

# MODEL ROUTE

<b>School:</b>	School of Engineering Technology and Applied Science	<b>Program Number:</b>	3442
<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 <input type="checkbox"/> Centennial College Certificate
<b>Program Delivery Mode:</b>	<input checked="" type="checkbox"/> Co-Op <input checked="" type="checkbox"/> Online <input type="checkbox"/> Fast Track <input type="checkbox"/> Hybrid <input type="checkbox"/> Non Co-op	<b>Duration :</b>	<input type="checkbox"/> 1 Semesters <input type="checkbox"/> 4 Semesters <input type="checkbox"/> 2 Semesters <input checked="" type="checkbox"/> 6 Semesters <input type="checkbox"/> 3 Semesters <input type="checkbox"/> 8 Semesters
<b>Campus:</b>	<b>ONLINE</b>	<b>Department Code:</b>	<b>3515</b>
<b>Intake:</b>	<b>Fall 2021 and Winter 2022</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</b>	<b>Fall 2021 or Winter 2022</b>								
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
GNEDE	General Education Elective			3		ODL	3	14	42
MATH175	Functions and Number Systems			3		ODL	3	14	42
								<b>Total</b>	<b>294</b>
<b>Semester 2</b>	<b>Winter 2022 or Summer 2022</b>								
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
								<b>Total</b>	<b>364</b>
<b>Break</b>	<b>Summer 2022</b>								
<b>Semester 3</b>	<b>Fall 2022</b>								
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
COOP321/421	Employment Preplacement	P=COMM170/171 minimum "C" grade; CGPA 2.5; 80% year 1 courses completed		1		ODL	1	14	14
GNEDE500	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
								<b>Total</b>	<b>336</b>
<b>Work Term 1</b>	<b>Winter 2023</b>								
COOP222	Co-op Work Placement 1					ODL			

<b>Semester 4</b>		<b>Summer 2023</b>									
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		
								<b>Total</b>		<b>322</b>	
<b>Work Term 2</b>		<b>Fall 2023</b>									
COOP331	Co-op Work Placement 2					ODL					
<b>Semester 5</b>		<b>Winter 2024</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		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		
								<b>Total</b>		<b>280</b>	
<b>Work Term 3</b>		<b>Summer 2024</b>									
COOP332	Co-op Work Placement 3					ODL					
<b>Semester 6</b>		<b>Fall 2024</b>									
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	2	2		ODL	4	14	56		
COMP263	Deep Learning	P= COMP258	2	2		ODL	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		ODL	4	14	56		
GNEDE	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)