The structure of the program requirements allows one to easily switch streams until relatively late in the program. Consequently, these streams should not be viewed as rigidly separated channels feeding students to different career paths, but as a flexible structure that provides computer science students guidance in their course selection based on their broad (but possibly fluid) interests.

Enrolment Requirements

Enrolment in the Specialist (Co-operative) program in Computer Science (all streams) is limited. Students must have completed the required A-level CSC and MAT courses, and achieved the required grades.

Note: Co-op students who started in Co-op prior to Fall 2025 are allowed to follow the calendar requirements in effect at that time.

Prospective Co-op Students:

Students who have not yet been admitted into a Co-op Degree POST must submit a co-op program request through ACORN and ensure they meet the minimum enrolment requirements as noted above. These qualifications may include a higher CGPA specific to the co-op program.

Deadlines follow the Limited Enrolment Program Application Deadlines set by the [Office of the Registrar](#) each year. Failure to submit the program request on ACORN will result in the student's application/request not being considered.

Please note that meeting the minimum qualifications does not guarantee enrolment in the Co-op Program of Study or Degree POST. The required CGPA may be higher than the minimum threshold and depends on the applicant pool and number of spaces available.

Minimum Qualifications for Prospective Co-op Students:

Credits: Minimum of 4.0 credits to a maximum of 10.0 credits

Required Courses: As noted in the Enrolment Requirements above

Cumulative GPA: 2.75 across all attempted courses.

Current Co-op Students:

Students admitted to a Co-op Degree POST must request a Co-op Program of Study through ACORN.

*Students must select **one** stream of the CS Specialist Co-op. Admission to the Entrepreneurship stream also requires the submission of a Supplementary Application Form available on the Department of Computer and Mathematical Sciences [webpage](#).

Minimum Qualifications for Current Co-op Students:

Credits: 4.0 credits

Required Courses: Program-specific courses described in the Enrolment Requirements above

Cumulative GPA: 2.50 across all attempted courses.

Academic Program Requirements

Students must complete the program requirements as described in the Specialist Program in Computer Science. To be eligible for their first work term, students must be enrolled in the program, have completed at least 7.0 credits, including all first year required courses ([CSCA08H3](#), [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), [MATA31H3](#), [MATA37H3](#)), and maintain a CGPA of 2.50 or higher. In addition to their academic courses, students must also complete the required Co-op preparation courses.

Planning your Co-op Work Terms & Academics:

Enrollment in a Co-op program requires careful planning of both academics and work terms. Students should consult their Co-op Program Coordinator and Academic Program Advisors, as well as review the standard co-op sequences and course maps available on the Arts & Science Co-op website and Arts and Science Co-op Compass for guidance.

Co-op Work Term Requirements:

Students must successfully complete three Co-op work terms, totaling 12 months in duration, which can be fulfilled through the following options:

- Three 4-month work terms, *or*
- One 4-month work term and one 8-month work term, *or*
- One 12-month work term.

Students must be available for work terms during the Fall, Winter, and Summer semesters, and are required to complete at least one of their work terms in either the Fall or Winter semester. As a result, students must also take courses during the Summer semesters.

Co-op Course Requirements:

Co-op students complete the following Co-op-specific courses as part of their degree

Co-op Preparation Courses (Completed in First Year):

- [COPB50H3](#)
- [COPB56H3](#)/[COPB51H3](#))

Work Term Search Courses:

- [COPB57H3](#)/[COPB52H3](#)) - Completed in the semester prior to the first work term
- [COPC98H3](#) - Taken in the semester prior to the second work term
- [COPC99H3](#) - Taken in the semester prior to the third work term

Co-op Work Term Courses:

- [COPC01H3](#) - First work term
- [COPC02H3](#) - Second work term
- [COPC03H3](#) - Third work term

Additional Work Terms & Courses:

After successful completion of three required work terms, students interested in additional work terms will require approval from the Arts & Science Co-op Office. Additional course work will also be required.

- [COPC04H3](#) - Fourth work term
- [COPC05H3](#) - Fifth work term

Note: Co-op courses are taken alongside a full course load and are recorded on transcripts as Credit/No Credit (CR/NCR). These courses have no credit weight and are considered additional credits beyond the 20.0 required degree credits. No additional course fee is charged, as registration is included in the Co-op Program fee.

For information on course codes, fees, status in Co-op programs, and certification of completion of Co-op programs, see the [Co-operative Programs](#) section and the [Arts and Science Co-op](#) section in the *UTSC Calendar*.

Specialist Program in Computer Science – Information Systems Stream Entry

SPECIALIST PROGRAM IN COMPUTER SCIENCE - Information Systems Stream (~~SCIENCE~~ BACHELOR OF COMPUTER SCIENCE) - SCSPE0455

~~Supervisor of Studies:~~ Supervisor of Studies: R. Pancer, ~~(416-287-7679)~~ Email: ~~pancer@utsc.utoronto.ca~~ richard.pancer@utoronto.ca

Program Objectives

This program provides a working knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. It also imparts an appreciation of the discipline's transformative impact on science and society. The program prepares students for further study and for careers in the computing industry. It comprises ~~four~~ **five** streams with different emphases:

The Information Systems Stream has a similar focus as the Software Engineering Stream, but it provides additional exposure to certain aspects of business management. It is of special interest to students wishing to pursue careers in technical management but who have a deep interest in the technology.

The structure of the program requirements allows one to easily switch streams until relatively late in the program. Consequently, these streams should not be viewed as rigidly separated channels feeding students to different career paths, but as a flexible structure that provides

computer science students guidance in their course selection based on their broad (but possibly fluid) interests.

Enrolment Requirements

Enrolment in the Specialist in Computer Science (all streams) is limited. Students may apply to enter the program after completing 4.0 credits, and must meet the requirements described below:

1. Students already admitted to the UTSC Year 1 Computer Science admissions category:

Required Courses:

Students must have passed the following CSC and MAT courses: [CSCA08H3](#), [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), [MATA31H3](#), and [MATA37H3](#).

