

Fleming College



**ARTICULATION AGREEMENT
RENEWAL:**

**COMPUTER ENGINEERING TECHNOLOGY
To
COMPUTER SCIENCE**

BETWEEN

**THE SIR SANDFORD FLEMING COLLEGE
OF APPLIED ARTS AND TECHNOLOGY
AND
TRENT UNIVERSITY**

NOVEMBER, 2020

The Sir Sandford Fleming College of Applied Arts and Technology

Ontario Advanced Diploma in Computer Engineering Technology

to

Trent University's

Bachelor of Science (Honours) in Computer Science

This agreement re-establishes the principles, guidelines and procedures governing admission and assessment of selected qualified students to enter Trent University on an advanced standing basis, subsequent to the successful completion of the Computer Engineering Technology Advanced Diploma program at The Sir Sandford Fleming College of Applied Arts and Technology (Fleming College).

This agreement replaces all previous versions of the Agreement – ONCAT #1801

1. PURPOSE

- 1.1. The purpose of this agreement is to provide qualified graduates of Fleming College's Computer Engineering Technology Advanced Diploma program with a seamless option for continuing their education in the Bachelor of Science (Honours) degree in Computer Science at Trent University.

2. ROLES AND RESPONSIBILITIES

2.1. Student Supports

Trent's program faculty will support incoming students by providing them with relevant information related to their program.

2.2. Admissions

The Admissions Office at Trent University will be responsible for ensuring that eligible students will be awarded credit transfers as stated in said agreement.

2.3. Recruitment and Marketing

Recruitment and Marketing representatives at Trent University will be responsible for promoting the articulation pathway and recruiting students.

2.4. Students

Through communication with program faculty and orientation sessions, students will be advised to consult academic advisors to ensure they are successfully completing program requirements.

3. TERMS AND CONDITIONS OF THE AGREEMENT

- 3.1. Graduates of Fleming College's Computer Engineering Technology Advanced Diploma program will be granted 10.0 credits towards a Bachelor of Science (Honours) in Computer Science at Trent University.
- 3.2. Upon successful admission to Trent University, students are required to complete an additional 10.0 credits to meet degree requirements.
- 3.3. Students that have graduated from Fleming College's Computer Engineering Technology Advanced Diploma program, who commenced studies since Fall 2018, will be awarded the full 10.0 transfer credits so long as they meet the admission requirements listed under Article 4 of this agreement.

Students commencing studies at Fleming College in the Computer Engineering Technology Advanced Diploma program prior to this intake will receive the transfer credits outlined in the previous version of this Agreement.

4. ADMISSION REQUIREMENTS

- 4.1. To qualify for this agreement, students must have:
- successfully completed Fleming College’s Computer Engineering Technology Advanced Diploma program; and
 - a minimum overall average of 75%.
- 4.2. Students must meet all specific admission and enrollment standards, and requirements for the program and will be accepted subject to capacity if applicable.

5. TRANSFER OF CREDITS

- 5.1. Students who are eligible, graduating from Fleming College’s Computer Engineering Technology Advanced Diploma program with a minimum average of 75%, will be granted 10.0 credits towards the successful completion of a 20.0 credit Bachelor of Science (Honours) in Computer Science at Trent University. Credits will be transferred as follows:

Course equivalency block at Trent University	Credits received
COIS 1010H – The Digital World	0.5
COIS 1020H – Programming for Computer Science	0.5
COIS 2300H – Computer Organization	0.5
COIS 2320H – Digital Logic	0.5
COIS 3400H – Database Management Systems	0.5
1.5 unassigned Computer Science credits at the 3000 level	1.5
0.5 unassigned Computer Science credit at the 4000 level	0.5
0.5 unassigned Physics credit at the 1000 level	0.5
2.0 unassigned Science credits at the 1000 level	2.0
3.0 unassigned Science credits at the 2000 level	3.0

- 5.2. As these credits recognize areas covered in Fleming College’s Computer Engineering Technology Advanced Diploma program rather than the completion of Trent University courses, numerical grades will not be recorded on the Trent transcript. Completion of these credits will be recognized with a pass grade.

6. PROGRAM AND GRADUATION REQUIREMENTS

- 6.1. Upon admission to the Bachelor of Science (Honours) degree in Computer Science at Trent, students must satisfy all general education, graduation, major and specialization requirements as outlined in the university’s undergraduate calendar. If a student does not have the foundation or skills to enroll in an upper level course because of a lack of the appropriate introductory course(s), any necessary prerequisite course(s) will be required.

