



**Fleming College of Applied Arts and Technology
and
Trent University**

**Revised Articulation Agreement
December 2008**

**Computer Engineering Technology to Bachelor of Science (Honours) – Computing
Systems
OCUTG # 1801**

Introduction

This agreement establishes the principles, guidelines, and procedures governing admission and assessment of selected qualified students to enter the ***Bachelor of Science (Honours) - Computing Systems*** program at Trent University on an advanced standing basis, subsequent to the successful completion of the ***Computer Engineering Technology*** program at Fleming College. Hereafter, this collaborative effort will be referred to as the "articulation agreement."

Purpose

The purpose of this articulation agreement is to recognize fully the potential that Trent University and Fleming College have to provide degree completion programs for the graduates of the *Computer Engineering Technology* program.

Objectives

- 1) Providing qualified graduates of the *Computer Engineering Technology* program at Fleming College with a seamless option for continuing their education at Trent University in the *Bachelor of Science (Honours) - Computing Systems* program.

- 2) Outlining the process for admission to Trent University for qualified graduates of the specified *Computer Engineering Technology* program at Fleming College and general conventions regarding advanced standing credit and degree completion requirements for the following degree programs at Trent University:
Bachelor of Science (Honours) - Computing Systems
Bachelor of Science (Honours) - Computing Systems, specialization in Computer Science
Bachelor of Science (Honours) - Computing Systems, specialization in Software Engineering

- 3) Providing for periodic review and assessment of the articulation agreement with respect to the academic performance of students, consistency across curricula, assurance of academic integrity, and all other aspects of the articulation agreement.

Conditions and Terms of the Agreement

- 1) Fleming College and Trent University agree to set up a joint committee to oversee the administration of the articulation.

- 2) Joint committee responsibility includes, but is not limited to, application procedures, an annual review of courses, credit transfer, enrolment data, student performance, administrative matters, and all other pertinent issues, as necessary. This activity will take place on an annual basis, to be established at a mutually convenient time for both parties.

- 3) Transfer credit will proceed in accordance with the following:
 - i) Upon successful completion of the *Computer Engineering Technology* 3 year program at Fleming College, students with a minimum 75% overall average will be eligible to make application to Trent University for admission to the *Bachelor of Bachelor of Science (Honours) - Computing Systems* degree program on an advanced standing basis. Students who closely approximate this average will be considered on an individual basis, subject to capacity.

 - ii) Trent University will grant direct entry and assign 10 credits, as outlined in the agreement, towards the successful completion of a 20-credit honours degree.

 - iii) Upon admission to the *Bachelor of Bachelor of Science (Honours) - Computing Systems* Program, students are required to follow the university and program regulations and requirements;





 - iv) Appendix A (attached) outlines the requirements to be met to achieve the *Bachelor of Bachelor of Science (Honours) - Computing Systems* degree on a transfer basis.

Review of Agreement

This agreement replaces all previous versions of the agreement.

The Agreement will be reviewed every three years. 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.

Signatures

	Fleming College	Trent University	Date
Vice-President, Academic			21/01/09
Program Chair:			15/01/09

**Appendix A- Fleming College
Computer Engineering Technology**

10 Transfer credits as follows:

Computer Engineering Technology
Assigned Credits
COIS 1010H
COIS 1020H
COIS 2300H
COIS 3400H
COIS 3420H
Unspecified Dept. Credits
0.5 COIS @ 2000 Level
1.5 COIS @ 3000 Level
0.5 COIS @ 4000 Level
Unassigned Credits:
3.0 Science @ 1000 Level
2.0 Science @ 2000 Level

As these credits recognize areas covered in the Computer Engineering Technology program rather than one-to-one course equivalents (which is not feasible), numerical grades will not be recorded on the Trent transcript. Completion of these credits will be recognized with a "Pass" grade. Students must then proceed to complete an additional 10 credits as specified below for each of the three degree options.

To Complete Trent's B.S.c. (Hons) Degree, Computing Systems, Computer Engineering Technology graduates will have to complete the following:

Computing Systems	Specialization in Computer Science	Specialization in Software Engineering
COIS 2020H	COIS 2020H	COIS 2020H
COIS 2240H	COIS 2240H	COIS 2240H
X	COIS 2320H	X
X	COIS 3030H	COIS 3030H
X	X	COIS 3040H
X	COIS 3050H	COIS 3050H
X	COIS 3320H	COIS 3320H
X	COIS 3380H	COIS 3380H
X	X	COIS 3850H
X	X	COIS 4000
X	COIS 4050H	X
X	COIS 4100H	X
COIS-MATH 2600H	COIS-MATH 2600H	COIS-MATH 2600H
PLUS 1.5 COIS credits @ 2000 Level (or Above)	X	X
PLUS 1.5 COIS credits @ 3000-4000 Level	PLUS 0.5 COIS credits @ 3000-4000 Level	X
PLUS 1.5 COIS credits @ 4000 Level	PLUS 0.5 COIS credit @ 4000 Level	PLUS 0.5 COIS credit @ 4000 Level
MATH 1005H or MATH 1100	MATH 1005H or MATH 1100	MATH 1005H or MATH 1100
MATH 1350H	MATH 1350H	MATH 1350H
MATH 1550H	MATH 1550H	MATH 1550H
PLUS 1.0 credits leading to a major other than COIS and MATH	PLUS 1.0 credits leading to a major other than COIS and MATH	PLUS 1.0 credits leading to a major other than COIS and MATH
X	PLUS 1.0 credits @ 2000 Level or above in any discipline	PLUS 1.0 credits @ 2000 Level or above in any discipline
PLUS 1.0 credits@ 3000-4000 Level in any discipline	X	X
PLUS 0.5 credits at any level in any discipline (if MATH 1005H is taken)	PLUS 0.5 credits at any level in any discipline (if MATH 1005H is taken)	PLUS 0.5 credits at any level in any discipline (if MATH 1005H is taken)

Note: Students in the degree completion program will be allowed to enrol concurrently in COIS 2020H, COIS 2240H, and any course for which COIS 2020H, COIS 2240H and/ or 2300H is a prerequisite (e.g. COIS 3030H, COIS 3040H, COIS 3320H).

Articulation Agreement

Department of Computing & Information Systems, Trent University for Graduates of Computer Engineering Technology 3-year advanced diploma program at Fleming College

The purpose of this agreement is to permit qualified students who have a three-year diploma program in Computer Engineering Technology from Fleming College to complete, in two years of full-time study, an Honours Science degree program at Trent University in one of:

- I. B.Sc. (Honours) in Computing Systems
- II. B.Sc. (Honours) in Computing Systems with a Specialization in Computer Science
- III. B.Sc. (Honours) in Computing Systems with a Specialization in Software Engineering

Students graduating from the diploma program in Computer Engineering Technology with a GPA of 3.0 (average of 75%) will be granted the following 10 credits toward the degree:

- 5.0 Computing & Information Systems (COIS) credits
- COIS 1010H, 1020H, 2300H, 3400H, and 3420H
- 0.5 unspecified COIS credit at the 2000-level
- 1.5 unspecified COIS credits at the 3000-level
- 0.5 unspecified COIS credit at the 4000-level
- 2.0 unspecified Science credits at the 1000-level
- 3.0 unspecified Science credits at the 2000-level

As these credits recognize areas covered in the Computer Engineering Technology program rather than one-to-one course equivalents (which is not feasible), numerical grades will not be recorded on the Trent transcript. Completion of these credits will be recognized with a “Pass” grade.

Students must then proceed to complete an additional 10 credits as specified below for each of the three degree options.

I. B.Sc. (Honours) in Computing Systems

To satisfy the requirements of the B.Sc. (Honours) in Computing Systems, students will need to complete:

- COIS 2020H, 2240H, and 3380H
- COIS-MATH 2600H
- 1.5 COIS credits in addition to the above at the 4000-level
- 1.0 COIS credit in addition to the above at the 3000- or 4000-level
- 1.5 COIS credits in addition to the above at the 2000-level or above
- MATH 1005H or MATH 1100Y or MATH 1101Y
- MATH 1350H and MATH 1550H

- 1.0 credit in addition to the above in any discipline
- 1.0 credit in addition to the above at the 3000- or 4000-level in any discipline
- if MATH 1005H is taken then 0.5 credit in addition to the above at any level in any discipline

Note: Students in the degree completion program will be allowed to enrol 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).

II. B.Sc. (Honours) in Computing Systems with a Specialization in Computer Science

To satisfy the requirements of the B.Sc. (Honours) in Computing Systems with a Specialization in Computer Science, students will need to complete:

- COIS 2020H, 2240H, 2320H, 3030H, 3050H, 3320H, 3380H, 4050H, and 4100H
- COIS-MATH 2600H
- 0.5 COIS credit in addition to the above at the 4000-level
- 0.5 COIS credit in addition to the above at the 3000- or 4000-level
- MATH 1005H or MATH 1100Y or MATH 1101Y
- MATH 1350H and MATH 1550H
- 1.0 credit in addition to the above in Humanities
- 1.0 credit in addition to the above in Business Administration
- if MATH 1005H is taken then 0.5 credit in addition to the above at any level in any discipline

Note: Students in the degree completion program will be allowed to enrol 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).

