## 2020-21 BACHELOR OF SCIENCE DEGREE IN:

## CYBERSECURITY AND NETWORK MANAGEMENT

| SEM | GRADE | COURSE & TITLE - UNIVERSITY STUDIES, 41 HOURS   | HRS |
|-----|-------|---|-----|
|     |       | ORAL & WRITTEN COMMUNICATION  |     |
|     |       | COM 161 INTRO. TO PUBLIC SPEAKING   | 3   |
|     |       | ENG 105 CRITICAL READING, WRITING, AND INQUIRY  | 4   |
|     |       | GLOBAL AWARENESS, CULTURAL DIVERSITY, AND THE WORLD'S ARTISTIC TRADITIONS                   |     |
|     |       | ANY COURSE IN CATEGORY  | 3   |
|     |       | SCIENTIFIC INQUIRY, METHODOLOGIES, & QUANTITATIVE SKILLS                                    |     |
|     |       | STA 135 INTRO. TO PROBABILITY & STATISTICS Prereq: Math ACT score of at least 20 or MAT 097 | 4   |
|     |       | MAT 140 COLLEGE ALGEBRA Prereq: ACT math score of at least 21 or MAT 097                    | 4   |
|     |       | PHY 125/126 BRIEF INTODUCTORY PHYSICS Prereq: MAT 140                                       | 5   |
|     |       | SOCIAL & SELF-AWARENESS & RESPONSIBLE CITIZENSHIP   |     |
|     |       | ANY COURSE IN SUB-CATEGORY OF ETHICS, SOCIAL RESPONSIBILITY, & CIVIC ENGAGEMENT             | 3   |
|     |       | ECO 231 PRINCIPLES OF MICROECONOMICS  | 3   |
|     |       | Prereqs: MAT 117, 120, 140 or 150; or an ACT math of 23; or consent of instructor           | 3   |
|     |       | WORLD'S HISTORICAL, LITERARY, & PHILOSOPHICAL TRADITIONS                                    |     |
|     |       | CIV 201 WORLD CIVILIZATION & CULTURES I OR CIV 202 WORLD CIVILIZATIONS & CULTURES II        | 3   |
|     |       | HUM 211 WESTERN HUMANITITES TRADITION   | 3   |
|     |       | UNIVERSITY STUDIES ELECTIVES  |     |
|     |       | CSC 101 INTRO TO PROB SOLVING USING COMP Prereq: MAT ACT at least 20; MAT 097 or higher     | 3   |
|     |       | CSC 199 INTRODUCTION TO INFO TECH Prereq: MAT ACT score of at least 19 or MAT 096 or higher | 3   |

| SEM | GRADE | COURSE & TITLE  | HRS |
|-----|-------|---|-----|
|     |       | REQUIRED COURSES, 64 HOURS  |     |
|     |       | ACC 200 PRINCIPLES OF ACCOUNTING I Prereq: Sophomore Standing                         | 3   |
|     |       | CIS 307 DECISION SUPPORT TECHNOLOGIES Prereq: CSC 101 and 199                         | 3   |
|     |       | CIS 317 PRINCIPLES OF INFORMATION SYSTEMS ANALYSIS AND DESIGN Prereq: CSC 101         | 3   |
|     |       | CSC 235 PROGRAMMING IN C++ Prereq: CSC 101 OR Consent of Instructor                   | 3   |
|     |       | FIN 330 PRINCIPLES OF FINANCE Prereq: ACC 200 and junior standing                     | 3   |
|     |       | IOE 350 FUNDAMENTALS OF MANAGEMENT Prereq: junior standing                            | 3   |
|     |       | IOE 399 PROFESSIONAL DEVELOPMENT SEMINAR I  | 1   |
|     |       | MKT 360 PRINCIPLES OF MARKETING Prereq: junior standing                               | 3   |
|     |       | CNM 100T TRANSITIONS (F)  | 1   |
|     |       | CNM 135 INTRODUCTION TO NETWORK TECHNOLOGY  | 3   |
|     |       | CNM 232 OPERATING SYSTEMS Prereq: TSM 134   | 3   |
|     |       | CNM 233 NETWORK SERVICES Prereq: TSM 232 and ENG 105                                  | 3   |
|     |       | CNM 241 NETWORKING FUNDAMENTALS Prereq: TSM 232                                       | 3   |
|     |       | CNM 302 INTERNET OF THINGS (S) Prereq: PHY 125/126                                    | 3   |
|     |       | CNM 320 INTRODUCTION TO WIRELESS TECHNOLOGY (F) Prereq: TSM 302                       | 3   |
|     |       | CNM 324 WIRELESS COMMUNICATIONS SECURITY (F) Prereq: TSM 320                          | 3   |
|     |       | CNM 343 PROTOCOL ANALYSIS (S) Prereq: TSM 232 and 241                                 | 3   |
|     |       | CNM 351 PRINCIPLES OF INFORMATION SECURITY (F) Prereq: TSM 135                        | 3   |
|     |       | CNM 353 NETWORK SECURITY (F) Prereq: TSM 351 and TSM 343                              | 3   |
|     |       | CNM 411 NETWORK DESIGN, OPERATIONS, & MANAGEMENT Prereqs: CIS 317 and senior standing | 3   |
|     |       | CNM 440 INFORMATION ASSURANCE POLICY AND MANAGEMENT Prereq: TSM 351                   | 3   |
|     |       | CNM 443 TELEPHONE TECHNOLOGY (S) Prereq: TSM 343                                      | 3   |
|     |       | CNM 488 COOPERATIVE EDUCATION/INTERNSHIP Prereq: TSM 241                              | 2   |

