

# Network Management & Security

## Emphasis

Associate of Applied Science (AAS) Degree

Technical Requirements ..... 57

General Education/MnTC ..... 15

Total Credits ..... 72

### Program Information

The Anoka Technical College Associate in Applied Science (AAS) degree in Information Technology with a concentration in Network Management and Security emphasis is a 72-credit program designed to prepare graduates to successfully compete for high-paying, rewarding careers in the high demand IT fields both today and in the future.

This unique program allows technical specialization in Network Management and Security while the common core courses and required electives from other options build a broad IT foundation needed to understand the terminology and methodologies of other IT specialties in the workplace.

The Network Management and Security emphasis focuses on the theory and practice of designing, deploying, and managing network technologies, network convergence, and network security.

The program requirements were determined through consultation with employers, those working in the industry, technical training professionals, and those currently seeking training and retraining for IT careers.

The IT degree has an initial curriculum in career areas of concentration:

- Network Management and Security
- Software Development
- Web Design & Development

Graduates will be encouraged to take advantage of access to corporate recruitment and IT recruiting firms. Internships and work-study positions will also be available. The IT graduate will be highly employable. The AAS degree includes General Education credits, which broaden knowledge beyond what is required in the technical field and places the student on track for future managerial positions.

### Program Learning Outcomes

By completing this program, students will achieve the following learning outcomes.

1. Apply critical thinking skills in the identification, analysis and resolution of information technology problems.
2. Exhibit interpersonal skills and a professional attitude while working in an information technology environment.
3. Clearly express ideas and information in written and spoken form.
4. Analyze, design and document system specifications to meet client needs.
5. Apply project management techniques to solve business problems.
6. Collaborate with a team to design and develop customer software-based solutions and integrate them into the user environment.
7. Apply logical reasoning to a problem.

### Course Prerequisites

Some courses may require appropriate test score or completion of basic math, basic English and/or reading courses with a "C" or better.

- **BDAT 1005, ITEC 1003, ITEC 1011, ITEC 1016, and TLIT 1005** are first semester courses and prerequisite to other courses in this major.
- **ENGL 2105** prerequisites ENGL 0102 or ENGL 0960 and READ 0900 or READ 0960 or appropriate test score.
- **Goal Area 4** could require extra math courses or appropriate scores

### Graduation Requirements

All Anoka Technical College students seeking an Associate in Applied Science (AAS), diploma, or certificate must meet the cumulative grade point average (GPA) of 2.0 or higher.

### Transfer Opportunities

To see how credits from this program may transfer into other Anoka Technical College programs or into a program at another college, visit:

- [Minnesota Transfer](#)
- [Anoka Technical College transfer student](#)

### Industry Information

Anoka Technical College Information Technology graduates will be specialists in their area of emphasis and will also have a broad base of foundational knowledge from the common core courses that span the three emphasis areas. Professional standards, proper methodology and project management will be emphasized throughout the courses.

### Wages/Outlook/Advancement

Wage information is available from the [Minnesota Department of Employment and Economic Development](#)

### Start Dates

Fall Semester.....August, October  
Spring Semester..... January, March

### General Education/MnTC Requirements: 15 Credits

Fifteen (15) general education credits of [Minnesota Transfer Curriculum \(MnTC\)](#) are required from three different goal areas. Student is required to take one transferable course from MnTC Goal Area 4 and the following courses:

- ENGL 2105 Business and Technical Writing..... 4
- PHIL 1200 Technology, Ethics and Society..... 3
- General Education/MnTC ..... 8

**Note: MnTC credits are not listed in your program sequence plan. Please see your faculty advisor or enrollment services for help in planning when to complete your MnTC credits.**



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Emphasis

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## Program Sequence

<b>First Semester</b>	<b>15</b>
<input type="checkbox"/> BDAT 1005 Data Analysis Fundamentals.....	2
<input type="checkbox"/> ITEC 1003 Networking Fundamentals.....	2
<input type="checkbox"/> ITEC 1011 Programming Logic & Design.....	4
<input type="checkbox"/> ITEC 1016 Web Programming Technologies.....	4
<input type="checkbox"/> TLIT 1005 Technology Fundamentals.....	3

**After completing the 15 credit core curriculum, IT students work with a faculty advisor to plan their course sequence.**

<input type="checkbox"/> ITEC 1025 Project Management.....	4
<input type="checkbox"/> ITEC 2207 Windows Server Administration.....	4
<input type="checkbox"/> ITEC 2215 Linux/Web Server Administration.....	4
<input type="checkbox"/> ITEC 2407 Internetworking Device I.....	4
<input type="checkbox"/> ITEC 2408 Internetworking Device II.....	4
<input type="checkbox"/> ITEC 2411 Network Scripting.....	2
<input type="checkbox"/> ITEC 2415 Virtualization Technologies.....	4
<input type="checkbox"/> ITEC 2430 Firewall Security.....	4
<input type="checkbox"/> ITEC 2440 IDS/IPS and Auditing.....	4
<input type="checkbox"/> ITEC 2450 Ethical Hacking.....	4
<input type="checkbox"/> ITEC 2901 Integrated Capstone Project.....	4

## Faculty Contact

[Tracy Hoffman](#) ..... 763-576-4198

For information on how to apply, to schedule a tour, or for service during summer hours, contact Enrollment Services at 763-576-7710 or [EnrollmentServices@anokatech.edu](mailto:EnrollmentServices@anokatech.edu)

*Also see AAS degrees and/or diplomas in: Business Data Analyst, Network Management and Security, Software Development, Web Design & Development, and IT Support certificate*