Required Grades:

Students ~~that~~ who meet all of the following requirements will be admitted to a CS Specialist POST*:

- a. A cumulative grade point average (CGPA) of at least 2.5 over the following courses: [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#);
- b. A final grade of at least B in [CSCA48H3](#); and
- c. A final grade of at least C- in two of the following: [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#).

*Students must select **one** stream of the CS Specialist as follows:

- a. Students can select either the Comprehensive stream or the Software Engineering stream **or the Artificial Intelligence and Machine Learning stream**.
- b. A limited number of students will be admitted to the Information Systems stream, depending on available space.
- c. Admission to the Entrepreneurship stream will be based in part on submission of a Supplementary Application Form (SAF) available on the Department of Computer and Mathematical Sciences [website](#). Applications for admission will be accepted once per academic year, during the April-May POST admissions round.

2. Students admitted to other UTSC Year 1 admissions categories:

Students ~~that~~ who have been admitted to either the UTSC Year 1 Math or UTSC Year 1 Statistics admissions categories are eligible to apply for the Computer Science Specialist POSt. Admission will be based on academic performance in the required A-level courses, identified above. The admission requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

Students ~~that~~ who have not been admitted to a UTSC Year 1 CMS admissions category (Computer Science, Mathematics, or Statistics) must achieve a final grade of at least A- in both [MATA31H3](#) and [CSCA67H3](#) **the first time they complete these courses** in order to be eligible to apply for a CS Specialist POSt. **This is a strict requirement.** Admission will be based on academic performance in the required A-level courses, identified above. The admission requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

For more information about the admission requirements, please visit the following [CMS webpage](#).

~~To remain in the program, a student must maintain a CGPA of 2.0 or higher throughout the program.~~

Note: Students admitted to the program after second or third year will be required to pay retroactive deregulated program fees.

Program Requirements

The program requirements comprise a core of ~~18~~ 17 courses (~~9.0~~ 8.5 credits), common to all streams and additional requirements which depend on the stream, for a total of 27 courses (13.5 credits) for the [Artificial Intelligence and Machine Learning](#), Comprehensive, Software Engineering, and Entrepreneurship streams, and 29 courses (14.5 credits) for the Information Systems stream.

Note: Many Computer Science courses are offered ~~both at~~ across all three U of T campuses: U of T Scarborough, [U of T Mississauga](#), and at the St. George campus. When a course is offered at ~~both campuses in a given session~~ more than one campus, U of T Scarborough students are expected to take that course at U of T Scarborough. The Department of Computer Science at the St. George campus [and the Department of Mathematical and Computational Sciences at U](#)

of T Mississauga cannot guarantee space for U of T Scarborough students in their courses, especially those offered at both campuses.

Core (9.0 credits)

1. Writing Requirement (0.5 credit)*

0.5 credit from the following: [ANTA01H3](#), [ANTA02H3](#), [CLAA06H3](#), (CTLA19H3), [CTLA01H3](#), [ENGA10H3](#), [ENGA11H3](#), [ENGB06H3](#), [ENGB07H3](#), [ENGB08H3](#), [ENGB09H3](#), [ENGB17H3](#), [ENGB19H3](#), [ENGB50H3](#), (ENGB51H3), [GGRA02H3](#), [GGRA03H3](#), [GGRB05H3](#), (GGRB06H3), (HISA01H3), (HLTA01H3), (ACMA01H3), (HUMA01H3), (HUMA11H3), (HUMA17H3), (LGGA99H3), [LINA01H3](#), [PHLA10H3](#), [PHLA11H3](#), [WSTA01H3](#).

***Note:** It is recommended that this requirement be satisfied by the end of the second year.

2. A-level courses (3.0 credits)

[CSCA08H3](#) Introduction to Computer Science I
[CSCA48H3](#) Introduction to Computer Science II
[CSCA67H3](#) Discrete Mathematics
[MATA22H3](#) Linear Algebra I for Mathematical Sciences
[MATA31H3](#) Calculus I for Mathematical Sciences
[MATA37H3](#) Calculus II for Mathematical Sciences

3. B-level courses (3.5 credits)

[CSCB07H3](#) Software Design
[CSCB09H3](#) Software Tools and Systems Programming
[CSCB36H3](#) Introduction to the Theory of Computation
[CSCB58H3](#) Computer Organization
[CSCB63H3](#) Design and Analysis of Data Structures
[MATB24H3](#) Linear Algebra II
[STAB52H3](#) Introduction to Probability

4. C-level courses (1.5 credits)

[CSCC43H3](#) Introduction to Databases
[CSCC69H3](#) Operating Systems
[CSCC73H3](#) Algorithm Design and Analysis

~~5. D-level courses (0.5 credit)~~

~~[CSCD03H3](#) Social Impact of Information Technology~~

Information Systems Stream

This stream requires a total of 29 courses (14.5 credits). In addition to the core requirements 1-~~5~~ 4 common to all streams, ~~11~~ 12 other distinct courses (~~5.5~~ 6.0 credits) must be chosen to satisfy all of the following requirements:

5. Technology, Society, and Ethics course (0.5 credit)

[CSCD03H3](#) Social Impact of Information Technology

6. Required management courses (1.5 credits)

[MGTA01H3](#) Introduction to Business

[MGTA02H3](#) Managing the Business Organization

[MGHB02H3](#) Managing People and Groups in Organizations

7. Additional required mathematics and computer science courses (3.0 credits)

[CSCC01H3](#) Introduction to Software Engineering

[CSCC37H3](#) Introduction to Numerical Algorithms for Computational Mathematics

[CSCC63H3](#) Computability and Computational Complexity

[CSCD01H3](#) Engineering Large Software Systems

[CSCD43H3](#) Database System Technology

[MATB41H3](#) Techniques of the Calculus of Several Variables I

8. Electives from courses on computer systems and applications (1.0 credit)

Choose from:

