MODEL ROUTE School of Engineering Technology School: **Program Number:** 3419 and Applied Science ☐ Certificate ☐ Graduate Certificate □ Degree **Software Engineering Technology Program Title: Credential:** ☑ Advanced Diploma ☐ Centennial College Certificate □ Diploma Co-op ☑ Co-Op Online ☐ 1 Semesters ☐ 4 Semesters **Program Delivery** ☐ Fast Track ☐ Hybrid **Duration:** 2 Semesters √ 6 Semesters Mode: ☐ Non Co-op ☐ 3 Semesters 8 Semesters Campus: PROGRESS **Department Code:** 3515 Fall 2022 and Winter 2023 Intake: Course Total Field Delivery Course Hrs Co/Pre Requisite Weeks Lab Lecture Course Code Course Title Placement ODL=Online (Lab + **Total Hours** (Course Code) Hours Hours (14)BLD=Blended Hours Lecture + HYB = Hybrid Field) Fall 2022 or Winter 2023 Semester 1 COMM160/161 � College Communications 1 3 ODL 3 14 42 COMP100 2 2 4 14 56 Programming 1 COMP120 ❖ Software Engineering Fundamentals 2 2 HYB 4 14 56 COMP213 Web Interface Design 4 4 14 56 GNED � **General Education Elective** 3 ODL 3 14 42 MATH175 � ODL 14 42 **Functions and Number Systems** 3 3 Total 294 Winter 2023 or Summer 2023 Semester 2 P=COMM160 or ODL COMM170/171 College Communications 2 3 3 14 42 COMM161 COMP122 Introduction to Database Concepts 2 2 4 14 56 COMP123 P=COMP100 4 14 56 Programming 2 2 2 P=COMP100 and COMP125 Client-Side Web Development 2 2 4 14 56 COMP213 P=COMP100, and, COMP225♦ 2 НҮВ 4 14 56 Software Requirements Engineering 2 COMP120 or COMP391 COMP301 **UNIX/Linux Operating Systems** P=COMP100 2 2 4 14 56 MATH185 � ODL 14 42 **Discrete Mathematics** 3 3 Total 364 Summer 2023 **Break** Semester 3 Fall 2023 COMP214 P=COMP122 2 4 14 56 **Advanced Database Concepts** 2 COMP228 Java Programming P=COMP123 2 2 4 14 56 P=COMP123 and COMP229 Web Application Development 2 2 4 14 56 COMP125 P=COMP123 and COMP246 **♦** 2 HYB 2 4 14 56 Software Systems Design COMP225 P=COMM170/171 minimum"C" grade; COOP321�� **Employment Preplacement** ODL 14 1 1 14 CGPA 2.5; 80% year 1 courses completed P=COMM170 or ENGL253 ♦ Advanced Business Communications 3 ODL 3 42 14 COMM171 Global Citizenship: from Social ODL 42 GNED500♦ 3 3 14 Analysis to Social Action Total 322 Work Term 1 Winter 2024 COOP222 Co-op Work Placement 1 Semester 4 Summer 2024 COMP212 P=COMP123 Programming 3 2 2 4 14 56 COMP216◆ Networking for Software Developers P=COMP100 2 2 HYB 4 14 56 COMP254 **Data Structures and Algorithms** P=COMP228 2 2 4 14 56 COMP304 Mobile Apps Development P=COMP228 2 2 4 14 56 Software Testing and Quality COMP311♦ P=COMP123 2 2 HYB 4 14 56 Assurance P=MATH175 and MATH210 � Linear Algebra and Statistics 2 2 HYB 4 14 56 MATH185 336 Total Work Term 2 Fall 2024 COOP331 Co-op Work Placement 2

Semester 5

Winter 2025

CNET307�	IT Project Management	P=COMM170 or COMM171, and, CNET229 or COMP246	1	2		ODL	3	14	42
COMP231�	Software Development Project 1	P=COMP228 and COMP229 and COMP246	2	2		ODL	4	14	56
COMP303	Enterprise Application Development	P=COMP214 and COMP228	2	2			4	14	56
COMP308	Emerging Technologies	P=COMP228 and COMP229	2	2			4	14	56
COMP321�	Enterprise Systems Integration	P=COMP246	2	2		НҮВ	4	14	56
ELECT1 �	Technical Elective 1		2	1		ODL	3	14	42
								Total	308
Work Term 3	Summer 2025								
COOP332	Co-op Work Placement 3								
Semester 6	Fall 2025								
COMP255�	Business and Entrepreneurship for Software Engineering Technology	P=COMP225	3			ODL	3	14	42
COMP306	API Engineering and Cloud Computing	P=COMP212 and COMP229	2	2			4	14	56
COMP307	Software Security	P=COMP212 and COMP228	2	2			4	14	56
COMP309	Data Warehousing and Predictive Analytics	P=COMP214	2	2			4	14	56
COMP313�	Software Development Project 2	P=COMP231 and COMP303 and COMP304, or, COMP231 and COMP381	2	2		ODL	4	14	56
GNED ♦	General Education Elective		1	3		ODL	3	14	42
								Total	308
Minimum Grade F	Required: D								
							Total Progr	am Hours:	1932
C = Co-Requisite; P = Pre-Requisite									
Notes:									
♦This course may be offered in one of the following modalities (Online, Hybrid or Blended)									
♦ ♦ This course may be offered in a compressed delivery 2 hours per week for a 7 week period.									
Technical Electives:									
COMP367 ♦	DevOps Implementation		2	1		ODL	3	14	42
	Al for Software Developers		2	1		ODL	3	14	42
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