2018-2019

Software Development

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 concentration in Software Development is a 72-credit program is 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.

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

This unique 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. The Software Development 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: (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: (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.

Wage

Wage information is available from the Minnesota Department of Employment and Economic Development (http://mn.gov/deed/job-seekers/job-outlook/index.jsp).

Technical Education: 57 Credits

☐ ITEC 1002	Networking Fundamentals	3
☐ ITEC 1016	Web Development Technologies	4
☐ ITEC 1025	Project Management	4
☐ ITEC 1035	Documentation Standards	2
☐ ITEC 1070	IT Support	1
☐ ITEC 2100	Programming Logic & Design	4
☐ ITEC 2105	JAVA Programming	4
☐ ITEC 2120	DB Design & SQL	4
☐ ITEC 2311	User Interface Experience	4
☐ ITEC 2347	Software and Game Testing	4
☐ ITEC 2340	Scripting languages	4
☐ ITEC 2501	Android Application Development	4
☐ ITEC 2600	Application Development	4
☐ ITEC 2601	Database Application Development	4
☐ ITEC 2901	Integrated Capstone Project	4
☐ TLIT 1005	Technology Fundamentals	3

ANOKA TECHNICAL COLLEGE
A member of Minnesota State

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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

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

Sample Program Sequence

Full Time

	First Semester	
1st YEAR	ITEC 1002	3
	ITEC 1016	4
	ITEC 1070	1
	ITEC 2100	4
	TLIT 1005	3
	TOTAL	**15**