[CSCC09H3](#) Programming on the Web

[CSCC10H3](#) Human-Computer Interaction

[CSCC11H3](#) Introduction to Machine Learning and Data Mining

[CSCC46H3](#) Social and Information Networks

[CSCC85H3](#) Fundamentals of Robotics and Automated Systems

[CSCD18H3](#) Computer Graphics

[CSCD25H3](#) Advanced Data Science

[CSCD27H3](#) Computer and Network Security

[CSCD58H3](#) Computer Networks

[CSCD70H3](#) Compiler Optimization

[CSCD84H3](#) Artificial Intelligence

CSC320H1 Introduction to Visual Computing

CSC401H1 Natural Language Computing

CSC413H1 Neural Networks and Deep Learning

CSC469H1 Operating Systems Design and Implementation

CSC485H1 Computational Linguistics

CSC488H1 Compilers and Interpreters

Specialist (Co-operative) Program in Computer Science – Information Systems Stream Entry

SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Information Systems Stream
(~~SCIENCE~~ BACHELOR OF COMPUTER SCIENCE) - SCSPE0455C

Academic Program Advisor: S. Calanza susan.calanza@utoronto.ca

Co-op Program Coordinator: coopsuccess.uts@utoronto.ca

This program provides a working knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. It also imparts an appreciation of the discipline's transformative impact on science and society. The program prepares students for further study and for careers in the computing industry. It comprises ~~four~~ five streams with different emphases:

The Information Systems Stream has a similar focus as the Software Engineering Stream, but it provides additional exposure to certain aspects of business management. It is of special interest to students wishing to pursue careers in technical management but who have a deep interest in the technology.

The structure of the program requirements allows one to easily switch streams until relatively late in the program. Consequently, these streams should not be viewed as rigidly separated channels feeding students to different career paths, but as a flexible structure that provides computer science students guidance in their course selection based on their broad (but possibly fluid) interests.

Enrolment Requirements

Enrolment in the Specialist (Co-operative) program in Computer Science (all streams) is limited. Students must have completed the required A-level CSC and MAT courses, and achieved the required grades.

Note: Co-op students who started in Co-op prior to Fall 2025 are allowed to follow the calendar

requirements in effect at that time.

Prospective Co-op Students:

Students who have not yet been admitted into a Co-op Degree POST must submit a co-op program request through ACORN and ensure they meet the minimum enrolment requirements as noted above. These qualifications may include a higher CGPA specific to the co-op program.

Deadlines follow the Limited Enrolment Program Application Deadlines set by the [Office of the Registrar](#) each year. Failure to submit the program request on ACORN will result in the student's application/request not being considered.

Please note that meeting the minimum qualifications does not guarantee enrolment in the Co-op Program of Study or Degree POST. The required CGPA may be higher than the minimum threshold and depends on the applicant pool and number of spaces available.

Minimum Qualifications for Prospective Co-op Students:

Credits: Minimum of 4.0 credits to a maximum of 10.0 credits

Required Courses: As noted in the Enrolment Requirements above

Cumulative GPA: 2.75 across all attempted courses.

Current Co-op Students:

Students admitted to a Co-op Degree POST must request a Co-op Program of Study through ACORN.

*Students must select **one** stream of the CS Specialist Co-op. Admission to the Entrepreneurship stream also requires the submission of a Supplementary Application Form available on the Department of Computer and Mathematical Sciences [webpage](#).

Minimum Qualifications for Current Co-op Students:

Credits: 4.0 credits

Required Courses: Program-specific courses described in the Enrolment Requirements above

Cumulative GPA: 2.50 across all attempted courses.

Academic Program Requirements

Students must complete the program requirements as described in the Specialist Program in Computer Science. To be eligible for their first work term, students must be enrolled in the program, have completed at least 7.0 credits, including all first year required courses ([CSCA08H3](#), [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), [MATA31H3](#), [MATA37H3](#)), and maintain a CGPA

of 2.50 or higher. In addition to their academic courses, students must also complete the required Co-op preparation courses.

Planning your Co-op Work Terms & Academics:

Enrollment in a Co-op program requires careful planning of both academics and work terms. Students should consult their Co-op Program Coordinator and Academic Program Advisors, as well as review the standard co-op sequences and course maps available on the Arts & Science Co-op website and Arts and Science Co-op Compass for guidance.

Co-op Work Term Requirements:

Students must successfully complete three Co-op work terms, totaling 12 months in duration, which can be fulfilled through the following options:

- Three 4-month work terms, *or*
- One 4-month work term and one 8-month work term, *or*
- One 12-month work term.

Students must be available for work terms during the Fall, Winter, and Summer semesters, and are required to complete at least one of their work terms in either the Fall or Winter semester. As a result, students must also take courses during the Summer semesters.

Co-op Course Requirements:

Co-op students complete the following Co-op-specific courses as part of their degree

Co-op Preparation Courses (Completed in First Year):

- [COPB50H3](#)
- [COPB56H3](#)/(COPB51H3)

Work Term Search Courses:

- [COPB57H3](#)/([COPB52H3](#)) - Completed in the semester prior to the first work term
- [COPC98H3](#) - Taken in the semester prior to the second work term
- [COPC99H3](#) - Taken in the semester prior to the third work term

Co-op Work Term Courses:

- [COPC01H3](#) - First work term
- [COPC02H3](#) - Second work term
- [COPC03H3](#) - Third work term

Additional Work Terms & Courses:

After successful completion of three required work terms, students interested in additional work terms will require approval from the Arts & Science Co-op Office. Additional course work will also be required.

- [COPC04H3](#) - Fourth work term
- [COPC05H3](#) - Fifth work term

Note: Co-op courses are taken alongside a full course load and are recorded on transcripts as Credit/No Credit (CR/NCR). These courses have no credit weight and are considered additional credits beyond the 20.0 required degree credits. No additional course fee is charged, as registration is included in the Co-op Program fee.

For information on course codes, fees, status in Co-op programs, and certification of completion of Co-op programs, see the [Co-operative Programs](#) section and the [Arts and Science Co-op](#) section in the *UTSC Calendar*.

Specialist Program in Computer Science – Software Engineering Stream Entry

SPECIALIST PROGRAM IN COMPUTER SCIENCE - Software Engineering Stream (~~SCIENCE~~ BACHELOR OF COMPUTER SCIENCE) - SCSPE0795

~~Supervisor of Studies:~~ Supervisor of Studies: R. Pancer, ~~(416-287-7679)~~ Email: ~~pancer@utsc.utoronto.ca~~ richard.pancer@utoronto.ca

Program Objectives

This program provides a working knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. It also imparts an appreciation of the discipline's transformative impact on science and society. The program prepares students for further study and for careers in the computing industry. It comprises ~~four~~ **five** streams with different emphases:

The Software Engineering Stream places a greater emphasis on the engineering side of the discipline, including computer systems and core applications.