- 6.2. If a student transfers to a different degree program, all transfer credits outlined in this agreement may not apply to the new degree program. It is the student's responsibility to consult an academic advisor, and to notify the Registrar's Office of any program changes.
- 6.3. Students have the option to complete specializations in Theoretical Computer Science, Data Analytics or Software Engineering as part of the Computer Science degree program. Completing these specializations may require additional prerequisites or credits in order to meet requirements. Program mapping with specializations is outlined in Appendix A.
- 6.4. Students progressing to Trent University through this agreement will be allowed to enroll concurrently in COIS 2020H, COIS 2240H, and any course for which COIS 2020H, COIS 2240H and/or COIS 2300H is a prerequisite (e.g. COIS 3030H, COIS 3040H, COIS 3320H).
- 6.5. To satisfy the requirements of Trent's Bachelor of Science (Honours) degree in Computer Science, students will need to complete specific courses to meet program requirements in addition to the courses they have already been granted from Fleming College. Program requirements are subject to change annually and the Academic Calendar should be consulted for all degree requirements and regulations. www.trentu.ca/calendar.

Program Requirements	Courses Granted through transfer equivalency	Courses students still need to take
4.0 COIS credits consisting of COIS 1010H, 1020H, 2020H, 2240H, 2300H, 3020H, 3380H, and 3400H	COIS 1010H, 1020H, 2300H, and 3400H	COIS 2020H, 2240H, 3020H and 3380H
2.0 COIS credits at the 4000 level	0.5 unassigned COIS 4000 level	1.5 COIS credits at the 4000 level
2.5 COIS credits at the 3000 level or beyond in addition to the above	1.5 unassigned COIS 3000 level	1.0 COIS credits at the 3000 level or beyond
2.0 COIS credits in addition to the above	COIS 2320H	1.5 COIS credits in addition to the above
1.5 MATH credits consisting of MATH 1350H, 1550H, and 2600H	---	MATH 1350H, 1550H, and 2600H
0.5 MATH credit from MATH 1005H or 1110H	---	MATH 1005H or 1110H
7.5 additional credits	0.5 unassigned PHYS 1000 level; 2.0 unassigned SCIE 1000 level; 3.0 unassigned SCIE 2000 level	2.0 additional credits
General University Requirements		
A minimum of 14.0 science credits, including 1.0 Math credit, for a BSc degree	10.0 science assigned through transfer credit	Fulfilled through program requirements
A minimum of 7.0 credits at the 3000 or 4000 level	2.5 assigned through transfer credit	3.5 required above; Minimum 1.0 additional required
A minimum of 3.0 credits with a grade of 60% leading to majors in different disciplines	2.5 assigned through transfer credit	Fulfilled through program requirements
Maximum of 7.0 credits at the 1000 level	3.5 assigned through transfer credit	1.5 required above; Maximum 2.0 additional permitted
Minimum of 0.5 credit from the Approved Indigenous Course List	---	Minimum 0.5 credit from the Approved Indigenous Course List

6.6. Completion of required courses will vary on an individual basis based on the flexibility and course options within the Bachelor of Science (Honours) degree and specific program chosen. Students must achieve the following to fulfill Trent University degree requirements:

- i. A maximum of 7.0 credits at the 1000 level can count towards the degree;
- ii. A maximum of 1.0 credit with a D grade (50-59%) in courses in a major or each joint-major or minor;
- iii. At least 0.5 credit from the Approved Indigenous Course List;
- iv. 7.0 credits completed at the 3000 or 4000 level through both program requirements and general elective options;
- v. An overall minimum average of 65% in Trent University courses to obtain an honours degree;
- vi. A minimum of 14.0 science credits (including 1.0 Math credit);
- vii. The maximum credits in a discipline that can count towards an honours degree is 13.0.

Note: It is recommended that students transferring into the Bachelor of Science (Honours) in Computer Science meet with an Academic Advisor at Trent University prior to completing any course selections.

7. IMPLEMENTATION AND REVIEW

This agreement is subject to review whenever either party makes curricular changes that impact the agreement. When a change occurs, the program departments will notify their respective articulation designates so that the agreement can be updated. Articulation designates at each institution will review the agreement annually to ensure it is current. This Agreement may be terminated by either party. In this case, notice of one year is required. In the event of termination of the Agreement, every effort will be made to ensure that students currently enrolled in the program will not be affected.

8. ACCEPTANCE OF AGREEMENT

We, the undersigned, as the representatives of Trent University and Fleming College hereby demonstrate our commitment to full implementation of the Agreement.

