MODEL ROUTE School of Engineering Technology and **Program Number:** 0131 **Applied Science** ☐ Certificate ☐ Graduate Certificate □ Degree **Honours Bachelor of Information Program Title: Technology (Computer and** Credential: ☐ Diploma ☐ Advanced Diploma ☐ Centennial College Certificate **Communication Networks)** Co-Op Online 1 Semesters 4 Semesters **Program Delivery** Fast Track ☐ Hybrid **Duration:** 2 Semesters ☐ 6 Semesters Mode: ☐ Non Co-op 3 Semesters √ 8 Semesters **PROGRESS** 3613 **Department Code:** Campus: Fall 2023 Intake: Total Course Field Delivery Course Hrs Weeks Co/Pre Requisite Lab Lecture ODL=Online **Total Hours** Course Code Course Title Placement (Lab + (Course Code) Hours Hours (14)BLD=Blended Hours Lecture + HYB = Hybrid Field) Semester 1 Fall 2023 **BUS100** Introduction to Business 3 3 14 42 **ENG115** The Power of Communications 3 3 14 42 MTH130 **Applied Mathematics** 3 3 14 42 56 NFT110 Introduction to Computer Networks 2 2 4 14 NET111 2 3 14 42 **Operating Systems** 1 SWS110 Introduction to Programming 2 2 4 56 14 Total 280 Semester 2 Winter 2024 BUS150 Organizational Behaviour P=BUS100 3 3 14 42 MTH116 Statistics 3 3 14 42 MTH160 Calculus P=MTH130 3 3 14 42 NET112 Computer Architecture P=NET111 1 2 3 14 42 NET120 P=NET110 Introduction to Switching and Routing 4 4 14 56 P=SWS110 SWS120 **Object Oriented Programming** 2 2 4 14 56 280 Total Summer 2024 Break Fall 2024 Semester 3 **BUS140 Management Principles and Practices** P=BUS150 and ENG115 3 3 14 42 Global Citizenship & Equity: World GCE215◆ ODL 42 3 3 14 Hunger NET212 Windows Server Operating System P=NET111 2 2 4 14 56 NET224 **Advanced Switching and Routing** P=NET120 2 2 4 14 56 REA215 42 **Fundamentals of Research** 3 3 14 SWS213 Database Design and Modeling P=SWS110 4 14 56 Total 294 Winter 2025 Semester 4 NET211 Unix/Linux Operating Systems P=NET212 2 2 4 14 56 P=NFT212 and NFT224 Computer and Network Security NFT220 2 2 4 14 56 P=MTH116 and Wireless Communication Systems **NET221** MTH160 2 2 56 14 PHL215 Ethics for a Plural World 3 3 42 14 SWS212 Server-Side Scripting P=SWS120 4 4 14 56 WRK221 2 2 28 **Employment Preplacement 1** P=See notes. 14 294 Total Summer 2025 Work Term* Work Placement 1 P=WRK221 WRK222 35 35 14 490 Semester 5 Fall 2025 BUS320 P=BUS140 42 **Project Management** 3 3 14 **NET312** System Scripting P=NET211 and SWS212 2 2 56 4 14 **NET324** Voice Systems and Services P=NET221 2 2 4 14 56 NET326 Wireless Networks P=NET221 2 2 4 14 56 42 SOC999 Social Science Elective 3 14 3 Total 252 Semester 6 Winter 2026 BUS230 **Business Analysis** P=BUS140 and BUS150 3 3 14 42 HUM999 **Humanities Elective** 3 42 3 14 NAT999 **Natural Science Elective** 3 3 14 42 P=NET224 and NET324 NET323 Converged Networks 2 2 14 56 NFT325 Virtualization and Cloud Infrastructure P=NFT211 and NFT324 2 2 4 14 56 Applied Research Techniques and P=MTH116 and **NET361** Methods MTH160 and REA215 3 42 3 14 Total 280

Break	Summer 2026							
Semester 7	Fall 2026							
ART999	Arts Elective			3		3	14	42
BUS340�	Law and Ethics for Information Technology	P=BUS230 and ENG115		3	ODL	3	14	42
ELECT1	Technical Elective 1		2	2		4	14	56
NET410	Enterprise Network Design	P=NET323 and NET324 and NET326		2		2	14	28
NET411	Project 1	P=NET323 and NET325 and NET361	3			3	14	42
PHL999	Philosophy Elective			3		3	14	42
						1	Γotal	252
Semester 8	Winter 2027							
ELECT2	Technical Elective 2		2	2		4	14	56
ELECT3	Technical Elective 3		2	2		4	14	56
NET420	Network Analysis and Troubleshooting	P=NET224 and NET323	2	2		4	14	56
NET421	Project 2	P=NET411	4			4	14	56
NET425	Network Management	P=NET224 and NET323 and NET326	1	2		3	14	42
						1	Γotal	266
Minimum Grade	Required: D							
						Total Progra	m Hours:	2198
C = Co-Requisite; P	P = Pre-Requisite							
Notes:								
WRK221: P= ENG1:	15 minimum "C" grade, CGPA 2.0, 80% ye	ar 1 and year 2 courses cor	npleted.					
