MODEL ROUTE

School:	School of Engineering Technology and Applied Science - ICET	Program Number:		3419					
Program Title:	**Software Engineering Technology Co-op**	Credential:		☐ Certificate ☐ Graduate Certificate ☐ Diploma ☑ Advanced Diploma ☐ Degree					
Delivery Mode:	☑ Co-Op ☐ Non - Co-Op ☐ Fast Track	Duration (Semesters):		☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☑ 9					
Intake:	**Fall 2016 and Winter 2017**								

Course Code	Course Title	Co/Pre Requisite (Course Code)	Lab Hours	Lecture Hours	Field Placement Hours	Total Course Hrs (Lab + Lecture + Field)	Weeks (14)	Total Hours
Semester 1 (Fall 2016 or Winter 2017)								
COMM170/171	College Communications 2			3		3	14	42
COMP100	Programming 1		2	2		4	14	56
COMP120	Software Engineering Fundamentals		2	2		4	14	56
COMP213	Web Interface Design		4			4	14	56
GNED219	The Canadian Workplace Experience			3		3	14	42
MATH175	Functions and Number Systems		1	2		3	14	42
						Total		294
Semester 2 (Winter 2017 or Summer 2017)								
COMP122	Introduction to Database Concepts		2	2		4	14	56
COMP123	Programming 2	P=COMP100	2	2		4	14	56
COMP125	Client-Side Web Development	P=COMP100, COMP213	2	2		4	14	56
COMP225	Software Engineering Methodologies 1	P=COMP100	2	2		4	14	56
COMP301	UNIX/Linux Operating Systems	P=COMP100	2	2		4	14	56
MATH185	Discrete Mathematics		1	2		3	14	42
						Total		322
Break (Summer 2017)								
Semester 3 (Fall 2017)								
COMP214	Advanced Database Concepts	P=COMP122	2	2		4	14	56
COMP228	Java Programming	P=COMP123	2	2		4	14	56
COMP229	Web Application Development	P=COMP100, COMP213	2	2		4	14	56
COMP246	Object Oriented Software Engineering	P=COMP123, COMP225	2	2		4	14	56
COOP221	Employment Preplacement	P=COMM170/171 minimum"C" grade; CGPA 2.5; 80% year 1 courses completed		1		1	14	14
ENGL253	Advanced Business Communications	P=COMM170/171		3		3	14	42
GNED500	Global Citizenship: from Social Analysis to Social Action			3		3	14	42
						Total		322
Work Term 1 (Winter 2018)								
COOP222	Co-op Work Placement 1							

Course Code	Course Title	Co/Pre Requisite (Course Code)	Lab Hours	Lecture Hours	Field Placement Hours	Total Course Hrs (Lab + Lecture + Field)	Weeks (14)	Total Hours
Semester 4 (Summer 2018)								
CNET124	Fundamentals of Computer Networks	P=(CNET101, CNET102) or COMP100 or ETEC116	2	2		4	14	56
CNET329	Business and ICT	P=CNET229 or GNED219	1	2		3	14	42
COMP212	Programming 3	P=COMP123	2	2		4	14	56
COMP311	Software Testing and Quality Assurance		2	2		4	14	56
ELECT1	Technical Elective 1		2	1		3	14	42
MATH210	Linear Algebra and Statistics	P=MATH175, MATH185	2	2		4	14	56
						Total		308
Work Term 2 (Fall 2018)								
COOP331	Co-op Work Placement 2							
Semester 5 (Winter 2019)								
CNET307	IT Project Management	P=COMM170/171, CNET229 or COMP225 or ETEC225 or MATH180	1	2		3	14	42
COMP231	Software Development Project 1	P=COMP214, COMP228, COMP229, COMP246	2	2		4	14	56
COMP303	Java EE Programming	P=COMP214, COMP228	2	2		4	14	56
COMP308	Emerging Technologies	P=COMP212, COMP214, COMP228	2	2		4	14	56
COMP321	Systems Integration	P=COMP246, ENGL253	2	2		4	14	56
ELECT2	Technical Elective 2		2	2		4	14	56
						Total		322
Work Term 3 (Summer 2019)								
COOP332	Co-op Work Placement 3							

Course Code	Course Title	Co/Pre Requisite (Course Code)	Lab Hours	Lecture Hours	Field Placement Hours	Total Course Hrs (Lab + Lecture + Field)	Weeks (14)	Total Hours
Semester 6 (Fall 2019)								
COMP304	Wireless Programming	P=COMP228	2	2		4	14	56
COMP306	API Engineering and Cloud Computing	P=COMP212	2	2		4	14	56
COMP307	Software Security	P=COMP212, COMP228	2	2		4	14	56
COMP309	Data Warehousing and Data Mining in HCIS	P=COMP214	2	2		4	14	56
COMP313	Software Development Project 2	P= COMP231, COMP381 or (COMP303, COMP306) or (COMP305, COMP392)	2	2		4	14	56
GNED	General Education Elective			3		3	14	42
							Total	322
Minimum Grade Required: D								
							Total Program Hours:	**1890**
C = Co-Requisite; P = Pre-Requisite								

Notes:

Technical Electives

Course Code	Course Title	Co/Pre Requisite (Course Code)	Lab Hours	Lecture Hours	Field Placement Hours	Total Course Hrs	Weeks (14)	Total Hours
COMP305	Game Programming 1	P=COMP123	2	2		4	14	56
COMP317	Software Quality Assurance and Test Management	P=COMP123, COMP225, COMP228	2	2		4	14	56
COMP381	Tools, Algorithms and Methods for HCIS	C=COMP214; P=COMP123	2	2		4	14	56
COMP382	Computer Techniques in Medical Imaging	P=COMP381	2	2		4	14	56
COMP383	Data Security and Privacy Policies in HCIS	P=COMP380	2	2		4	14	56
COMP384	Telehealth	P=COMP381	2	2		4	14	56
COMP387	Clinical Workflow and IT Solutions	P=COMP380	2	1		3	14	42
COMP392	Advanced Graphics	P=COMP212, COMP228	2	2		4	14	56
COMP396	Game Programming 2	P=COMP305, COMP391	2	2		4	14	56
COMP397	Web Game Programming	P=COMP123, COMP213	2	1		3	14	42

Signature: Predrag Pešikan

School Dean/Designate

14-Mar-16

Revised Date

Associate Vice President - Academic Excellence