

MODEL ROUTE

School:	School of Engineering Technology and Applied Science	Program Number:	3442						
Program Title:	Software Engineering Technology - Artificial Intelligence Co-op	Credential:	☐ Certificate ☐ Graduate Certificate ☐ Degree ☐ Diploma ☒ Advanced Diploma ☐ Centennial College Certificate						
Program Delivery Mode:	☒ Co-Op ☒ Online ☐ Fast Track ☐ Hybrid ☐ Non Co-op	Duration :	☐ 1 Semesters ☐ 4 Semesters ☐ 2 Semesters ☒ 6 Semesters ☐ 3 Semesters ☐ 8 Semesters						
Campus:	ONLINE	Department Code:	3515						
Intake:	Fall 2021 and Winter 2022								
Course Code	Course Title	Co/Pre Requisite (Course Code)	Lab Hours	Lecture Hours	Field Placement Hours	Course Delivery ODL=Online BLD=Blended HYB = Hybrid	Total Course Hrs (Lab + Lecture + Field)	Weeks (14)	Total Hours
Semester 1	Fall 2021 or Winter 2022								
COMM160/161	College Communications 1			3		ODL	3	14	42
COMP100	Programming 1		2	2		ODL	4	14	56
COMP120	Software Engineering Fundamentals		2	2		ODL	4	14	56
COMP213	Web Interface Design		4			ODL	4	14	56
GNED	General Education Elective			3		ODL	3	14	42
MATH175	Functions and Number Systems			3		ODL	3	14	42
								Total	294
Semester 2	Winter 2022 or Summer 2022								
COMM170/171	College Communications 2	P=COMM160 or COMM161		3		ODL	3	14	42
COMP122	Introduction to Database Concepts		2	2		ODL	4	14	56
COMP123	Programming 2	P=COMP100	2	2		ODL	4	14	56
COMP125	Client-Side Web Development	P=COMP100 and COMP213	2	2		ODL	4	14	56
COMP225	Software Requirements Engineering	P=COMP100, and, COMP120 or COMP391	2	2		ODL	4	14	56
COMP301	UNIX/Linux Operating Systems	P=COMP100	2	2		ODL	4	14	56
MATH185	Discrete Mathematics			3		ODL	3	14	42
								Total	364
Break	Summer 2022								
Semester 3	Fall 2022								
COMP228	Java Programming	P=COMP123	2	2		ODL	4	14	56
COMP229	Web Application Development	P=COMP123 and COMP125	2	2		ODL	4	14	56
COMP237	Introduction to Artificial Intelligence	C=MATH210 P=COMP123 and MATH175 and MATH185	2	2		ODL	4	14	56
COMP246	Software Systems Design	P=COMP123 and COMP225	2	2		ODL	4	14	56
COOP421	Employment Preplacement	P=COMM170/171 minimum "C" grade; CGPA 2.5; 80% year 1 courses completed		1		ODL	1	14	14
GNED500	Global Citizenship: from Social Analysis to Social Action			3		ODL	3	14	42
MATH210	Linear Algebra and Statistics	P=MATH175 and MATH185	2	2		ODL	4	14	56
								Total	336
Work Term 1	Winter 2023								
COOP222	Co-op Work Placement 1					ODL			

Semester 4	Summer 2023								
COMP214 ♦	Advanced Database Concepts	P=COMP122	2	2		ODL	4	14	56
COMP216 ♦	Networking for Software Developers	P=COMP100	2	2		ODL	4	14	56
COMP247 ♦	Supervised Learning	P= COMP228 and COMP237 and MATH210	2	2		ODL	4	14	56
COMP254 ♦	Data Structures and Algorithms	P=COMP228	2	2		ODL	4	14	56
COMP311 ♦	Software Testing and Quality Assurance	P=COMP123	2	2		ODL	4	14	56
ENGL253 ♦	Advanced Business Communications	P=COMM170 or COMM171		3		ODL	3	14	42
								Total	322
Work Term 2	Fall 2023								
COOP331 ♦	Co-op Work Placement 2					ODL			
Semester 5	Winter 2024								
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		ODL	4	14	56
COMP261 ♦	AI Ethics and Data Governance	P=COMP247 and COMP254	1	2		ODL	3	14	42
COMP264 ♦	Cloud Machine Learning	P=COMP247	2	1		ODL	3	14	42
COMP304 ♦	Mobile Apps Development	P=COMP228	2	2		ODL	4	14	56
								Total	280
Work Term 3	Summer 2024								
COOP332 ♦	Co-op Work Placement 3					ODL			
Semester 6	Fall 2024								
COMP251 ♦	Big Data Tools for Machine Learning	P=COMP247 and COMP254	2	2		ODL	4	14	56
COMP257 ♦	Unsupervised and Reinforcement Learning	P=COMP247 and COMP254	2	2		ODL	4	14	56
COMP262 ♦	Natural Language Processing and Recommender Systems	P=COMP247 and COMP254 and COMP258	2	2		ODL	4	14	56
COMP263 ♦	Deep Learning	P= COMP258	2	2		ODL	4	14	56
COMP385 ♦	Artificial Intelligence Capstone Project	P=COMP246 and COMP258	2	2		ODL	4	14	56
GNED ♦	General Education Elective			3		ODL	3	14	42
								Total	322
Minimum Grade 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)