

# COMPUTER PROGRAMMING

## ASSOCIATE OF APPLIED SCIENCE (AAS) - 60 CREDITS

### About this program

This program provides the programming skills needed in computer application development, database management, computer systems and data communications. Students learn to design, write, code, document and implement computer programs for various computer platforms. They learn at least one operating system, one command-level language, one database management system and other high-level programming languages. The program prepares students to design and develop computer software systems and to design information management systems. It includes the study of languages, software design, information flow and processing. Students study the design of mathematical and simulation models and large-scale programs used for processing and retrieving information.

### Program outcomes

1. Demonstrate professionalism including presentation skills, utilizing research for problem solving, working independently and in teams, being accountable and meeting deadlines.
2. Analyze business problems and prepare program definitions for computerized solutions.
3. Create, document and implement computerized solutions using a variety of languages.
4. Apply testing and debugging methods to assure quality and workability of finished programs.
5. Solve problems using appropriate mathematical and/or scientific techniques.

### Curriculum overview

Crds	Requirement type
	Total

**Developmental courses note:** A student may be required to enroll in developmental courses in reading, writing and math. A student's scores on the Accuplacer assessment will determine enrollment in developmental courses. The purpose of developmental courses is to prepare students for the demands of a college-level curriculum. *Credits may vary.*

**Accreditation:** Minnesota State Community and Technical College is accredited by the Higher Learning Commission, a regional accreditation agency recognized by the U.S. Department of Education. The Higher Learning Commission 230 South LaSalle Street, Suite 7-500 Chicago, IL 60604-1411 <http://www.ncahigherlearningcommission.org> Phone: 312.263.0456 / 800.621.7440

# Curriculum requirement details

Required courses

Other requirements or restricted electives



## Course summaries



# COMPUTER PROGRAMMING

## ASSOCIATE OF APPLIED SCIENCE (AAS) - 60 CREDITS

Program Plan — ""

Locations:

