

IT Networking and Security
AAS Degree | 72 credits

Campus: Hibbing

FIRST YEAR		CREDITS	HOURS LEC/LAB
FALL SEMESTER 2024 – 19 Credits			
ITNS 1505	IT Essentials 1	4	2/4
ITNS 1510	IT Essentials 2	4	2/4
ITNS 2019	Windows OS	2	1/2
# General Education courses from the MnTC		9	
SPRING SEMESTER 2025 – 17 Credits			
ITNS 1650	Intro 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		CREDITS	HOURS LEC/LAB
FALL SEMESTER 2025 – 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
# General education courses from the MnTC		3	
SPRING SEMESTER 2026 – 19 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
# General education courses from the MnTC		3	0/2

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 LEARNING OUTCOMES

Upon completion of the IT Networking and Security AAS Degree, 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.

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7. Demonstrate the ability to be a life-long learner by identifying, implementing, and studying new technologies that change throughout the student's career.
8. Demonstrate effective writing, speaking, and listening skills.
9. Apply mathematics skills and logical reasoning.
10. Demonstrate knowledge of behaviors and interactions among individuals, societal groups, and institutions.

ARTICULATION AGREEMENT

- Bemidji State University
- Minnesota State University, Moorhead: Operations Management, Technical Management

PROGRAM NOTES

- * Course has a prerequisite requirement.
- # General education courses require a minimum of 15 credits selected from at least three of the ten goal areas of the Minnesota Transfer Curriculum (MnTC).
- [Differential tuition is assessed for the ITNS courses.](#)

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
218-293-6867

dj.erickson@minnesotanorth.edu

Boelk, Keith
218-293-6898

keith.boelk@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.*

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