Information Technology Management

Software Development Emphasis

Associate of Applied Science (AAS) Degree

Technical Credits......57 MnTC General Education Credits.....15 Total Credits72

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

- Apply critical thinking skills in the identification, analysis and resolution of information technology problems.
- Exhibit interpersonal skills and a professional attitude while working in an information technology environment.
- Clearly express ideas and information in written and spoken form.
- 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.
- 7. Apply logical reasoning to a problem.

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 Minnesota Department of Employment and Economic Development

Program Start Dates

Fall Semester	August, Octobe
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 MATE	I course (Goal 4)	3
MnTC Electiv	ves	5

Program Sequence Fall Start

□ BDAT 1005 Data Analysis Fundamentals 2 □ ITEC 1003 Networking Fundamentals 2 □ ITEC 1011 Programming Logic & Design 4 □ ITEC 1016 Web Programming Technologies 4 □ ITEC 1016 Web Programming Technologies 4 □ TLIT 1005 Technology Fundamentals 3 □ MnTC Electives 3 Spring Semester 20 □ ENGL 2105 Business and Technical Writing 4 □ ITEC 2120 Database Design and SQL 4 □ ITEC 2311 User Experience & Interface Design 4 □ ITEC 2601 Database Application Development 4 □ ITEC 2601 Database Application Development 4 □ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 2901 Integr	Fall Semester	1	8
□ ITEC 1011 Programming Logic & Design	□ BDAT 1005	Data Analysis Fundamentals	2
□ ITEC 1016 Web Programming Technologies 4 □ TLIT 1005 Technology Fundamentals 3 □ MnTC Electives 3 Spring Semester 20 □ ENGL 2105 Business and Technical Writing 4 □ ITEC 2120 Database Design and SQL 4 □ ITEC 2311 User Experience & Interface Design 4 □ ITEC 2600 Application Development 4 □ ITEC 2601 Database Application Development 4 □ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	☐ ITEC 1003	Networking Fundamentals	2
□ TLIT 1005 Technology Fundamentals 3 □ MnTC Electives 3 Spring Semester 20 □ ENGL 2105 Business and Technical Writing 4 □ ITEC 2120 Database Design and SQL 4 □ ITEC 2311 User Experience & Interface Design 4 □ ITEC 2600 Application Development 4 □ ITEC 2601 Database Application Development 4 Fall Semester 16 □ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	☐ ITEC 1011	Programming Logic & Design	4
□ MnTC Electives 3 Spring Semester 20 □ ENGL 2105 Business and Technical Writing 4 □ ITEC 2120 Database Design and SQL 4 □ ITEC 2311 User Experience & Interface Design 4 □ ITEC 2600 Application Development 4 □ ITEC 2601 Database Application Development 4 Fall Semester 16 □ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	☐ ITEC 1016	Web Programming Technologies	4
Spring Semester	☐ TLIT 1005	Technology Fundamentals	3
□ ENGL 2105 Business and Technical Writing	☐ MnTC Electi	ves	3
□ ITEC 2120 Database Design and SQL 4 □ ITEC 2311 User Experience & Interface Design 4 □ ITEC 2600 Application Development 4 □ ITEC 2601 Database Application Development 4 Fall Semester 16 □ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	Spring Semeste	er2	0
□ ITEC 2311 User Experience & Interface Design 4 □ ITEC 2600 Application Development 4 □ ITEC 2601 Database Application Development 4 Fall Semester 16 □ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	☐ ENGL 2105	Business and Technical Writing	4
□ ITEC 2600 Application Development 4 □ ITEC 2601 Database Application Development 4 Fall Semester 16 □ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	☐ ITEC 2120	Database Design and SQL	4
□ ITEC 2601 Database Application Development 4 Fall Semester 16 □ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	☐ ITEC 2311	User Experience & Interface Design	4
Fall Semester 16 □ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	☐ ITEC 2600	Application Development	4
□ ITEC 2105 Java Programming 4 □ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	☐ ITEC 2601	Database Application Development	4
□ ITEC 2340 Scripting Languages 4 □ ITEC 2520 Mobile Application Development 4 □ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	Fall Semester	1	6
□ ITEC 2520 Mobile Application Development. 4 □ ITEC 2700 Artificial Intelligence. 4 Spring Semester. 18 □ ITEC 1025 Project Management. 4 □ ITEC 1035 Documentation Standards. 2 □ ITEC 2901 Integrated Capstone Project. 4	☐ ITEC 2105	Java Programming	4
□ ITEC 2700 Artificial Intelligence 4 Spring Semester 18 □ ITEC 1025 Project Management 4 □ ITEC 1035 Documentation Standards 2 □ ITEC 2901 Integrated Capstone Project 4	☐ ITEC 2340	Scripting Languages	4
Spring Semester18□ ITEC 1025Project Management4□ ITEC 1035Documentation Standards2□ ITEC 2901Integrated Capstone Project4	☐ ITEC 2520	Mobile Application Development	4
□ ITEC 1025 Project Management	☐ ITEC 2700	Artificial Intelligence	4
□ ITEC 1035 Documentation Standards	Spring Semeste	er1	8
□ ITEC 2901 Integrated Capstone Project4	☐ ITEC 1025	Project Management	4
8 1 3	☐ ITEC 1035	Documentation Standards	2
□ PHIL 1200 Technology, Ethics and Society3	☐ ITEC 2901	Integrated Capstone Project	4
	□ PHIL 1200	Technology, Ethics and Society	3

☐ 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
□ PHIL 1200	Technology, Ethics and Society	3
Fall Semester		19
☐ ITEC 2105	Java Programming	4
☐ ITEC 2340	Scripting Languages	4
☐ ITEC 2520	Mobile Application Development	4
□ ITEC 2700	Artificial Intelligence	



(continued)

2023-2024

Information Technology ManagementSoftware Development Emphasis

Spring Semester		20
	Business and Technical Writing	
☐ ITEC 2120	Database Design and SQL	
☐ ITEC 2311	User Experience & Interface Design	4
☐ ITEC 2600	Application Development	
☐ ITEC 2601	Database Application Development	4
Fall Semester		15
☐ ITEC 1025	Project Management	
☐ ITEC 1035	Documentation Standards	2
☐ ITEC 2901	Integrated Capstone Project	4
☐ MnTC Electi	ves	5

Graduation Requirements

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

Faculty Contact

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