## **REQUIRED ELECTIVES, 15** (Select 15 hours from any of the courses below)

\*NOTE: When selecting courses for an area of emphasis or as an elective, a maximum of 9 hours may be selected from courses with a business prefix including: ACC, BPA, CIS, FIN, MGT, MKT, or OSY. Adherence to course prerequisites is critical.

| SEM | GRADE | COURSE & TITLE  | HRS |
|-----|-------|---|-----|
|     |       | WIRELESS COMMUNICATIONS   |     |
|     |       | CNM 322 WIRELESS COMMUNICATIONS II (F) Prereq: TSM 320                                | 3   |
|     |       | CNM 323 WIRELESS MOBILE INTERNET Prereq: TSM 320                                      | 3   |
|     |       | CNM 421 MOBILE SATELLITE COMMUNICATIONS (S) Prereq: TSM 320                           | 3   |
|     |       |   |     |
|     |       | CYBERSECURITY   |     |
|     |       | CNM 352 SYSTEM SECURITY (S) Prereq: TSM 351 and TSM 343                               | 3   |
|     |       | CNM 441 ADVANCED INFORMATION SECURITY (S) Prereq: TSM 352                             | 3   |
|     |       |   |     |
|     |       | NETWORK AND SYSTEM ADMINISTRATION   |     |
|     |       | CSC 310 DATABASE ADMINISTRATION Prereqs: CIS 307 and TSM 133                          | 3   |
|     |       | CNM 345 LINUX SERVER ADMINISTRATION Prereq: TSM 233                                   | 3   |
|     |       | CNM 360 VIRTUALIZED ENTERPRISE SYSTEMS Prereq: TSM 233 and TSM 343                    | 3   |
|     |       | CNM 450 TELECOMMUNICATIONS POLICY AND STRATEGIES Sr Standing or Instructor Permission | 3   |
|     |       | CNM 517 SYSTEMS PLANNING Prereq: CIS 317  | 3   |

| APPROVED ELECTIVES (SEE ADVISOR FOR APPROVAL)  |   |
|--|---|
| CSC 370 INTRODUCTION TO ARTIFICIAL INTELLIGENCE Prereqs: CSC 145 OR CSC 232 OR CSC 235   | 3 |
| ECO 335 ECONOMICS & PUBLIC POLICY OF TELECOMMUNICATIONS INDUSTRY Prereq: ECO 231   | 3 |
| LSC 343 FUNDAMENTALS OF OPERATIONS & TECHNOLOGY Prereqs: MAT 120 or higher and conditional or full admission to upper-level business courses or junior standing. | 3 |
| MGT 358 ENTREPRENEURIAL BUSINESS PLAN DEVELOPMENT Prereqs: junior standing; ACC 200 and MGT 350  | 3 |
| MKT 475 MKT STRATEGIES IN E-COMMERCE Prereqs: BUS 355 and MKT 360  | 3 |
| CNM 444 WIDE AREA NETWORKS (F) Prereqs: TSM 343 and 443  | 3 |

Dated: February 2020

## **TOTAL CURRICULUM REQUIREMENTS, 120 HOURS**

NOTE: When selecting courses in the areas of emphasis or as an elective, a maximum of 9 hours may be selected with business prefixes of: ACC, BPA (BUS), CIS, FIN, MGT, or MKT.

NOTE: A grade of a "C" is required in all TSM core and elective classes.