## **MODEL ROUTE** School of Engineering Technology and School: **Program Number:** 0131 Applied Science - ICET ☐ Certificate ☐ Graduate Certificate ✓ Degree **Honours Bachelor of Information Program Title: Technology (Computer and** Credential: Diploma Advanced Diploma **Communication Networks)** Online Co-Op ☐3 Semesters 2 Semesters Program Fast Track ☐ Hybrid **Duration:** 4 Semesters 6 Semesters Delivery Mode: ☐ Non Co-op 8 Semesters √ 9 Semesters Campus: **Progress Campus** Fall 2020 Intake: Course Total Field Delivery Course Hrs Weeks Co/Pre Requisite Lab Lecture Course Code Course Title Placement ODL=Online (Lab + **Total Hours** (Course Code) (14)Hours Hours BLD=Blended Lecture + Hours HYB = Hybrid Field) Semester 1 Fall 2020 **BUS100** Introduction to Business 3 3 14 42 ENG115 The Power of Communications 3 3 14 42 MTH130 **Applied Mathematics** 3 3 14 42 NET110 **Introduction to Computer Networks** 2 2 4 14 56 3 **NET111 Operating Systems** 1 2 14 42 SWS110 Introduction to Programming 2 2 4 14 56 Total 280 Winter 2021 Semester 2 3 BUS150 Organizational Behaviour P=BUS100 3 14 42 MTH116 **Statistics** 3 3 14 42 3 P=MTH130 3 MTH160 Calculus 14 42 2 **NET112** Computer Architecture P=NET111 1 3 14 42 NET120 Introduction to Switching and Routing P=NET110 4 56 4 14 SWS120 **Object Oriented Programming** P=SWS110 2 2 4 14 56 Total 280 Break (Summer 2021) Semester 3 Fall 2021 P=BUS150 and **BUS140 Management Principles and Practices ENG115** 3 3 14 42 Global Citizenship & Equity: World GCE215◆ ODL 3 3 14 42 NET212 Windows Server Operating System P=NET111 2 2 4 14 56 2 Advanced Switching and Routing 2 4 14 56 NET224 P=NET120 REA215 **Fundamentals of Research** 3 3 14 42 SWS213 Database Design and Modeling P=SWS110 4 4 14 56 294 Total Winter 2022 Semester 4 Unix/Linux Operating Systems P=NET212 2 2 4 14 NET211 56 P=NET212 and NET220 Computer and Network Security NET224 2 4 56 2 14

P=MTH116 and

2

4

2

3

2

4

3

4

2

Total

14

14

14

14

56

42

56

28

294

MTH160

P=SWS120

P=See notes.

NET221

PHL215

SWS212

**WRK221** 

Work Term 1 (Summer 2022)

Wireless Communication Systems

Ethics for a Plural World

**Employment Preplacement 1** 

Server-Side Scripting

WRK222	Work Placement 1	P=WRK221			35		35	14	490
	Fall 2022								
BUS320	Project Management	P=BUS140		3			3	14	42
NET312	System Scripting	P=NET211 and SWS212	2	2			4	14	56
	Voice Systems and Services	P=NET221	2	2			4	14	56
NET326	Wireless Networks	P=NET221	2	2			4	14	56
SOC999	Social Science Elective			3			3	14	42
								Total	252
Semester 6	Winter 2023	D DUIS440							
	Business Analysis	P=BUS140 and BUS150		3			3	14	
	Humanities Elective			3			3		42
NAT999	Natural Science Elective			3			3	14	42
NET323	Converged Networks	P=NET224 and NET324	2	2			4	14	56
NET325	Virtualization and Cloud Infrastructure	P=NET211 and NET324	2	2			4	14	56
INFT361	Applied Research Techniques and Methods	P=MTH116 and MTH160 and							
		REA215		3			3	14 Total	42
Break (Summer	2023)							TOTAL	280
break (Sammer	2023)								
Semester 7	Fall 2023								
	Arts Elective			3			3	14	42
BU\$340�	Law and Ethics for Information Technology	P=BUS230 and ENG115		3		ODL	3	14	42
	Technical Elective 1	LNGIIS	2	2		ODE	4		56
	Enterprise Network Design	P=NET323 and NET324 and NET326		2			2		
NET411	Project 1	P=NET323 and NET325 and NET361	3				3		
PHL999	Philosophy Elective			3			3		42
								Total	252
Semester 8	Winter 2024								
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		42
Minimum Grade	Required: D							Total	266
willing Grade	nequireu. D						Total Progr	am Hours	2198
C = Co-Requisite;	P = Pre-Requisite						i otal Filogi	ani riours.	2130
Notes:	-								
	L15 minimum "C" grade, CGPA 2.0, 80% of the following mod								
Technical Elective									
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
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
Liberal Electives:	<u>:</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 Perspective			3	3	14	42
HUM313	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
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 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 Determination of Behaviour			3	3	14	42
SOC304	Human Geography: Migration and Globalization			3	3	14	42
SOC305	Media, Culture, & Society			3	3	14	42
SOC306	Contemporary Canadian Society			3	3	14	42