# Minnesota North College - Hibbing Campus

**Academic Year 2023-24**

## IT Networking and Security

**Diploma (67 credits)**

| FIRST YEAR FALL SEMESTER 2023 – 16 Credits | | CREDITS | HOURS LEC/LAB |
|---|---|---|---|
| ITNS 1505 | IT Essentials 1 | 4 | 2/4 |
| ITNS 1510 | IT Essentials 2 | 4 | 2/4 |
| ITNS 1520 | Introduction to Web Master | 3 | 1/4 |
| ITNS 2019 | Windows OS | 2 | 1/2 |
| GENS 1170 | Introduction to Computer Applications | 1 | 0/2 |
| PSYC 1105 | Psychology of Adjustment | 2 | 2/0 |
| **SPRING SEMESTER 2024 – 17 Credits** | | | |
| ITNS 1650 | Introduction to Cloud Computing | 2 | 1/2 |
| ITNS 2010 | Linux Install and Admin | 3 | 1/4 |
| ITNS 2020 | Linux Networking and Security | 3 | 1/4 |
| ITNS 2095 | SQL (Oracle) Programming | 5 | 2/6 |
| ITNS 2145 | Microsoft MTA Server | 4 | 2/4 |
| **SECOND YEAR FALL SEMESTER 2024 – 17 Credits** | | | |
| ITNS 2536 | PC Systems 1 | 2 | 0/4 |
| CNT 1010 | Network Fundamentals | 3 | 2/2 |
| CNT 1020 * | Router Theory and Technology | 3 | 2/2 |
| CNT 2010 | Information Assurance | 3 | 2/2 |
| CNT 2070 | Digital Forensics | 3 | 2/2 |
| COMM 1210 | Introduction to Communication (MNTC 1) | 3 | 3/0 |
| **SPRING SEMESTER 2025 – 17 Credits** | | | |
| ITNS 1601 | Tech Writing Applications | 2 | 2/0 |
| ITNS 2537 or ITNS 2100 | PC Systems 2 or Computer Systems Internship | 2 | 0/4 |
| ITNS 2560 | Wireless Networking Technologies | 3 | 2/2 |
| ITNS 2580 | IT Project Management | 3 | 2/2 |
| CNT 1030 * | Advanced Routing and Switching | 3 | 2/2 |
| CNT 1040 * | Advanced Networking and Management | 3 | 2/2 |
| PDEV 1130 | Employment Strategies | 1 | 0/2 |

\* Course has prerequisite requirement.

**PROGRAM DESCRIPTION**

The IT Networking and Security program prepare students for rewarding careers in the dynamic field of computer networking, repair, and security. The continued growth of the internet, wide area networks (WANs), cloud storage, and local area networks (LANs) requires people with broad knowledge and skills to design, manage, secure, and troubleshoot sophisticated information storage, retrieval, and presentation systems. This rigorous educational program covers the workings of networks and computers from an end user's desktop to a remote server that could be located anywhere in the world. The curriculum has been designed to encompass many of the same competencies that are covered by several recognized industry certifications, for example, Comp TIA's A+, Server+, Network+, Security+, Cisco CCNA; CWNA, and Linux Essentials: Students will gain the knowledge and skills that are recognized as important for employment in the field.

**PROGRAM OUTCOMES**

Upon completion of the IT Networking and Security Diploma,  the graduate will be able to:

1. Demonstrate professional behavior in the workplace environment, including clear and concise communication skills.
2. Complete industry certifications in order to meet industry employment requirements.
3. Work collectively and collaboratively, exhibiting skills in leadership and team management.

4. Demonstrate mastery of Microsoft, Linux, Macintosh, and CISCO operating systems.
5. Identify and demonstrate hardware diagnostic skills and troubleshooting strategies.
6. Identify security issues and develop strategies to implement security protocols to make networks and servers more secure to intrusions.
7. Demonstrate the ability to be a life-long learner by identifying, implementing, and studying new technologies that change throughout the student's career.

**ARTICULATION AGREEMENT**
- Bemidji State University – Applied Engineering
- Minnesota State University, Moorhead – Operations Management (Technical Management)

**EMPLOYMENT OPPORTUNITIES**
Graduates of the IT Networking and Security program have many career advantages. Jobs are available in almost any area of the country in fields of computer research and manufacturing, training users on various hardware, software, operating systems, and security applications.

**PROGRAM FACULTY**
- Erickson, Dj M dj.erickson@minnesotanorth.edu
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***MISSION***
*Minnesota North College prepares lifelong learners and engaged citizens through inclusive, transformative experiences reflecting the character and natural environment of the region.*

***Minnesota North College, a member of Minnesota State, is an affirmative action, equal opportunity employer and educator.***
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**AASC Approval Date: 11-21-2022**
**Document Updated: 11-08-2023**