For, and on behalf of,
Trent University



Dr. Holger Hintelmann
Dean of Arts & Science - Science

Nov 26, 2020

Date

For, and on behalf of,
The Sir Sandford Fleming College of Applied Arts
and Technology



Brett Goodwin, PhD
Acting Vice President Academic Experience

January 13, 2021

Date



Dr. Michael Khan
Provost & Vice-President Academic

December 11, 2020

Date

**APPENDIX A – SUMMARY OF TRANSFER CREDITS AND PROGRAM REQUIREMENTS FOR COMPUTER SCIENCE WITH
OPTIONAL SPECIALIZATIONS**

BACHELOR OF SCIENCE (HONOURS), COMPUTER SCIENCE WITH A SPECIALIZATION IN THEORETICAL COMPUTER SCIENCE:

Program Requirements	Courses Granted through transfer equivalency	Courses students still need to take
Requirements for Specialization in Computer Science		
3.0 COIS credits consisting of COIS 2320H, 3030H, 3050H, 3320H, 4050H, and 4100H	COIS 2320H	COIS 3030H, 3050H, 3320H, 4050H, and 4100H
1.0 credit from ADMN	---	1.0 credit from ADMN
1.0 arts credit from AHCL, CAST, CUST, ENGL, FREN, HIST, PHIL, SPAN or WMST	---	1.0 arts credit
1.0 credit in addition to the above in Science	1.0 unassigned SCIE 1000 level	---
2.0 additional credits outside of COIS and MATH	2.0 unassigned SCIE 2000 level	---
Requirements for Computer Science Major		
4.0 COIS credits consisting of COIS 1010H, 1020H, 2020H, 2240H, 2300H, 3020H, 3380H, and 3400H	COIS 1010H, 1020H, 2300H, and 3400H	COIS 2020H, 2240H, 3020H and 3380H
2.0 COIS credits at the 4000 level	0.5 unassigned COIS 4000 level	1.0 outlined above (COIS 4050H and 4100H); 0.5 additional required
2.5 COIS credits at the 3000 level or beyond in addition to the above	1.5 unassigned COIS 3000 level	1.0 outlined above (COIS 3030H and 3050H)
2.0 COIS credits in addition to the above	0.5 outlined above (COIS 2320H)	0.5 outlined above (COIS 3320H); 1.0 additional required
1.5 MATH credits consisting of MATH 1350H, 1550H, and 2600H	---	MATH 1350H, 1550H, and 2600H
0.5 MATH credit from MATH 1005H or 1110H	---	MATH 1005H or 1110H
7.5 additional credits	3.0 credits outlined above (1.0 unassigned SCIE 1000 level, 2.0 unassigned SCIE 2000 level); 0.5 unassigned PHYS 1000 level; 1.0 unassigned SCIE 1000 level; 1.0 unassigned SCIE 2000 level	2.0 credits outlined above (1.0 ADMN and 1.0 Humanities)
General University Requirements		
A minimum of 14.0 science credits, including 1.0 Math credit, for a BSc degree	10.0 science assigned through transfer credit	Fulfilled through program requirements
A minimum of 7.0 credits at the 3000 or 4000 level	2.5 assigned through transfer credit	4.0 required above; Minimum 0.5 additional required
A minimum of 3.0 credits with a grade of 60% leading to majors in different disciplines	2.5 assigned through transfer credit	Fulfilled through program requirements
Maximum of 7.0 credits at the 1000 level	3.5 assigned through transfer credit	1.5 required above; Maximum 2.0 additional permitted
Minimum of 0.5 credit from the Approved Indigenous Course List	---	Minimum 0.5 credit from the Approved Indigenous Course List

BACHELOR OF SCIENCE (HONOURS), COMPUTER SCIENCE WITH A SPECIALIZATION IN DATA ANALYTICS:

Program Requirements	Courses Granted through transfer equivalency	Courses students still need to take
Requirements for Specialization in Data Analytics		
4.0 COIS credits consisting of COIS 1400H, 3030H, 3510H, 3560H, 4350H, 4400H, 4470H, and 4550H	---	COIS 1400H, 3030H, 3510H, 3560H, 4350H, 4400H, 4470H, and 4550H
Requirements for Computer Science Major		
4.0 COIS credits consisting of COIS 1010H, 1020H, 2020H, 2240H, 2300H, 3020H, 3380H, and 3400H	COIS 1010H, 1020H, 2300H, and 3400H	COIS 2020H, 2240H, 3020H and 3380H
2.0 COIS credits at the 4000 level	0.5 unassigned COIS 4000 level	1.5 required above (COIS 4350H, 4400H, and 4470H)
2.5 COIS credits at the 3000 level or beyond in addition to the above	1.5 unassigned COIS 3000 level	1.0 required above (COIS 3030H and 3510H)
2.0 COIS credits in addition to the above	COIS 2320H	1.5 required above (COIS 1400H, 3560H and 4550H)
1.5 MATH credits consisting of MATH 1350H, 1550H, and 2600H	---	MATH 1350H, 1550H, and 2600H
0.5 MATH credit from MATH 1005H or 1110H	---	MATH 1005H or 1110H
7.5 additional credits	0.5 unassigned PHYS 1000 level; 2.0 unassigned SCIE 1000 level; 3.0 unassigned SCIE 2000 level	2.0 additional credits
General University Requirements		
A minimum of 14.0 science credits, including 1.0 Math credit, for a BSc degree	10.0 science assigned through transfer credit	Fulfilled through program requirements
A minimum of 7.0 credits at the 3000 or 4000 level	2.5 assigned through transfer credit	Fulfilled through program and specialization requirements
A minimum of 3.0 credits with a grade of 60% leading to majors in different disciplines	2.5 assigned through transfer credit	Fulfilled through program requirements
Maximum of 7.0 credits at the 1000 level	3.5 assigned through transfer credit	2.0 required above; Maximum 1.5 additional permitted
Minimum of 0.5 credit from the Approved Indigenous Course List	---	Minimum 0.5 credit from the Approved Indigenous Course List

