MODEL ROUTE

School:	School of Engineering Technology and Applied Science	Program Number:		3432	

Program Title:	**Software Engineering Technology - Artificial Intelligence Co-op, Fast Track**	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:	**PROGRESS**	Department Code:	**3515**

Intake:	**Fall 2022 and Winter 2023**

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 3	**Fall 2022 or Winter 2023**								
COMM170/171	College Communications 2	P=COMM160 or COMM161		3			3	14	42
COMP228	Java Programming	P=COMP123	2	2			4	14	56
COMP229	Web Application Development	P=COMP123 and COMP125	2	2			4	14	56
COMP237	Introduction to Artificial Intelligence	C=MATH210 P=COMP123 and MATH175 and MATH185	2	2			4	14	56
COMP246	Software Systems Design	P=COMP123 and COMP225	2	2			4	14	56
GNED500	Global Citizenship: from Social Analysis to Social Action			3			3	14	42
MATH210	Linear Algebra and Statistics	P=MATH175 and MATH185	2	2			4	14	56
							Total		364
Semester 4	**Winter 2023 or Summer 2023**								
COMP214	Advanced Database Concepts	P=COMP122	2	2			4	14	56
COMP216	Networking for Software Developers	P=COMP100	2	2			4	14	56
COMP247	Supervised Learning	P= COMP228 and COMP237 and MATH210	2	2			4	14	56
COMP254	Data Structures and Algorithms	P=COMP228	2	2			4	14	56
COMP311	Software Testing and Quality Assurance	P=COMP123	2	2			4	14	56
COOP321/421◈	Employment Preplacement	P=COMM170/171 minimum"C" grade; CGPA 2.5; 80% year 1 courses completed		1		ODL	1	14	14
ENGL253	Advanced Business Communications	P=COMM170 or COMM171		3			3	14	42
							Total		336
Work Term 1	**Summer 2023 or Fall 2023**								
COOP222	Co-op Work Placement 1								
Work Term 2	**Fall 2023 or Summer 2024**								
COOP331	Co-op Work Placement 2								
Semester 5	**Winter 2024**								
CNET307◈	IT Project Management	P=COMM170 or COMM171, and, CNET229 or COMP225	1	2		ODL	3	14	42

Code	Title	Prereq					Modality			
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	AI Ethics and Data Governance	P=COMP247 and COMP254	1	2				3	14	42
COMP264	Cloud Machine Learning	P=COMP247	2	1				3	14	42
COMP304	Mobile Apps Development	P=COMP228	2	2				4	14	56
								Total		280
Break	**Summer 2024**									
Semester 6	**Fall 2024**									
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	2	2				4	14	56
COMP263	Deep Learning	P= COMP258	2	2				4	14	56
COMP313◈	Software Development Project 2	P=COMP231 and COMP303 and COMP304, or, COMP231 and COMP381, or, COMP231 and COMP305 and COMP391, or, COMP246 and COMP258	2	2			HYB	4	14	56
GNED◈	General Education Elective			3			ODL	3	14	42
								Total		322
Minimum Grade Required: D										
								Total Program Hours:		**1302**

C = Co-Requisite; P = Pre-Requisite

Notes:
◈This course may be offered in one of the following modalities (Online, Hybrid or Blended)