

# MODEL ROUTE

School:	School of Engineering Technology and Applied Science	Program Number:	3412						
Program Title:	Software Engineering Technology - Artificial Intelligence Co-op	Credential:	<div><input type="checkbox"/> Certificate<input type="checkbox"/> Graduate Certificate<input type="checkbox"/> Degree</div> <div><input type="checkbox"/> Diploma<input checked="" type="checkbox"/> Advanced Diploma<input type="checkbox"/> Centennial College Certificate</div>						
Program Delivery Mode:	<div><input checked="" type="checkbox"/> Co-Op<input type="checkbox"/> Online</div> <div><input type="checkbox"/> Fast Track<input type="checkbox"/> Hybrid</div> <div><input type="checkbox"/> Non Co-op</div>	Duration :	<div><input type="checkbox"/> 1 Semesters<input type="checkbox"/> 4 Semesters</div> <div><input type="checkbox"/> 2 Semesters<input checked="" type="checkbox"/> 6 Semesters</div> <div><input type="checkbox"/> 3 Semesters<input type="checkbox"/> 8 Semesters</div>						
Campus:	PROGRESS	Department Code:	3515						
Intake:	Fall 2023 and Winter 2024								
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 2023 or Winter 2024								
COMM160/161	College Communications 1			3			3	14	42
COMP100	Programming 1		2	2			4	14	56
COMP120	Software Engineering Fundamentals		2	2			4	14	56
COMP213	Web Interface Design		4				4	14	56
GNED◆	General Education Elective			3		ODL	3	14	42
MATH175	Functions and Number Systems			3			3	14	42
							Total		294
Semester 2	Winter 2024 or Summer 2024								
COMM170/171	College Communications 2	P=COMM160 or COMM161		3			3	14	42
COMP122	Introduction to Database Concepts		2	2			4	14	56
COMP123	Programming 2	P=COMP100	2	2			4	14	56
COMP125	Client-Side Web Development	P=COMP100 and COMP213	2	2			4	14	56
COMP225◆	Software Requirements Engineering	P=COMP100, and, COMP120 or COMP391	2	2		HYB	4	14	56
COMP301	UNIX/Linux Operating Systems	P=COMP100	2	2			4	14	56
MATH185	Discrete Mathematics			3			3	14	42
							Total		364
Break	Summer 2024								
Semester 3	Fall 2024								
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
COOP321/421◆	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			4	14	56
							Total		336
Work Term 1	Winter 2025								
COOP222	Co-op Work Placement 1								

Semester 4	Summer 2025								
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
ENGL253	Advanced Business Communications	P=COMM170 or COMM171		3			3	14	42
							Total		322
Work Term 2	Fall 2025								
COOP331	Co-op Work Placement 2								
Semester 5	Winter 2026								
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	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
Work Term 3	Summer 2026								
COOP332	Co-op Work Placement 3								
Semester 6	Fall 2026								
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
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			
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)									