BACHELOR OF SCIENCE (HONOURS), COMPUTER SCIENCE WITH A SPECIALIZATION IN SOFTWARE ENGINEERING:

Program Requirements	Courses Granted through transfer equivalency	Courses students still need to take
Requirements for Specialization in Software Engineering		
4.0 COIS credits consisting of COIS 3030H, 3040H, 3050H, 3320H, 3420H, 3850H, and 4000Y	---	COIS 3030H, 3040H, 3050H, 3320H, 3420H, 3850H and 4000Y
1.0 credit from ADMN	---	0.5 required above (COIS 3850H); 0.5 additional ADMN credit required
1.0 arts credit from AHCL, CAST, CUST, ENGL, FREN, HIST, PHIL, SPAN or WMST	---	1.0 arts credit
1.0 credit in addition to the above in Science	1.0 unassigned SCIE 1000 level	---
2.0 additional credits outside of COIS and MATH	2.0 unassigned SCIE 2000 level	---
Requirements for Computer Science Major		
4.0 COIS credits consisting of COIS 1010H, 1020H, 2020H, 2240H, 2300H, 3020H, 3380H, and 3400H	COIS 1010H, 1020H, 2300H, and 3400H	COIS 2020H, 2240H, 3020H and 3380H
2.0 COIS credits at the 4000 level	0.5 unassigned COIS 4000 level	1.0 required above (COIS 4000Y); 0.5 additional required
2.5 COIS credits at the 3000 level or beyond in addition to the above	1.5 unassigned COIS 3000 level	1.0 required above (COIS 3030H and 3040H)
2.0 COIS credits in addition to the above	COIS 2320H	1.5 required above (COIS 3050H, 3320H and 3420H)
1.5 MATH credits consisting of MATH 1350H, 1550H, and 2600H	---	MATH 1350H, 1550H, and 2600H
0.5 MATH credit from MATH 1005H or 1110H	---	MATH 1005H or 1110H
7.5 additional credits	0.5 unassigned PHYS 1000 level; 2.0 unassigned SCIE 1000 level; 3.0 unassigned SCIE 2000 level	1.5 required above (0.5 credit ADMN, 1.0 credit arts)
General University Requirements		
A minimum of 14.0 science credits, including 1.0 Math credit, for a BSc degree	10.0 science assigned through transfer credit	Fulfilled through program requirements
A minimum of 7.0 credits at the 3000 or 4000 level	2.5 assigned through transfer credit	Fulfilled through program and specialization requirements
A minimum of 3.0 credits with a grade of 60% leading to majors in different disciplines	2.5 assigned through transfer credit	Fulfilled through program requirements
Maximum of 7.0 credits at the 1000 level	3.5 assigned through transfer credit	1.5 required above; Maximum 2.0 additional permitted
Minimum of 0.5 credit from the Approved Indigenous Course List	---	Minimum 0.5 credit from the Approved Indigenous Course List

JUNE 2023
ADDENDUM
TO THE
ARTICULATION AGREEMENT #1801
BETWEEN
THE SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY'S
ONTARIO COLLEGE ADVANCED DIPLOMA IN COMPUTER ENGINEERING TECHNOLOGY
AND
TRENT UNIVERSITY'S
BACHELOR OF SCIENCE (HONOURS), COMPUTER SCIENCE

This Addendum recognizes the changes outlined below, which shall become effective as of the Fall 2023 intake at Fleming College. These changes will remain effective until the above-mentioned Agreement expires or until a new agreement is entered in to, whichever occurs first.

The following changes have occurred:

- Fleming College has suspended the Computer Engineering Technology Advanced Diploma. Graduates of the program will still be eligible for the block of transfer credits as per the terms outlined in the original agreement, as well as subsequent addendums.