

# Information Technology Management

## Software Development Emphasis

Associate of Applied Science (AAS) Degree

Technical Credits .....57

MnTC General Education Credits.....15

Total Credits .....72

### Program Information

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

The Software Development Associate of Applied Science (AAS) degree emphasis provides students with the knowledge to become part of a software application team that builds applications to solve industry needs. Students develop both the front-end graphical user interface (GUI) as well as the software code and back-end database for business applications. Students are given the opportunity to collaborate in a team environment for development and practice documenting and critiquing code. Collaboration and communication are emphasized as a part of the software development coursework.

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.

### Program 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.

### Career Opportunities

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.

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

### Program Start Dates

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

### Course Prerequisites

Some courses in this program may require a prerequisite. Please see [course descriptions](#) for more details.

### MnTC General Education Requirements

This program requires completion of the following fifteen credits of general education from at least three goal areas of the Minnesota Transfer Curriculum (MnTC). Refer to the [MnTC course list](#) for elective courses:

- ENGL 2105 Business and Technical Writing (Goal 1&2)..... 4
- PHIL 1200 Technology, Ethics and Society (Goal 9)..... 3
- MnTC MATH course (Goal 4) ..... 3
- MnTC Electives..... 5

### Program Sequence

- First Semester ..... 15**
- BDAT 1005 Data Analysis Fundamentals..... 2
  - ITEC 1003 Networking Fundamentals..... 2
  - ITEC 1011 Programming Logic & Design..... 4
  - ITEC 1016 Web Programming Technologies ..... 4
  - TLIT 1005 Technology Fundamentals ..... 3

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

- ITEC 1025 Project Management ..... 4
- ITEC 1035 Documentation Standards ..... 2
- ITEC 2105 JAVA Programming ..... 4
- ITEC 2120 DB Design & SQL..... 4
- ITEC 2311 User Interface Experience..... 4
- ITEC 2340 Scripting languages ..... 4
- ITEC 2520 Mobile Application Development ..... 4
- ITEC 2600 Application Development ..... 4
- ITEC 2601 Database Application Development ..... 4
- ITEC 2700 Artificial Intelligence ..... 4
- ITEC 2901 Integrated Capstone Project ..... 4

### Graduation Requirements

Students must earn a cumulative 2.0 GPA or higher to be eligible for graduation from this program.

### Faculty Contact

**Gerard Kne**..... 763-576-4044

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*