The structure of the program requirements allows one to easily switch streams until relatively late in the program. Consequently, these streams should not be viewed as rigidly separated channels feeding students to different career paths, but as a flexible structure that provides computer science students guidance in their course selection based on their broad (but possibly fluid) interests.

Enrolment Requirements

Enrolment in the Specialist in Computer Science (all streams) is limited. Students may apply to enter the program after completing 4.0 credits, and must meet the requirements described below:

1. Students already admitted to the UTSC Year 1 Computer Science admissions category:

Required Courses:

Students must have passed the following CSC and MAT courses: [CSCA08H3](#), [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), [MATA31H3](#), and [MATA37H3](#).

Required Grades:

Students ~~that~~ **who** meet all of the following requirements will be admitted to a CS Specialist POST*:

- a. A cumulative grade point average (CGPA) of at least 2.5 over the following courses: [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#);
- b. A final grade of at least B in [CSCA48H3](#); and
- c. A final grade of at least C- in two of the following: [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#).

*Students must select **one** stream of the CS Specialist as follows:

- a. Students can select either the Comprehensive stream or the Software Engineering stream **or the Artificial Intelligence and Machine Learning stream**.
- b. A limited number of students will be admitted to the Information Systems stream, depending on available space.

c. Admission to the Entrepreneurship stream will be based in part on submission of a Supplementary Application Form (SAF) available on the Department of Computer and Mathematical Sciences [website](#). Applications for admission will be accepted once per academic year, during the April-May POST admissions round.

2. Students admitted to other UTSC Year 1 admissions categories:

Students ~~that~~ **who** have been admitted to either the UTSC Year 1 Math or UTSC Year 1 Statistics admissions categories are eligible to apply for the Computer Science Specialist POST. Admission will be based on academic performance in the required A-level courses, identified above. The admission requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

Students ~~that~~ **who** have not been admitted to a UTSC Year 1 CMS admissions category (Computer Science, Mathematics, or Statistics) must achieve a final grade of at least A- in both [MATA31H3](#) and [CSCA67H3](#) **the first time they complete these courses** in order to be eligible to apply for a CS Specialist POST. **This is a strict requirement.** Admission will be based on academic performance in the required A-level courses, identified above. The admission requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

For more information about the admission requirements, please visit the following [CMS webpage](#).

~~To remain in the program, a student must maintain a CGPA of 2.0 or higher throughout the program.~~

Note: Students admitted to the program after second or third year will be required to pay retroactive deregulated program fees.

Program Requirements

The program requirements comprise a core of ~~18~~ **17** courses (~~9.0~~ **8.5** credits), common to all streams and additional requirements which depend on the stream, for a total of 27 courses (13.5 credits) for the [Artificial Intelligence and Machine Learning](#), Comprehensive, Software

Engineering, and Entrepreneurship streams, and 29 courses (14.5 credits) for the Information Systems stream.

Note: Many Computer Science courses are offered ~~both at~~ across all three U of T campuses: U of T Scarborough, U of T Mississauga, and at the St. George campus. When a course is offered at ~~both campuses in a given session~~ more than one campus, U of T Scarborough students are expected to take that course at U of T Scarborough. The Department of Computer Science at the St. George campus and the Department of Mathematical and Computational Sciences at U of T Mississauga cannot guarantee space for U of T Scarborough students in their courses, ~~especially those offered at both campuses.~~

Core (9.0 credits)

1. Writing Requirement (0.5 credit)*

0.5 credit from the following: [ANTA01H3](#), [ANTA02H3](#), [CLAA06H3](#), (CTLA19H3), [CTLA01H3](#), [ENGA10H3](#), [ENGA11H3](#), [ENGB06H3](#), [ENGB07H3](#), [ENGB08H3](#), [ENGB09H3](#), [ENGB17H3](#), [ENGB19H3](#), [ENGB50H3](#), (ENGB51H3), [GGRA02H3](#), [GGRA03H3](#), [GGRB05H3](#), (GGRB06H3), (HISA01H3), (HLTA01H3), (ACMA01H3), (HUMA01H3), (HUMA11H3), (HUMA17H3), (LGGA99H3), [LINA01H3](#), [PHLA10H3](#), [PHLA11H3](#), [WSTA01H3](#).

***Note:** It is recommended that this requirement be satisfied by the end of the second year.

2. A-level courses (3.0 credits)

[CSCA08H3](#) Introduction to Computer Science I
[CSCA48H3](#) Introduction to Computer Science II
[CSCA67H3](#) Discrete Mathematics
[MATA22H3](#) Linear Algebra I for Mathematical Sciences
[MATA31H3](#) Calculus I for Mathematical Sciences
[MATA37H3](#) Calculus II for Mathematical Sciences

3. B-level courses (3.5 credits)

[CSCB07H3](#) Software Design
[CSCB09H3](#) Software Tools and Systems Programming
[CSCB36H3](#) Introduction to the Theory of Computation
[CSCB58H3](#) Computer Organization
[CSCB63H3](#) Design and Analysis of Data Structures
[MATB24H3](#) Linear Algebra II
[STAB52H3](#) Introduction to Probability

4. C-level courses (1.5 credits)

[CSCC43H3](#) Introduction to Databases

[CSCC69H3](#) Operating Systems

[CSCC73H3](#) Algorithm Design and Analysis

~~5. D-level courses (0.5 credit)~~

~~[CSCD03H3](#) Social Impact of Information Technology~~

Software Engineering Stream

This stream requires a total of 27 courses (13.5 credits). In addition to the core requirements 1-~~5~~ **4** common to all streams, ~~9~~ **10** other distinct courses (~~4.5~~ **5.0** credits) must be chosen to satisfy all of the following requirements:

