



**South Central College
Program Design**

DIP 3276 Information Systems

Program Information

Instructional Level Technical Diploma

Career Cluster Arts, Communications, & Information Systems

Description

This program is designed to prepare the learner for a career as a computer programmer, programmer/analyst, database programmer, database administrator, technical writer, technical support specialist, help desk specialist, web designer, web developer, webmaster. The learner will receive a solid background in the basic concepts of computer programming, web page development, web server application development, management and maintenance of web servers, and electronic commerce concepts. The learner will be exposed to major programming languages, systems analysis, and software design, computer operating systems, and Internet services.

Program Admission Dates (Fall and/or Spring)

Fall and Spring

Program Location (North Mankato and/or Faribault)

North Mankato

Program Student Learning Outcomes

- 1 Design and code software applications using a variety of programming languages.
- 2 Utilize and maintain relational databases.
- 3 Use web application development tools.
- 4 Apply current web server technologies.

Program Configurations

Fall Starts

Credits

Technical Course	45
Liberal Arts & Sciences	7
Elective	8

Semester 1

Course #	Course Title	Credits	Function
COMP 1200	Hardware and Software Essentials	4	Technical Course
COMM Choice	COMM110 or COMM120 or COMM140	3	Liberal Arts & Sciences
COMP 1140	Web For Business	3	Technical Course
COMP1120	Foundations of Computing	4	Technical Course

Semester 2

Course #	Course Title	Credits	Function
COMP 1360	Introduction to Data Communications and Networking	4	Technical Course
ENGL Choice	ENGL100 or ENGL240	4	Liberal Arts & Sciences
COMP1125	Spreadsheet/Database Integration	4	Technical Course
COMP1130	Programming Fundamentals	4	Technical Course

Semester 3

Course #	Course Title	Credits	Function
COMP 2300	Java	4	Technical Course
COMP Choice	Select from the following electives: COMP2460, COMP2462	4	Elective
COMP2145	Web Programming	4	Technical Course
GCC1120	Graphic Software I	4	Technical Course

Semester 4

Course #	Course Title	Credits	Function
COMP2496	Capstone - Software Development	2	Technical Course
COMP Choices	Select from the following electives: COMP2466, COMP2475	4	Elective
COMP 2312	Software Development	4	Technical Course
COMP2150	Web Services	4	Technical Course

Program Course List

Number	Title	Credits	Pre/Corequisites
COMP 1140	Web For Business	3	None
COMP 1200	Hardware and Software Essentials	4	(Skill) - Basic Windows navigation; Click, Double-click, etc. (Skill) - Internet usage such as email,

			internet searching, etc. (Skill) - Window Explorer, such as file organization, searches, etc.
COMP 1360	Introduction to Data Communications and Networking	4	None.
COMP 2220	SQL/DB2	4	COMP2200 - IBMi Operating Systems
COMP 2300	Java	4	Successful completion of COMP1130 Programming Fundamentals (with a C grade or higher), or a working knowledge of another programming language. Note: Prerequisites ensure that you are at the correct learning level for the course. Please feel free to contact the instructor to help you determine your expertise level if you have not completed the prerequisite courses.
COMP 2312	Software Development	4	Successful completion of COMP 1130 Programming Fundamentals with a C or higher, or a working knowledge of at least one programming language.
COMP 2460	Linux Administration	4	COMP 1200 COMP 1360
COMP 2462	Microsoft Administration	4	COMP 1360
COMP 2466	Routing & Switching	4	COMP 1360
COMP 2475	Security Basics	4	COMP 1360
COMP 2496	Capstone - Software Development	4	
ENGL 100	Composition	4	Next-Generation Accuplacer Reading minimum score of 250 (Classic Accuplacer, minimum of 75) or completion of READ 0090 or EAP 0095 with a C (2.0) or higher.
ENGL 240	Technical Communication	4	ENGL 100 or a score of 104 or higher on the sentence skills portion of the Accuplacer test.