III. B.Sc. (Honours) in Computing Systems with a Specialization in Software Engineering

To satisfy the requirements of the B.Sc. (Honours) in Computing Systems with a Specialization in Software Engineering, students will need to complete:

- COIS 2020H, 2240H, 3030H, 3040H, 3050H, 3320H, 3380H, and 4000Y, and COIS-ADMN 3850H
- COIS-MATH 2600H
- 0.5 COIS credit in addition to the above at the 4000-level
- MATH 1005H or MATH 1100Y or MATH 1101Y
- MATH 1350H and MATH 1550H
- 1.0 credit in addition to the above in Humanities
- 1.0 credit in addition to the above in Business Administration if MATH 1005H is taken then 0.5 credit in addition to the above at any level in any discipline

Note: Students in the degree completion program will be allowed to enrol 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).

AUGUST 2018
ADDENDUM
 TO THE
ARTICULATION AGREEMENT #1801
 BETWEEN
FLEMING COLLEGE'S
COMPUTER ENGINEERING TECHNOLOGY ADVANCED DIPLOMA
 AND
TRENT UNIVERSITY'S
BACHELOR OF SCIENCE (HONOURS), COMPUTING SYSTEMS

This Addendum recognizes the changes outlined below and shall become effective as of the September 2018 intake and remain effective until a new agreement is entered into.

Trent University has implemented the following degree requirement changes. These changes specifically refer to Section 6 of the Agreement.

BACHELOR OF SCIENCE (HONOURS), COMPUTING SYSTEMS: PROGRAM REQUIREMENTS

BACHELOR OF SCIENCE (HONOURS), COMPUTING SYSTEMS WITHOUT SPECIALIZING		
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 COIS credit at the 4000 level	1.5 COIS credit at the 4000 level
2.5 COIS credits at the 3000 level or beyond in addition to the above	COIS 3420H; 1.5 COIS credits at the 3000 level	0.5 COIS credit at the 3000 level or beyond
2.0 COIS credits in addition to the above	0.5 COIS credit at the 2000 level	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; or 1.0 credit from MATH 1100Y or 1101Y	---	0.5 MATH credit from MATH 1005H or 1110H; or 1.0 credit from MATH 1100Y or 1101Y
Total of 20.0 credits required	5.0 listed above; 3.0 Science credits at the 1000 level; 2.0 Science credits at the 2000 level	7.5 (or 8.0) listed above; 2.5 (or 2.0) additional credits required
General University Requirements		

A minimum of 14.0 science credits, including 1.0 MATH	7.5 assigned through transfer credit	Minimum 4.0 required above, including MATH requirement; an additional 2.5 science credits required
A minimum of 7.0 credits at the 3000 or 4000 level	3.0 assigned through transfer credit	3.0 required above; an additional 1.0 required
A minimum of 3.0 credits with a grade of 60% leading to majors in a different discipline	2.0 assigned through transfer credit	Fulfilled through requirements above
Maximum of 7.0 credits at the 1000 level	4.0 assigned through transfer credit	Minimum 1.5 required above; maximum 1.5 additional permitted
Minimum of 0.5 credit from the Approved Indigenous Course List	---	Minimum of 0.5 credit from the Approved Indigenous Course List

BACHELOR OF SCIENCE (HONOURS), COMPUTING SYSTEMS SPECIALIZING IN COMPUTER SCIENCE

Specialization Requirements	Courses Granted Through Transfer Equivalency	Courses Students Still Need to Take
3.0 COIS credits consisting of COIS 2320H, 3030H, 3050H, 3320H, 4050H, and 4100H	---	COIS 2320H, 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 from AHCL, CAST, CUST, ENGL, FREN, HIST, PHIL, SPAN or WMST
1.0 science credit from BIOL, CHEM, ERSC, FRSC, GEOG or PHYS	---	1.0 science credit from BIOL, CHEM, ERSC, FRSC, GEOG or PHYS
2.0 additional credits outside of COIS and MATH	2.0 Science credits at the 2000 level	---
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 COIS credit at the 4000 level	1.0 required above; an additional 0.5 credit at the 4000 level required
2.5 COIS credits at the 3000 level or beyond in addition to the above	COIS 3420H; 1.5 COIS credit at the 3000 level	0.5 required above
2.0 COIS credits in addition to the above	0.5 COIS credit at the 2000 level	1.5 required 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; or 1.0 credit from MATH 1100Y or 1101Y	---	0.5 MATH credit from MATH 1005H or 1110H; or 1.0 credit from MATH 1100Y or 1101Y
Total of 20.0 credits required	7.0 listed above; 3.0 Science credits at the 1000 level	10.5 required above
General University Requirements		

This addendum was created to account for, and inform of, Trent degree requirement changes. As such, no signature is required for implementation.

