MODEL ROUTE School of Engineering Technology and School: **Program Number:** 3412 **Applied Science** ☐ Certificate ☐ Graduate Certificate □ Degree **Software Engineering Technology -Program Title:** Credential: ☐ Centennial College Certificate □ Diploma ☑ Advanced Diploma **Artificial Intelligence Co-op** □ Online ☑ Co-Op ☐ 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 2024 and Winter 2025 and Summer 2025 Intake: Course Total Field Course Hrs Delivery Co/Pre Requisite Lab Weeks Lecture Course Code Course Title Placement ODL=Online **Total Hours** (Lab + (Course Code) Hours Hours (14)Lecture + Hours **BLD=Blended** HYB = Hybrid Field) Fall 2024 or Winter 2025 or Summer 2025 Semester 1 COMM160/161 � College Communications 1 3 ODL 3 14 42 2 2 COMP100 Programming 1 4 14 56 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 3 MATH175 � **Functions and Number Systems** ODL 3 14 42 **Total** 294 Semester 2 Winter 2025 or Summer 2025 or Fall 2025 P=COMM160 or COMM170/171 3 ODL 3 14 42 College Communications 2 COMM161 COMP122 Introduction to Database Concepts 2 2 4 14 56 COMP123 2 2 4 Programming 2 P=COMP100 14 56 P=COMP100 and COMP125 Client-Side Web Development 2 2 4 14 56 COMP213 P=COMP100, and, COMP225◆ Software Requirements Engineering 2 2 HYB 4 14 56 COMP120 or COMP391 2 COMP301 P=COMP100 2 **UNIX/Linux Operating Systems** 4 14 56 Discrete Mathematics and Introductory MATH195 � P=MATH175 3 ODL 3 14 42 Calculus **Total** 364 **Break** Summer 2025 Fall 2025 or Winter 2026 Semester 3 COMP228 Java Programming P=COMP123 2 2 4 14 56 P=COMP123 and 2 2 COMP229 Web Application Development 14 4 56 COMP125 C=MATH210 P=COMP123 and Introduction to Artificial Intelligence COMP237 2 2 14 4 56 MATH175 and **MATH195** P=COMP123 and 2 2 COMP248 Artificial Intelligence Systems Design 4 14 56 COMP225 P=COMM160/161 minimum"C" grade; COOP321�� ODL 14 **Employment Preplacement** 1 14 1 CGPA 2.5; 80% year 1 courses completed Global Citizenship: from Social Analysis GNED500◆ 3 ODL 3 14 42 to Social Action P=MATH175, and, MATH210 � 2 2 **Linear Algebra and Statistics** HYB 4 14 56 MATH185 or MATH195 **Total** 336 Work Term 1 Winter 2026 or Summer 2026

COOP222	Co-op Work Placement 1							
Semester 4	Summer 2026 or Winter 2027	T						
COMP214	Advanced Database Concepts	P=COMP122	2	2		4	14	56
COMP219	Networking and Intelligent Robotics	P=COMP123 and COMP237	2	2	НҮВ	4	14	56
COMP247	Supervised Learning	P= COMP228 and COMP237 and COMP248 and MATH210	2	2		4	14	56
COMP254	Data Structures and Algorithms	P=COMP228	2	2		4	14	56
COMP315	Artificial Intelligence Software Testing a	P=COMP100 and COMP237	2	2	НҮВ	4	14	56
ENGL253�	Advanced Business Communications	P=COMM170 or COMM171		3	ODL	3	14	42
Work Term 2	Fall 2026						Total	322
COOP331	Co-op Work Placement 2	1				T		
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Semester 5	Winter 2027 or Fall 2027							
CNET307◆	IT Project Management	P=COMM170 or COMM171, and, CNET229 or COMP225	1	2	ODL	3	14	42
COMP255�	Business and Entrepreneurship for Software Engineering Technology	P=COMP225	3		ODL	3	14	42
COMP258	Neural Networks	P=COMP247 and COMP254	2	2		4	14	56
COMP261�	Al Ethics and Data Governance	P=COMP237 and COMP254	1	2	НҮВ	3	14	42
COMP264	Cloud Machine Learning	P = COMP237	2	1		3	14	42
COMP304	Mobile Apps Development	P=COMP228	2	2		4	14	56
							Total	280
Work Term 3	Summer 2027							
COOP332	Co-op Work Placement 3							
Semester 6	Fall 2027 or Winter 2028	1						
COMP251	Big Data Tools for Machine Learning	P=COMP247 and COMP254	2	2		4	14	56
COMP257	Unsupervised and Reinforcement Learning	P=COMP247 and COMP254	2	2		4	14	56
COMP262	Natural Language Processing and Recommender Systems	P=COMP247 and COMP254 and COMP258	2	2		4	14	56
COMP263	Deep Learning	P= COMP258	2	2		4	14	56
COMP385 ♦	Artificial Intelligence Capstone Project	P=COMP248 and COMP258	2	2	НҮВ	4	14	56
GNED❖	General Education Elective			3	ODL	3	14	42
							Total	322
Minimum Grade	e Required: D							

Total Program Hours:

1918

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.