5. Technology, Society, and Ethics course (0.5 credit)

[CSCD03H3](#) Social Impact of Information Technology

6. Additional required courses (3.0 credits)

[CSCC01H3](#) Introduction to Software Engineering

[CSCC24H3](#) Principles of Programming Languages

[CSCC37H3](#) Introduction to Numerical Algorithms for Computational Mathematics

[CSCC63H3](#) Computability and Computational Complexity

[CSCD01H3](#) Engineering Large Software Systems

[MATB41H3](#) Techniques of the Calculus of Several Variables I

7. Electives from courses on computer systems and applications (1.5 credits)

Choose from:

[CSCC09H3](#) Programming on the Web

[CSCC10H3](#) Human-Computer Interaction

[CSCC11H3](#) Introduction to Machine Learning and Data Mining

[CSCC46H3](#) Social and Information Networks

[CSCC85H3](#) Fundamentals of Robotics and Automated Systems

[CSCD18H3](#) Computer Graphics

[CSCD25H3](#) Advanced Data Science

[CSCD27H3](#) Computer and Network Security

[CSCD43H3](#) Database System Technology

[CSCD58H3](#) Computer Networks

[CSCD70H3](#) Compiler Optimization

[CSCD84H3](#) Artificial Intelligence

CSC320H1 Introduction to Visual Computing

CSC401H1 Natural Language Computing

CSC413H1 Neural Networks and Deep Learning

CSC469H1 Operating Systems Design and Implementation

CSC485H1 Computational Linguistics

CSC488H1 Compilers and Interpreters

Specialist (Co-operative) Program in Computer Science – Software Engineering Stream Entry

**SPECIALIST (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE - Software Engineering
Stream (~~SCIENCE~~ BACHELOR OF COMPUTER SCIENCE) - SCSPE0795C**

Academic Program Advisor: S. Calanza susan.calanza@utoronto.ca

Co-op Program Coordinator: coopsuccess.uts@utoronto.ca

This program provides a working knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. It also imparts an appreciation of the discipline's transformative impact on science and society. The program prepares students for further study and for careers in the computing industry. It comprises ~~four~~ five streams with different emphases:

The Software Engineering Stream places a greater emphasis on the engineering side of the discipline, including computer systems and core applications.

The structure of the program requirements allows one to easily switch streams until relatively late in the program. Consequently, these streams should not be viewed as rigidly separated channels feeding students to different career paths, but as a flexible structure that provides computer science students guidance in their course selection based on their broad (but possibly fluid) interests.

Enrolment Requirements

Enrolment in the Specialist (Co-operative) program in Computer Science (all streams) is limited. Students must have completed the required A-level CSC and MAT courses, and achieved the required grades.

Note: Co-op students who started in Co-op prior to Fall 2025 are allowed to follow the calendar requirements in effect at that time.

Prospective Co-op Students:

Students who have not yet been admitted into a Co-op Degree POST must submit a co-op program request through ACORN and ensure they meet the minimum enrolment requirements as noted above. These qualifications may include a higher CGPA specific to the co-op program.

Deadlines follow the Limited Enrolment Program Application Deadlines set by the [Office of the Registrar](#) each year. Failure to submit the program request on ACORN will result in the student's application/request not being considered.

Please note that meeting the minimum qualifications does not guarantee enrolment in the Co-op Program of Study or Degree POST. The required CGPA may be higher than the minimum threshold and depends on the applicant pool and number of spaces available.

Minimum Qualifications for Prospective Co-op Students:

Credits: Minimum of 4.0 credits to a maximum of 10.0 credits

Required Courses: As noted in the Enrolment Requirements above

Cumulative GPA: 2.75 across all attempted courses.

Current Co-op Students:

Students admitted to a Co-op Degree POST must request a Co-op Program of Study through ACORN.

*Students must select **one** stream of the CS Specialist Co-op. Admission to the Entrepreneurship stream also requires the submission of a Supplementary Application Form available on the Department of Computer and Mathematical Sciences [webpage](#).

Minimum Qualifications for Current Co-op Students:

Credits: 4.0 credits

Required Courses: Program-specific courses described in the Enrolment Requirements above

Cumulative GPA: 2.50 across all attempted courses.

Program Requirements

Students must complete the program requirements as described in the Specialist Program in Computer Science. To be eligible for their first work term, students must be enrolled in the

program, have completed at least 7.0 credits, including all first year required courses ([CSCA08H3](#), [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), [MATA31H3](#), [MATA37H3](#)), and maintain a CGPA of 2.50 or higher. In addition to their academic courses, students must also complete the required Co-op preparation courses.

Planning your Co-op Work Terms & Academics:

Enrollment in a Co-op program requires careful planning of both academics and work terms. Students should consult their Co-op Program Coordinator and Academic Program Advisors, as well as review the standard co-op sequences and course maps available on the Arts & Science Co-op website and Arts and Science Co-op Compass for guidance.

Co-op Work Term Requirements:

Students must successfully complete three Co-op work terms, totaling 12 months in duration, which can be fulfilled through the following options:

- Three 4-month work terms, *or*
- One 4-month work term and one 8-month work term, *or*
- One 12-month work term.

Students must be available for work terms during the Fall, Winter, and Summer semesters, and are required to complete at least one of their work terms in either the Fall or Winter semester. As a result, students must also take courses during the Summer semesters.

Co-op Course Requirements:

Co-op students complete the following Co-op-specific courses as part of their degree

Co-op Preparation Courses (Completed in First Year):

- [COPB50H3](#)
- [COPB56H3](#)/([COPB51H3](#))

Work Term Search Courses:

- [COPB57H3](#)/([COPB52H3](#)) - Completed in the semester prior to the first work term
- [COPC98H3](#) - Taken in the semester prior to the second work term
- [COPC99H3](#) - Taken in the semester prior to the third work term

Co-op Work Term Courses:

- [COPC01H3](#) - First work term
- [COPC02H3](#) - Second work term
- [COPC03H3](#) - Third work term

Additional Work Terms & Courses:

After successful completion of three required work terms, students interested in additional work terms will require approval from the Arts & Science Co-op Office. Additional course work will also be required.

