

# 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 emphasis in Network Management and Security 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 of over 90 courses in seven career areas:

- Database Design & Development
- Game Programming
- Mobile Development
- Network Analyst
- Network Management & 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 Associate of Applied Science (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.

ITEC 1002, ITEC 1016, ITEC 1070, ITEC 2100, and TLIT 1005 are first semester courses and prerequisite to other courses in this major.

### 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](http://www.mntransfer.org/students/plan/s_agreements.php?numResults=25&archive=false&from_inst=70&from_prog=&to_inst=&Search=Search): (www.mntransfer.org/students/plan/s\_agreements.php?numResults=25&archive=false&from\_inst=70&from\_prog=&to\_inst=&Search=Search)
- [Anoka Technical College transfer student](http://www.anokatech.edu/BecomeStudent/Transfers.aspx): (www.anokatech.edu/BecomeStudent/Transfers.aspx)

### 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 seven 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](https://mn.gov/deed/job-seekers/job-outlook/) (https://mn.gov/deed/job-seekers/job-outlook/).

### Technical Education: 57 Credits

<input type="checkbox"/>	ITEC 1002	Networking Fundamentals.....	3
<input type="checkbox"/>	ITEC 1016	Web Development Technologies .....	4
<input type="checkbox"/>	ITEC 1025	Project Management .....	4
<input type="checkbox"/>	ITEC 1070	IT Support.....	1
<input type="checkbox"/>	ITEC 2100	Programming Logic & Design.....	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
<input type="checkbox"/>	TLIT 1005	Technology Fundamentals .....	3



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(continued)

2018-2019

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### 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

*Also see AAS degrees and diplomas in: Business Data Analyst, Database Design & Development, Game Programming, Mobile Development, Network Analyst, Network Management and Security, Software Development, and Web Design & Development*

### Start Dates

Fall Semester..... August, October  
Spring Semester..... January, March  
(Also multiple start options each semester.)

### 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)

### Sample Program Sequence

Full Time

1 <sup>st</sup> YEAR		First Semester
	ITEC 1002.....	3
	ITEC 1016.....	4
	ITEC 1070.....	1
	ITEC 2100.....	4
	TLIT 1005.....	3
	<b>TOTAL</b> .....	<b>15</b>