

# MODEL ROUTE

<b>School:</b>	School of Engineering Technology and Applied Science	<b>Program Number:</b>	3412						
<b>Program Title:</b>	<b>Software Engineering Technology - Artificial Intelligence Co-op</b>	<b>Credential:</b>	<input type="checkbox"/> Certificate	<input type="checkbox"/> Graduate Certificate	<input type="checkbox"/> Degree				
			<input type="checkbox"/> Diploma	<input checked="" type="checkbox"/> Advanced Diploma					
<b>Program Delivery Mode:</b>	<input checked="" type="checkbox"/> Co-Op <input type="checkbox"/> Online <input type="checkbox"/> Fast Track <input type="checkbox"/> Hybrid <input type="checkbox"/> Non Co-op	<b>Duration :</b>	<input type="checkbox"/> 2 Semesters	<input type="checkbox"/> 3 Semesters					
			<input type="checkbox"/> 4 Semesters	<input checked="" type="checkbox"/> 6 Semesters					
			<input type="checkbox"/> 8 Semesters						
<b>Campus:</b>	<b>Progress</b>								
<b>Intake:</b>	<b>Fall 2020 and Winter 2021</b>								
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
<b>Semester 1      Fall 2020 or Winter 2021</b>									
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		1	2			3	14	42
							<b>Total</b>		294
<b>Semester 2      Winter 2021 or Summer 2021</b>									
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, COMP213	2	2			4	14	56
COMP225◆	Software Engineering Methodologies 1	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		1	2			3	14	42
COMM170/171	College Communications 2			3			3	14	42
							<b>Total</b>		364
<b>Break (Summer 2021)</b>									
<b>Semester 3      Fall 2021</b>									
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
							<b>Total</b>		336
<b>Work Term 1 (Winter 2022)</b>									
COOP222	Co-op Work Placement 1								
<b>Semester 4      Summer 2022</b>									
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
							<b>Total</b>		322
<b>Work Term 2 (Fall 2022)</b>									
COOP331	Co-op Work Placement 2								
<b>Semester 5      Winter 2023</b>									

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
							<b>Total</b>		<b>280</b>
<b>Work Term 3 (Summer 2023)</b>									
COOP332	Co-op Work Placement 3								
<b>Semester 6 Fall 2023</b>									
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
							<b>Total</b>		<b>322</b>
<b>Minimum Grade Required: D</b>									
								<b>Total Program Hours:</b>	<b>1918</b>

C = Co-Requisite; P = Pre-Requisite

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