- [COPC04H3](#) - Fourth work term
- [COPC05H3](#) - Fifth work term

Note: Co-op courses are taken alongside a full course load and are recorded on transcripts as Credit/No Credit (CR/NCR). These courses have no credit weight and are considered additional credits beyond the 20.0 required degree credits. No additional course fee is charged, as registration is included in the Co-op Program fee.

For information on course codes, fees, status in Co-op programs, and certification of completion of Co-op programs, see the [Co-operative Programs](#) section and the [Arts and Science Co-op](#) section in the *UTSC Calendar*.

Specialist Program in Computer Science – Artificial Intelligence and Machine Learning Stream Entry

Note: This stream is being advanced through a separate major modification proposal and is included for context only. Subject to approval, it will be incorporated into the Academic Calendar.

Specialist (Co-operative) Program in Computer Science – Artificial Intelligence and Machine Learning Stream Entry

Note: This stream is being advanced through a separate major modification proposal and is included for context only. Subject to approval, it will be incorporated into the Academic Calendar.

Major Program in Computer Science Entry

MAJOR PROGRAM IN COMPUTER SCIENCE (~~SCIENCE~~ BACHELOR OF COMPUTER SCIENCE) - SCMAJ1688

Supervisor of Studies: R. Pancer, ~~(416-287-7679)~~ Email: pancer@utsc.utoronto.ca
richard.pancer@utoronto.ca

Program Objectives

This program provides basic knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. This program is intended to be combined with other programs, typically a major program in another discipline.

Enrolment Requirements

Enrolment in the Major in Computer Science is limited. Students may apply to enter the program after completing 4.0 credits, and must meet the requirements described below:

1. Students already admitted to the UTSC Year 1 Computer Science admissions category:

Required Courses:

Students must have passed the following CSC and MAT courses: [CSCA08H3](#), [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), [MATA31H3](#), and [MATA37H3](#).

Required Grades:

Students ~~that~~ **who** meet all of the following requirements will be admitted to a CS Major POST:

- A cumulative grade point average (CGPA) of at least 2.5 over the following

courses: [CSCA48H3](#), [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#);

b. A final grade of at least B in [CSCA48H3](#); and

c. A final grade of at least C- in two of the following: [CSCA67H3](#), [MATA22H3](#), and [MATA37H3](#).

2. Students admitted to other UTSC Year 1 admissions categories:

Students ~~that~~ **who** have been admitted to either the UTSC Year 1 Math or UTSC Year 1 Statistics admissions categories are eligible to apply for the Computer Science Major POST. Admission will be based on academic performance in the required A-level courses, identified above. The admission requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

Students ~~that~~ **who** have not been admitted to a UTSC Year 1 CMS admissions category (Computer Science, Mathematics, or Statistics) must achieve a final grade of at least A- in both [MATA31H3](#) and [CSCA67H3](#) **the first time they complete these courses** in order to be eligible to apply for a CS Major POST. **This is a strict requirement.** Admission will be based on academic performance in the required A-level courses, identified above. The admission requirements change each year depending on available spaces and the pool of eligible applicants, and students are cautioned that there is no guarantee of admission; as such, students are strongly advised to plan to enroll in backup programs.

For more information about the admission requirements, please visit the following [CMS webpage](#).

Note: Students admitted to the program after second or third year will be required to pay retroactive deregulated program fees.

Program Requirements

This program requires a total of 16 distinct courses (8.0 credits) satisfying all of the requirements listed below.

Note: Many Computer Science courses are offered ~~both at~~ **across all three U of T campuses:** U of T Scarborough, **U of T Mississauga**, and at the St. George campus. When a course is offered at ~~both campuses in a given session~~ **more than one campus**, U of T Scarborough students are expected to take that course at U of T Scarborough. The Department of Computer Science at the St. George campus **and the Department of Mathematical and Computational Sciences at U**

of T Mississauga cannot guarantee space for U of T Scarborough students in their courses, especially those offered at both campuses.

1. A-level courses (3.0 credits)

[CSCA08H3](#) Introduction to Computer Science I

[CSCA48H3](#) Introduction to Computer Science II

[CSCA67H3](#) Discrete Mathematics

[MATA22H3](#) Linear Algebra I for Mathematical Sciences

[MATA31H3](#) Calculus I for Mathematical Sciences

[MATA37H3](#) Calculus II for Mathematical Sciences

2. B-level courses (3.0 credits)

[CSCB07H3](#) Software Design

[CSCB09H3](#) Software Tools and Systems Programming

[CSCB36H3](#) Introduction to the Theory of Computation

[CSCB58H3](#) Computer Organization

[CSCB63H3](#) Design and Analysis of Data Structures

and

0.5 credit from the following:*

[MATB24H3](#) Linear Algebra II

[STAB52H3](#) Introduction to Probability

***Note:** In making this choice, students should consider the prerequisites of courses they plan to take to satisfy requirements 3-4.

3. C-level courses in numerical computation and theory of computing (1.0 credit)

[CSCC37H3](#) Introduction to Numerical Algorithms for Computational Mathematics

and

0.5 credit from the following:

[CSCC63H3](#) Computability and Computational Complexity

[CSCC73H3](#) Algorithm Design and Analysis

4. CSC electives (1.0 credit)

1.0 credits in any C- or D-level CSC courses.

Writing Recommendation:

Students are urged to take a course from the following list of courses by the end of their second year: [ANTA01H3](#), [ANTA02H3](#), [CLAA06H3](#),

(CTLA19H3), [CTLA01H3](#), [ENGA10H3](#), [ENGA11H3](#), [ENGB06H3](#), [ENGB07H3](#), [ENGB08H3](#), [ENGB17H3](#), [ENGB19H3](#), [ENGB50H3](#), (ENGB51H3), [GGRA02H3](#), [GGRA03H3](#), [GGRB05H3](#), (GGRB06H3), (HISA01H3), (HLTA01H3), (HUMA01H3), (HUMA11H3), (HUMA17H3), (LGGA99H3), [LINA01H3](#), [PHLA10H3](#), [PHLA11H3](#), [WSTA01H3](#).