A minimum of 14.0 science credits, including 1.0 MATH	7.5 assigned through transfer credit	Fulfilled through requirements above
A minimum of 7.0 credits at the 3000 or 4000 level	3.0 assigned through transfer credit	Fulfilled through requirements above
A minimum of 3.0 credits with a grade of 60% leading to majors in a different discipline	2.0 assigned through transfer credit	Fulfilled through requirements above
Maximum of 7.0 credits at the 1000 level	4.0 assigned through transfer credit	Minimum 1.5 required above; maximum 1.5 additional permitted
Minimum of 0.5 credit from the Approved Indigenous Course List	---	Minimum of 0.5 credit from the Approved Indigenous Course List

**To fulfill general, major and specialization requirements, students will be required to complete more than 10.0 credits at Trent University.*

BACHELOR OF SCIENCE (HONOURS), COMPUTING SYSTEMS SPECIALIZING IN DATA ANALYTICS		
Specialization Requirements	Courses Granted Through Transfer Equivalency	Courses Students Still Need to Take
3.5 COIS credits consisting of COIS 3030H, 3510H, 3560H, 4350H, 4400H, 4470H, and 4550H	---	COIS 3030H, 3510H, 3560H, 4350H, 4400H, 4470H and 4550H
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 COIS credit at the 4000 level	1.5 required above
2.5 COIS credits at the 3000 level or beyond in addition to the above	COIS 3420H; 1.5 COIS credit at the 3000 level	0.5 required above
2.0 COIS credits in addition to the above	0.5 COIS credit at the 2000 level	1.5 required 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; or 1.0 credit from MATH 1100Y or 1101Y	---	0.5 MATH credit from MATH 1005H or 1110H; or 1.0 credit from MATH 1100Y or 1101Y
Total of 20.0 credits required	5.0 listed above; 3.0 Science credits at the 1000 level; 2.0 Science credits at the 2000 level	Minimum 7.5 required above; an additional 2.5 required
General University Requirements		
A minimum of 14.0 science credits, including 1.0 MATH	7.5 assigned through transfer credit	Fulfilled through requirements above
A minimum of 7.0 credits at the 3000 or 4000 level	3.0 assigned through transfer credit	Fulfilled through requirements above
A minimum of 3.0 credits with a grade of 60% leading to majors in a different discipline	2.0 assigned through transfer credit	Fulfilled through requirements above

Maximum of 7.0 credits at the 1000 level	4.0 assigned through transfer credit	Minimum 1.5 required above; maximum 1.5 additional permitted
Minimum of 0.5 credit from the Approved Indigenous Course List	---	Minimum of 0.5 credit from the Approved Indigenous Course List

BACHELOR OF SCIENCE (HONOURS), COMPUTING SYSTEMS SPECIALIZING IN SOFTWARE ENGINEERING		
Specialization Requirements	Courses Granted Through Transfer Equivalency	Courses Students Still Need to Take
4.0 COIS credits consisting of COIS 3030H, 3040H, 3050H, 3320H, 3420H, 3850H and 4000Y	COIS 3420H	COIS 3030H, 3040H, 3050H, 3320H, 3850H and 4000Y
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 from AHCL, CAST, CUST, ENGL, FREN, HIST, PHIL, SPAN or WMST
1.0 science credit from BIOL, CHEM, ERSC, FRSC, GEOG or PHYS	---	1.0 science credit from BIOL, CHEM, ERSC, FRSC, GEOG or PHYS
2.0 additional credits outside of COIS and MATH	2.0 Science credits at the 2000 level	---
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 COIS credit at the 4000 level	1.0 required above; an additional 0.5 required
2.5 COIS credits at the 3000 level or beyond in addition to the above	0.5 listed above; 1.5 COIS credit at the 3000 level	0.5 required above
2.0 COIS credits in addition to the above	0.5 COIS credit at the 2000 level	1.5 required 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; or 1.0 credit from MATH 1100Y or 1101Y	---	0.5 MATH credit from MATH 1005H or 1110H; or 1.0 credit from MATH 1100Y or 1101Y
Total of 20.0 credits required	7.0 listed above; 3.0 Science credits at the 1000 level	11.0 required above
A minimum of 14.0 science credits, including 1.0 MATH	7.5 assigned through transfer credit	Fulfilled through requirements above
A minimum of 7.0 credits at the 3000 or 4000 level	3.0 assigned through transfer credit	Fulfilled through requirements above
A minimum of 3.0 credits with a grade of 60% leading to majors in a different discipline	2.0 assigned through transfer credit	Fulfilled through requirements above

Maximum of 7.0 credits at the 1000 level	4.0 assigned through transfer credit	Minimum 1.5 required above; maximum 1.5 additional permitted
Minimum of 0.5 credit from the Approved Indigenous Course List	---	Minimum of 0.5 credit from the Approved Indigenous Course List

**To fulfill general, major and specialization requirements, students will be required to complete more than 10.0 credits at Trent University.*