MODEL ROUTE

School:	School of Engineering Technology and Applied Science	**Program Number:**	3119
Program Title:	**Game - Programming Co-op**	**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 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
COMP213	Web Interface Design		4				4	14	56
COMP391	Introduction to Game and Simulation		2	2			4	14	56
GNED	General Education Elective			3			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
COMP253	Assets for Game Developers	P=COMP391	2	2			4	14	56
COMP301	UNIX/Linux Operating Systems	P=COMP100	2	2			4	14	56
							Total		378
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
COMP246	Software Systems Design	P=COMP123 and COMP225	2	2			4	14	56
COMP305	Game Programming 1	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
GNED500	Global Citizenship: from Social Analysis to Social Action			3			3	14	42
MATH185	Discrete Mathematics			3			3	14	42
							Total		322
Work Term 1	**Winter 2025**								
COOP222	Co-op Work Placement 1								
Semester 4	**Summer 2025**								
COMP217	C++ for Game Development	P=COMP123	2	2			4	14	56

Code	Course Name	Prerequisite					Modality		Weeks	Total
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
COMP397	Web Game Programming	P=COMP123	2	1				3	14	42
ENGL253	Advanced Business Communications	P=COMM170 or COMM171		3				3	14	42
MATH210	Linear Algebra and Statistics	P=MATH175 and MATH185	2	2				4	14	56
								Total		308
Work Term 2	**Fall 2025**									
COOP331	Co-op Work Placement 2									
Semester 5	**Winter 2026**									
COMP216	Networking for Software Developers	P=COMP100	2	2				4	14	56
COMP231◈	Software Development Project 1	P=COMP228 and COMP229 and COMP246	2	2		HYB		4	14	56
COMP256	Special Topics in Interactive Gaming	P=COMP305	3					3	14	42
COMP304	Mobile Apps Development	P=COMP228	2	2				4	14	56
COMP308	Emerging Technologies	P=COMP228 and COMP229	2	2				4	14	56
COMP392	Advanced Graphics	P= COMP217 and COMP305	2	2				4	14	56
COMP395	Simulation Design	P=COMP305 and COMP391	2	2				4	14	56
								Total		378
Work Term 3	**Summer 2026**									
COOP332	Co-op Work Placement 3									
Semester 6	**Fall 2026**									
CNET307◈	IT Project Management	P=COMM170 or COMM171, and, CNET229 or COMP225	1	2		ODL		3	14	42
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
COMP394	Practical Game Design	P=COMP305 and COMP391	2	2				4	14	56
COMP396	Game Programming 2	P=COMP305 and COMP391	2	2				4	14	56
GNED	General Education Elective			3				3	14	42
								Total		252
Minimum Grade Required: D										
								Total Program Hours:		**1932**

C = Co-Requisite; P = Pre-Requisite

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