Major (Co-operative) Program in Computer Science Entry

MAJOR (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE (SCIENCE BACHELOR OF COMPUTER SCIENCE) - SCMAJ1688C

Academic Program Advisor: S. Calanza susan.calanza@utoronto.ca

Co-op Program Coordinator: coopsuccess.utsc@utoronto.ca

The Major (Co-op) Program in Computer Science is a Work Integrated Learning (WIL) program that combines academic studies with paid work terms in the public, private, and/or non-profit sectors. The program provides students with the opportunity to develop the academic and professional skills required to pursue employment in these areas, or to continue on to graduate training in an academic field related to Computer Science upon graduation.

In addition to their academic course requirements, students must successfully complete the additive Arts & Science Co-op Work Term and Course requirements.

Enrolment Requirements

Enrolment in the Major (Co-operative) Program in Computer Science is limited. Students must have completed the required A-level CSC and MAT courses, and achieved the required grades.

Note: Co-op students who started in Co-op prior to Fall 2025 are allowed to follow the calendar requirements in effect at that time.

Prospective Co-op Students:

Students who have not yet been admitted into a Co-op Degree POST must submit a co-op program request through ACORN and ensure they meet the minimum enrolment requirements as noted above. These qualifications may include a higher CGPA specific to the co-op program.

Deadlines follow the Limited Enrolment Program Application Deadlines set by the [Office of the Registrar](#) each year. Failure to submit the program request on ACORN will result in the student's application/request not being considered.

Please note that meeting the minimum qualifications does not guarantee enrolment in the Co-op Program of Study or Degree POST. The required CGPA may be higher than the minimum threshold and depends on the applicant pool and number of spaces available.

Minimum Qualifications for Prospective Co-op Students:

Credits: Minimum of 4.0 credits to a maximum of 10.0 credits

Required Courses: As noted in the Enrolment Requirements above

Cumulative GPA: 2.75 across all attempted courses.

Current Co-op Students:

Students admitted to a Co-op Degree POST must request a Co-op Program of Study through ACORN.

Minimum Qualifications for Current Co-op Students:

Credits: 4.0 credits

Required Courses: Program-specific courses described in the Enrolment Requirements above

Cumulative GPA: 2.50 across all attempted courses.

Academic Program Requirements

Students must complete the program requirements as described in the Major in Computer Science (Science).

Planning your Co-op Work Terms & Academics:

Enrollment in a Co-op program requires careful planning of both academics and work terms. Students should consult their Co-op Program Coordinator and Academic Program Advisors, as well as review the standard co-op sequences and course maps available on the Arts & Science Co-op website and Arts and Science Co-op Compass for guidance.

Co-op Work Term Requirements:

Students must successfully complete three Co-op work terms, totaling 12 months in duration, which can be fulfilled through the following options:

- Three 4-month work terms, *or*
- One 4-month work term and one 8-month work term, *or*
- One 12-month work term.

Students must be available for work terms during the Fall, Winter, and Summer semesters, and are required to complete at least one of their work terms in either the Fall or Winter semester.

As a result, students must also take courses during the Summer semesters.

To be eligible for their first work term, students must be enrolled in the program, have completed at least 7.0 credits, and maintain a CGPA of 2.50 or higher. In addition to their academic courses, students must also complete the required Co-op preparation courses.

Co-op Course Requirements:

Co-op students complete the following Co-op-specific courses as part of their degree

Co-op Preparation Courses (Completed in First Year):

- [COPB50H3](#)
- [COPB56H3](#)/[\(COPB51H3\)](#)

Work Term Search Courses:

- [COPB57H3](#)/[\(COPB52H3\)](#) - Completed in the semester prior to the first work term
- [COPC98H3](#) - Taken in the semester prior to the second work term
- [COPC99H3](#) - Taken in the semester prior to the third work term

Co-op Work Term Courses:

- [COPC01H3](#) - First work term
- [COPC02H3](#) - Second work term
- [COPC03H3](#) - Third work term

Additional Work Terms & Courses:

After successful completion of three required work terms, students interested in additional work terms will require approval from the Arts & Science Co-op Office. Additional course work will also be required.

- [COPC04H3](#) - Fourth work term
- [COPC05H3](#) - Fifth work term

Note: Co-op courses are taken alongside a full course load and are recorded on transcripts as Credit/No Credit (CR/NCR). These courses have no credit weight and are considered additional

credits beyond the 20.0 required degree credits. No additional course fee is charged, as registration is included in the Co-op Program fee.

For information on course codes, fees, status in Co-op programs, and certification of completion of Co-op programs, see the [Co-operative Programs](#) section and the [Arts and Science Co-op](#) section in the UTSC *Calendar*.

Appendix B: Degree-Level Expectations (DLEs) for the Bachelor of Computer Science

As defined here: <https://www.vpacademic.utoronto.ca/academic-programs/degree-diploma-certificate-programs/degree-level-expectations/>

University of Toronto at Scarborough
Undergraduate Degree Level Expectations for the
Honors Bachelor of Arts, HBA
Honors Bachelor of Science, HBSc
Bachelor of Computer Science, BCS
Bachelor of Business Administration, BBA

This document sets out the goals and expectations that UTSC has for its undergraduate degrees and programs of study. The degree expectations are used to assess existing and new programs. They provide a standard by which students can evaluate the undergraduate education they receive at UTSC.

Depth and Breadth of Knowledge

Depth of Knowledge:

Programs of study will attain depth through a progression of introductory, core and specialized courses. Specialized courses will normally be at the C and D levels. This basic requirement is further refined in the three sections Knowledge of Methodologies, Application of Knowledge and Awareness of Limits of Knowledge.

Breadth of Knowledge:

In the course of their studies, students will gain an appreciation of the variety of modes of thinking, methods of inquiry and analysis, and ways of understanding the world that underpin different intellectual fields. Through courses within or outside of their programs of study, students will be exposed to an appropriate balance of: the arts, literature and history of human cultures, the social and behavioral sciences, the natural sciences, and quantitative reasoning.

Knowledge of Methodologies

Students will have a working knowledge of different methodologies and approaches relevant to their area of study. They will be able to evaluate the efficacy of different methodologies in addressing questions that arise in their area of study.

