## **MODEL ROUTE** School: 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 ☐ 4 Semesters ☐ 1 Semesters **Program Delivery** Fast Track ☐ Hybrid **Duration:** 2 Semesters ☐ 6 Semesters Mode: ☐ Non Co-op ☐ 3 Semesters √ 8 Semesters **PROGRESS** 3613 Campus: **Department Code:** Fall 2024 Intake: Course Total Field Delivery Course Hrs Lab Weeks Co/Pre Requisite Lecture Course Code Course Title Placement ODL=Online (Lab + **Total Hours** (Course Code) Hours Hours (14)Hours BLD=Blended Lecture + HYB = Hybrid Field) Semester 1 Fall 2024 BUS100 3 3 14 42 Introduction to Business **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 2025 BUS150 Organizational Behaviour P=BUS100 3 3 14 42 MTH116 **Statistics** 3 3 14 42 MTH160 P=MTH130 42 Calculus 3 3 14 NET112 P=NET111 3 42 Computer Architecture 1 2 14 NET120 Introduction to Switching and Routing P=NET110 4 4 14 56 SWS120 **Object Oriented Programming** P=SWS110 2 2 4 14 56 280 Total Summer 2025 **Break** Fall 2025 Semester 3 **BUS140 Management Principles and Practices** P=BUS150 and ENG115 3 14 42 3 Global Citizenship & Equity: World GCE215 ODI 42 Hunger 3 3 14 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 2026 Semester 4 NET211 Unix/Linux Operating Systems P=NET212 2 2 4 14 56 P=NFT212 and NFT224 NFT220 Computer and Network Security 2 2 4 14 56 P=MTH116 and NET221 Wireless Communication Systems MTH160 2 2 14 56 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 Summer 2026 Work Term\* Work Placement 1 P=WRK221 14 WRK222 35 35 490 Semester 5 Fall 2026 P=BUS140 **BUS320** Project Management 3 3 14 42 **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 2027 **BUS230 Business Analysis** P=BUS140 and BUS150 3 3 14 42 **HUM999 Humanities Elective** 3 3 14 42 NAT999 Natural Science Elective 3 3 42 14 Converged Networks P=NFT224 and NFT324 NET323 2 2 4 14 56 NFT325 Virtualization and Cloud Infrastructure P=NET211 and NET324 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 2027							
Semester 7	Fall 2027			-				
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
Semester 8	Winter 2028						Total	252
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
		and NETS20	1	2		-	Total	266
Minimum Grade	e Required: D					Total Progra	m Hours	2198
C = Co-Requisite;	P = Pre-Requisite					Total Flogia	ani nours.	2130
* The Work Term further with an u	y be offered in one of the following modali is a mandatory requirement to graduate a nmet Work Term requirement.			ng Semester 8	3. Students will require	e advising to p	orogress to S	emester 5 or
Technical Elective NET801		P=NET220	2	2		4	14	E.C.
NET801	Cryptography in Network Security Network Defense and Counter	P=NET220	2	2		4	14	56 56
	Measure					•		
NET803	Computer Forensics	P=NET220	2	2		4	14	56
NET804 NET901	Cloud Security Programming for Wireless Devices	P=NET325 P=NET326	2 2	2 2		4	14 14	56 56
NET902	Cellular Networks	P=NET326	2	2		4	14	56
NET903	Wireless Broadband	P=NET902	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
HUM312	Indigenous Peoples: a Global			3		3	14	42
HUM313	Perspective Caribbean Literature			3		3	14	42
HUM314	Visionaries, Revolutionaries, and Reactionaries: Global Issues in the 21st Century			3		3	14	42
HUM315	The Self and Self-Knowledge			3		3	14	42
HUM316	Beyond Islamophobia: Deconstructing Anti-Muslim Racism			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
NAT324	Brains, Minds, and Social Life			3		3	14	42
NAT325	The History of Medical Cannabis			3		3	14	42
PHL402	Logic, Critical Thinking, and Communication			3		3	14	42
PHL403	Science and Religion in Modern Western Civilization			3		3	14	42
PHL404	Human Genomics			3		3	14	42
SOC301	Sociology of Deviance			3		3	14	42
SOC302	Consumer Behaviour: Why We Buy What We Buy			3		3	14	42
SOC303	Psychology: The Interplay of Genetics, Physiology, and Environment in the			3		3	14	42

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SOC303

SOC304

SOC305

SOC306

Physiology, and Environment in the

Human Geography: Migration and

Contemporary Canadian Society

Determination of Behaviour

Media, Culture, & Society

Globalization