MODEL ROUTE

School:	School of Engineering Technology and Applied Science - ICET	**Program Number:**	0131
Program Title:	**Honours Bachelor of Information Technology (Computer and Communication Networks)**	**Credential:**	☐ Certificate ☐ Graduate Certificate ☑ Degree ☐ Diploma ☐ Advanced Diploma
Program Delivery Mode:	☐ Co-Op ☐ Online ☐ Fast Track ☐ Hybrid ☐ Non Co-op	**Duration :**	☐ 2 Semesters ☐ 3 Semesters ☐ 4 Semesters ☐ 6 Semesters ☐ 8 Semesters ☑ 9 Semesters
Campus:	**Progress Campus**		
Intake:	**Fall 2018**		

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 2018**								
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
NET112	Computer Architecture		1	2			3	14	42
SWS110	Introduction to Programming		2	2			4	14	56
							Total		280
Semester 2	**Winter 2019**								
BUS150	Organizational Behaviour	P=BUS100		3			3	14	42
MTH116	Statistics			3			3	14	42
MTH160	Calculus	P=MTH130		3			3	14	42
NET111	Operating Systems	P=NET112	1	2			3	14	42
NET120	Introduction to Switching and Routing	P=NET110	4				4	14	56
SWS120	Object Oriented Programming	P=SWS110	2	2			4	14	56
							Total		280
Break (Summer 2019)									
Semester 3	**Fall 2019**								
BUS140	Management Principles and Practices	P=BUS150, ENG115		3			3	14	42
GCE215◆	Global Citizenship & Equity: World Hunger			3		ODL	3	14	42
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	Fundamentals of Research			3			3	14	42
SWS213	Database Design and Modeling	P=SWS110	4				4	14	56
							Total		294
Semester 4	**Winter 2020**								
NET211	Unix/Linux Operating Systems	P=NET212	2	2			4	14	56
NET220	Computer and Network Security	P=NET212, NET224	2	2			4	14	56
NET221	Wireless Communication Systems	P=MTH116, MTH160	2	2			4	14	56
PHL215	Ethics for a Plural World			3			3	14	42
SWS212	Server-Side Scripting	P=SWS120	4				4	14	56
WRK221	Employment Preplacement 1	P=See notes.		2			2	14	28
							Total		294
Work Term 1 (Summer 2020)									

Code	Course Name	Prereq						Weeks	Total
WRK222	Work Placement 1	P=WRK221			35		35	14	490
Semester 5	**Fall 2020**								
BUS320	Project Management	P=BUS140		3			3	14	42
NET324	Voice Systems and Services	P=NET221	2	2			4	14	56
NET326	Wireless Networks	P=NET221	2	2			4	14	56
NET350	WAN Technologies	P=NET224	2	2			4	14	56
SOC999	Social Science Elective			3			3	14	42
							Total		252
Semester 6	**Winter 2021**								
BUS230	Business Analysis	P=BUS140, BUS150		3			3	14	42
HUM999	Humanities Elective			3			3	14	42
NAT999	Natural Science Elective			3			3	14	42
NET323	Converged Networks	P=NET324, NET350	2	2			4	14	56
NET325	Virtualization and Cloud Infrastructure	P=NET324, NET350	2	2			4	14	56
NET361	Applied Research Techniques and Methods	P=MTH116, MTH160, REA215		3			3	14	42
							Total		280
Break (Summer 2021)									
Semester 7	**Fall 2021**								
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
							Total		252
Semester 8	**Winter 2022**								
ELECT2	Technical Elective 2		2	2			4	14	56
ELECT3	Technical Elective 3		2	2			4	14	56
NET420	Network Analysis and Troubleshooting	P=NET323 and NET350	2	2			4	14	56
NET421	Project 2	P=NET411	4				4	14	56
NET425	Network Management	P=NET323 and NET326 and NET350	1	2			3	14	42
							Total		266
Minimum Grade Required: D									
							Total Program Hours:		**2198**

C = Co-Requisite; P = Pre-Requisite

Notes:

WRK221: P= ENG115 minimum "C" grade, CGPA 2.0, 80% year 1 and year 2 courses completed.

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

Technical Electives:

Code	Course Name	Prereq						Weeks	Total
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

Code	Title	Prerequisite						
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:								
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