



Program Outcomes for Computer Information Science AA

- provide a transfer track for students who are planning to transfer to Minnesota State University, Mankato, to complete a Computer Information Science major at the baccalaureate level
- emphasis on general education
- complete a specific computer information science core of 16 credits with a 2.5 or higher GPA

Upon completion of the program the student will be able to:

- Design a specified computer program using appropriate logical and electronic design tools
- Implement program execution using one or more computer programming languages
- Demonstrate computational and problem solving skills as applied to the computing industry
- Develop communication effectively to a wide variety of audiences verbally and electronically using software applications

Program Outcomes for Management Information Systems AA

- provide a transfer track for students who are planning to transfer to Minnesota State University, Mankato, to complete a Management Information Systems major at the baccalaureate level
- emphasis on general education
- complete a specific management information systems core of 16 credits with a 2.5 or higher GPA

Upon completion of the program the student will be able to:

- Demonstrate computational and problem solving skills as applied to the computing industry
- Implement program execution using Java as the object-oriented computer programming language
- Prepare financial statements in accordance with generally accepted accounting principles

Program Outcomes for Computer Science AA, 2+2 SMSU

- provide a transfer track for students who are planning to transfer to Minnesota State University, Marshall, to complete a Computer Science major at the baccalaureate level
- emphasis on general education
- complete a specific computer information science core of 19 credits with a 2.5 or higher GPA

Upon completion of the program the student will be able to:

- Reason and think in abstract terms, such as object orientation in order to build proper computer programming algorithms
- Demonstrate computational and problem solving skills as applied to the computing industry
- Ability to use several current computer programming languages to produce logical and accurate programs that solve problems
- Familiar with the fundamental and mathematical control constructs essential to the computer science discipline

Program Outcomes for Computer Applied Technology AS

- provide computer skills training, futuristic trends in technology and general education classes designed to transfer to the Bachelor of Applied Science major at the baccalaureate level or,
- provide computer skills training, futuristic trends in technology and general education classes to prepare students for in-demand, sustainable careers on completion
- encourage proactive life-long learning strategies to update and transfer computer skills, manage new career opportunities and reason

Upon completion of the program the student will be able to:

- Apply spreadsheet and database software to solve business problems
- Apply information technology as a tactical resource and to plan for its ethical use in current and emerging technologies
- Use several computer programming languages currently appropriate in the information technology industry

Program Outcomes for Computer Science AS

- integrate a seamless transfer track for students of study in Computer Support Technician courses
- provide a transfer for students to Southwest Minnesota State University, Marshall, to complete the Bachelor of Science in the Computer Science degree, or
- provide the option to successfully enter the computer related job market on completion

Upon completion of the program the student will be able to:

- Understand network fundamentals and terminology
 - Install and administrate network operating systems
 - Use Unix operating system and aware of cross-platform data security issues
 - Ability to use several current computer programming languages to produce logical and accurate programs that solve problems
 - Familiar with the fundamental and mathematical control constructs essential to the computer science discipline
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Program Outcomes for Networking Specialist AS

- emphasize the specialized skills in Microsoft technologies including preparedness for the MSCE Microsoft certification exams
- provide a transfer track for students who plan to complete a networking specialist major at the baccalaureate level or,
- provide the option to enter the computer related job market on completion
- complete a 30 credit core consisting of Microsoft networking courses and computer programming courses

Upon completion of the program the student will be able to:

- Install server and professional Windows operating systems
- Add users and maintain an active directory for network administration
- Demonstrate the personal and professional ethics and interpersonal skills that are expected in the workplace
- Ability to use several current computer programming languages to produce logical and accurate programs that solve problems

Program Outcomes for Web Development AS

- provide a transfer track for students who plan to complete a web development/web design major at the baccalaureate level or,
- provide the option to enter the computer related job market on completion
- explore W3C standards, HTML, XHTML, Style Sheets, multimedia objects, Visual Basic, Java, C++ and JavaScript

Upon completion of the program the student will be able to:

- Develop project management skills related to web development/web design
- Create, update and maintain web site content
- Demonstrate technical skills required of web developers to create, update and maintain web site content
- Provide expertise in several current computer programming and scripting languages underlying success in the web development employment scene

Learning Outcomes for Computer Specialist AAS

Upon completion of the program the student will be able to:

- Use Microsoft Office software applications of Word, Excel, PowerPoint and Access to complete business tasks
- Support users of such computer applications
- Discuss the history of computing, computer hardware, operating systems
- Exhibit essential communication skills and problem solving skills necessary in the computer employment arena

Learning Outcomes for Computer Applications Specialist Certificate

- CSCI Department Disclosure: Due to scheduling, the courses that satisfy this certificate are not guaranteed to be offered within one semester

Upon completion of the program the student will be able to:

- Understand the essential knowledge and use of common business solution productivity software to complete business tasks
- Value achievement and encourage lifelong learning within computer related upward degree mobility

Learning Outcomes for Computer Data Entry Specialist Certificate

- CSCI Department Disclosure: Due to scheduling, the courses that satisfy this certificate are not guaranteed to be offered within one semester

Upon completion of the program the student will be able to:

- Accurately enter, manipulate and maintain digital data using computer documents and databases
- Value achievement and encourage lifelong learning within computer related upward degree mobility

Learning Outcomes for Computer Desktop Support Specialist Certificate

- CSCI Department Disclosure: Due to scheduling, the courses that satisfy this certificate are not guaranteed to be offered within one semester

Upon completion of the program the student will be able to:

- Understand the essential knowledge and advanced study of business solution productivity software
- Use various operating systems to install, configure, troubleshoot and maintain OS efficiencies
- Meet desktop end-user OS and standard software needs within a production environment
- Value achievement and encourage lifelong learning within computer related upward degree mobility

Learning Outcomes for Computer IT Workplace Assistant, Certificate

- CSCI Department Disclosure: Due to scheduling, the courses that satisfy this certificate are not guaranteed to be offered within one semester

Upon completion of the program the student will be able to:

- Set up entry level items on a network and conduct some basic troubleshooting of network problems
- Demonstrate an extensive background in the use of the Microsoft Office Suite of applications
- Assist network clients and end-users
- Value achievement and encourage lifelong learning within computer related upward degree mobility

Learning Outcomes for Computer IT Workplace Specialist, Certificate

- CSCI Department Disclosure: Due to scheduling, the courses that satisfy this certificate are not guaranteed to be offered within one semester

Upon completion of the program the student will be able to:

- Exhibit an entry level background in the most current, industry used, operating systems, application software, networking skills and some type of computer programming language
- Assist network clients and end-users
- Value achievement and encourage lifelong learning within computer related upward degree mobility

Learning Outcomes for Computer Programmer Specialist, Certificate

- CSCI Department Disclosure: Due to scheduling, the courses that satisfy this certificate are not guaranteed to be offered within one semester

Upon completion of the program the student will be able to:

- Logically and creatively design concise code, execute and maintain it using multiple computer programming languages
- Value achievement and encourage lifelong learning within computer related upward degree mobility

Learning Outcomes for Computer Specialist, Certificate

- CSCI Department Disclosure: Due to scheduling, the courses that satisfy this certificate are not guaranteed to be offered within one semester

Upon completion of the program the student will be able to:

- Demonstrate a background in the specialized computer areas of Unix, Gaming Development and Web Programming
- Value achievement and encourage lifelong learning within computer related upward degree mobility

Learning Outcomes for Webpage Design Assistant, Certificate

- CSCI Department Disclosure: Due to scheduling, the courses that satisfy this certificate are not guaranteed to be offered within one semester

Upon completion of the program the student will be able to:

- Demonstrate common project skills related to web design; versed in various scripting languages, aesthetics, graphics, animation, color and code
- Create and/or adapt, update, implement and maintain web site content
- Value achievement and encourage lifelong learning within computer related upward degree mobility