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	
Program Delivery Mode:	☑Co-Op ☐Online ☑Fast Track ☐Hybrid ☐Non Co-op	**Duration :**	☐2 Semesters ☐3 Semesters ☑4 Semesters ☐6 Semesters ☐8 Semesters	
Campus:	**Progress**			
Intake:	**Fall 2020 and Winter 2021**			

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 2020 or Winter 2021**								
COMM170/171	College Communications 2	P=COMM160/161		3			3	14	42
COMP228	Java Programming	P=COMP123	2	2			4	14	56
COMP229	Web Application Development	P=COMP123, COMP125	2	2			4	14	56
COMP237	Introduction to Artificial Intelligence	C=MATH210 P=COMP123, MATH175, MATH185	2	2			4	14	56
COMP246	Object Oriented Software Engineering	P=COMP123, COMP225	2	2			4	14	56
GNED500◈	Global Citizenship: from Social Analysis to Social Action			3		ODL	3	14	42
MATH210	Linear Algebra and Statistics	P=MATH175, MATH185	2	2			4	14	56
							Total		364
Semester 4	**Winter 2021 or Summer 2021**								
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, COMP237, 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=COMM170/171		3			3	14	42
							Total		336
Work Term 1 (Summer 2021 or Fall 2021)									
COOP222	Co-op Work Placement 1								
Work Term 2 (Fall 2021 or Summer 2022)									
COOP331	Co-op Work Placement 2								
Semester 5	**Winter 2022**								
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

COMP262	Natural Language Processing and Recommender Systems	P=COMP247 and COMP254	2	2				4	14	56
COMP264	Cloud Machine Learning	P=COMP247	2	1				3	14	42
COMP304	Mobile Apps Development	P=COMP228	2	2				4	14	56
							Total		294

Break (Summer 2022)

Semester 6	**Fall 2022**								
CNET307◈	IT Project Management	P=COMM170 or COMM171, and, CNET229 or COMP246	1	2		ODL	3	14	42
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
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		308

 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)