The Anoka Technical College Software Development diploma is a 57-credit program designed to prepare graduates to successfully compete for high-paying, rewarding careers in the high-demand field of IT software development.

The Software Development diploma 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.

This unique diploma program allows technical specialization in Software Development while the common core courses and required electives from other specializations build the broad IT foundation needed to understand the terminology and methodologies of other IT specialties in the workplace.

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.

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.

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

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

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

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