Program Information

The Anoka Technical College Software Development diploma is a 57-credit program is 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 frontend 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

- 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.
- Apply project management techniques to solve business problems.
- Collaborate with a team to design and develop customer software-based solutions and integrate them into the user environment.

Industry and Career Outlook

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 <u>Minnesota Department of</u> <u>Employment and Economic Development</u>. **Program Start Dates**

Fall Semester	August, October
Spring Semester	January, March

Course Prerequisites

Some courses in this program may require a prerequisite. Please see <u>course descriptions</u> for more details.

Program Sequence Fall Start

Fall Semester	
□ BDAT 1005	Data Analysis Fundamentals2
□ ITEC 1003	Networking Fundamentals2
□ ITEC 1011	Programming Logic & Design4
□ ITEC 1016	Web Programming Technologies4
□ TLIT 1005	Technology Fundamentals
Spring Semester	
□ ITEC 2120	Database Design and SQL
□ ITEC 2311	User Experience & Interface Design
□ ITEC 2600	Application Development 4
□ ITEC 2601	Database Application Development 4
Fall Semester	
□ ITEC 2105	Java Programming4
□ ITEC 2340	Scripting Languages4
□ ITEC 2520	Mobile Application Development4
□ ITEC 2700	Artificial Intelligence
Spring Semester	
□ ITEC 1025	Project Management
□ ITEC 1035	Documentation Standards2
□ ITEC 2901	Integrated Capstone Project

Program Sequence Spring Start

Spring Semester		
□ BDAT 1005	Data Analysis Fundamentals2	
□ ITEC 1003	Networking Fundamentals2	
□ ITEC 1011	Programming Logic & Design	
□ ITEC 1016	Web Programming Technologies4	
□ TLIT 1005	Technology Fundamentals	
Fall Semester		
□ ITEC 2105	Java Programming4	
□ ITEC 2340	Scripting Languages	
□ ITEC 2520	Mobile Application Development	
□ ITEC 2700	Artificial Intelligence	
Spring Semeste	r16	
□ ITEC 2120	Database Design and SQL	
□ ITEC 2311	User Experience & Interface Design	
□ ITEC 2600	Application Development 4	
□ ITEC 2601	Database Application Development 4	
Fall Semester		
□ ITEC 1025	Project Management	
□ ITEC 1035	Documentation Standards2	
□ ITEC 2901	Integrated Capstone Project	



2023-2024 Software Development Diploma

Graduation Requirements

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

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, Web Design & Development, and IT Support certificate