Application of Knowledge

Within their area of study students will be able to frame relevant questions for further inquiry. They will be familiar with or will be able to seek the tools with which they can address such questions effectively.

Awareness of Limits of Knowledge

Students will gain an understanding of the limits to their own knowledge. They will also gain an appreciation of the uncertainty, ambiguity, and limits to our collective knowledge and how these might influence analyses and interpretations.

Communication Skills

Students will be able to communicate information, arguments, and analyses accurately and reliably, both orally and in writing. Students will learn to read and to listen critically.

Autonomy and Professional Capacity

In a broader context, the education students receive while pursuing their degrees has three further goals: to give students the skills and knowledge they need to become informed, independent and creative thinkers; to instill the awareness that knowledge and its applications are influenced by and contribute to society; and to lay the foundation for learning as a life-long endeavour.

Appendix C: Bachelor of Computer Science Working Group Terms of Reference and Meeting Dates

Bachelor of Computer Science Proposal Tri-Campus Working Group Terms of Reference (July 2024)

In 2023, discussions began among the Faculty of Arts & Science, the University of Toronto Mississauga (UTM) and the University of Toronto Scarborough (UTSC) regarding the development of a new University of Toronto degree, a Bachelor of Computer Science (name to be confirmed).

The Office of the Vice-Provost, Academic Programs, provided a template for proposing this new degree. This working group will focus on completing a draft of this proposal in the 2024-25 academic year.

Key deliverables of the Working Group:

1. Draft degree proposal document with appendices from each division
2. Draft major modification proposals from each division to re-point pertinent programs to the new degree

Objectives

The Working Group will meet 5-6 times starting in July 2024. The Working Group will complete the degree proposal document collaboratively by:

- Articulating the academic rationale for the development of this new degree, including need and demand as well as impact on other degrees or programs at U of T
- Determining the most appropriate degree name (e.g., Bachelor of Computer Science)
- Developing Degree requirements and incorporating into division-specific Degree-Level Expectations for inclusion in the proposal
- Determining which programs would point to the degree
- Coordinating on a tri-campus consultation strategy to inform the development of the proposals and inform stakeholders
- Reporting on consultations undertaken at division and unit level (including students, faculty, and staff) for each campus
- Determine how implementation of the new degree will work and which options will be available to continuing students

Meeting Schedule Summary

- 90 minutes
- 5-6 meetings Online

**Bachelor of Computer Science Proposal Tri-Campus Working Group
Schedule of Meetings**

Working Group Meeting & Topic	Date and Time
Meeting # 1 Introductions and Scope of Group, Rationale	July 31, 2024, 9:00am - 10:30am
Meeting # 2 Consultations with Students and Employers, Degree Requirements	March 6, 2025, 3:00pm - 4:30pm
Meeting # 3 Degree Requirements, Abbreviations and Programs	May 26, 2025, 9:10am – 10:30am
Meeting #4 Reviewing Draft of Proposal & Fall Consultations	Sep. 15, 2025, 1:00pm - 2:30pm
Meeting #5 Reviewing Proposal Feedback & Consultations	Oct. 31, 2025, 2:00pm - 3:00pm
Meeting #6 Consultations and Major Modifications	Dec. 15, 2025, 1:00pm - 2:30pm

Appendix D: UTSC Degree Requirements: Bachelor of Computer Science

Proposed BCS Degree Requirements: Bachelor of Computer Science (BCS)

***Note:** the following degree requirements are aligned with the existing degree requirements for the [Honours Bachelor of Science](#)

To qualify for the degree, students must:

1. Pass a minimum of 20.0 credits.
2. Of the 20.0 credits, at least 10.0 credits must be completed at UTSC.
3. Of the 20.0 credits, at least 6.0 credits must be at the C- and/or D-level, with at least 1.0 credit at the D-level.
4. Of the 20.0 credits, at least 0.5 credit must come from each of the following five [breadth categories](#) (breadth categories are identified in course descriptions):
 - a. Arts, Literature & Language
 - b. History, Philosophy & Cultural Studies
 - c. Social & Behavioural Sciences
 - d. Natural Sciences
 - e. Quantitative Reasoning
5. Complete a program or programs as below (only programs offered by UTSC may be used to fulfill degree requirements, and students are permitted to graduate with a maximum of three certified programs):
 - a. A Specialist program in Computer Science; or
 - b. A Major program in Computer Science and at least one additional Major program; or
 - c. A Major program in Computer Science and two Minor offerings.
6. Ensure the combinations of programs used to meet the degree requirement include a minimum of 12.0 distinct credits.
7. Earn a cumulative grade point average of at least 1.85. A student whose cumulative grade point average (CGPA) is at least 1.50, but less than 1.85, may request to graduate with a Bachelor of Science (BSc). Students combining a Major program in Arts with a Major program in Computer Science may request either a Bachelor of Arts (BA) or a Bachelor of Science (BSc).

Notes:

- Some combinations of programs are not possible due to the similarity in course requirements. Students with questions or concerns are advised to consult the Academic Advising & Career Centre to ensure they complete a minimum of 12.0 different credits. In the event that a student completes two certified Major programs and an additional certified Minor, the 12.0 distinct credits may be taken from any of these certified programs.
- The CGPA requirement to complete certain programs is higher than 1.85. For details see the individual program descriptions.
- Students may consult with an Academic Advisor in the Academic Advising & Career Centre regarding degree requirements. Consult the departmental program advisor regarding program requirements.

The type of degree students receive, whether HBA, BCS or HBSc, will be determined by the Specialist or Major program completed. For example:

- Students completing a Specialist BA program will receive an HBA degree;
- Students completing a Specialist BSc program will receive an HBSc degree;
- Students completing a Specialist program in Computer Science will receive a BCS degree;
- Students completing a Major BA program, in conjunction with any combination of two Minor programs, will receive an HBA degree;
- Students completing a Major BSc program, in conjunction with any combination of two Minor programs, will receive an HBSc degree;
- Students completing a Major program in Computer Science, in conjunction with any combination of two Minor programs will receive a BCS degree;
- Students completing Majors from two different degree areas (Arts, Science, Computer Science) may choose either the HBA, HBSC or BCS. Students may request a degree change on [eService](#).