♦This course may	be offered in one of the following modalit	ties (Online, Hybrid or Blend	ded)					
	s a mandatory requirement to graduate a	nd must be completed prio	r to enterir	g Semester 8.	Students will require a	dvising to pro	gress to Sei	mester 5 or
further with an uni	met Work Term requirement.							
Technical Electives	<u>:</u>							
NET801	Cryptography in Network Security	P=NET220	2	2		4	14	56
NET802	Network Defense and Counter Measure	P=NET220	2	2		4	14	56
NET803	Computer Forensics	P=NET220	2	2		4	14	56
NET804	Cloud Security	P=NET325	2	2		4	14	56
NET901	Programming for Wireless Devices	P=NET326	2	2		4	14	56

NET802	Network Defense and Counter Measure	P=NET220	2	2	4	14	56
NET803	Computer Forensics	P=NET220	2	2	4	14	56
NET804	Cloud Security	P=NET325	2	2	4	14	56
NET901	Programming for Wireless Devices	P=NET326	2	2	4	14	56
NET902	Cellular Networks	P=NET326	2	2	4	14	56
NET903	Wireless Broadband	P=NET902	2	2	4	14	56
NET422	Mobile Operating Systems	P=NET320 and SWS120	2	2	4	14	56
<u>Liberal Electives:</u>							
ART411	Film Art in the Internet Age			3	3	14	42
ART412	Conceptual Art and Cultural Change			3	3	14	42
ART413	Performance and Technology			3	3	14	42
ART414	21st Century Visual Culture			3	3	14	42
HUM311	Critical Approaches to Popular Culture			3	3	14	42
TIOWISTI				3	3	14	42
HUM312	Indigenous Peoples: a Global Perspective			3	3	14	42
HUM313	Caribbean Literature			3	3	14	42
HUM314	Visionaries, Revolutionaries, and Reactionaries: Global Issues in the 21st			3	3	14	42
HOWS14	Century			3	3	14	42
HUM315	The Self and Self-Knowledge			3	3	14	42
NAT321	Chemistry of Pollutants: Impacts & Solutions			3	3	14	42
NAT322	Food Chemistry: From Crop to Consumption			3	3	14	42
NAT323	Global Perspectives on the Human Immune System			3	3	14	42
PHL402	Logic, Critical Thinking, and Communication			3	3	14	42
PHL403	Science and Religion in Modern			3	3	14	42
PHL404	Western Civilization Human Genomics			3	3	14	42
SOC301	Sociology of Deviance			3	3	14	42
300301	Consumer Behaviour: Why We Buy			3	3	14	42
SOC302	What We Buy			3	3	14	42
	Psychology: The Interplay of Genetics,						
SOC303	Physiology, and Environment in the Determination of Behaviour			3	3	14	42
	Human Geography: Migration and				_		
SOC304	Globalization			3	3	14	42
SOC305	Media, Culture, & Society			3	3	14	42
SOC306	Contemporary Canadian Society			3	3	14	42