

COMPUTER INFORMATION SYSTEMS, Certificate - 1312

Engineering, Trades & Computer Technologies Department

CIP Code: 11.1006

The Computer Information Systems certificate provides students with the essential knowledge and skills in computer software, hardware, and network communication needed for entry into the computer information technology job market. Additionally, the certificate is appropriate for individuals, who are currently in the workforce and are interested in updating their technical skills. Students are able to focus their studies by choosing one of two concentrations: **Support Specialist**, which concentrates on technical support with software, hardware, and security and the **Database Analyst**, which emphasizes database management and administration. This program can be completed entirely through asynchronous instruction.

Career Opportunities

Graduates may obtain entry-level positions within many different businesses, government agencies, computer consulting firms, health care, and educational institutions. Depending on the degree concentration the student has chosen, below are the specific occupations associated with each of the two concentrations:

- **Support Specialist:** *computer operator, help-desk analyst, and technical support specialist*
- **Database Analyst:** *database analyst, database administrator and data modeler*

(SOC Code: 15-1150 Computer User Support Specialists)

Competency Profile

These degree concentrations are designed to prepare students to:

The Support Specialist:

- Troubleshoot computer software, hardware and networks
- Operate a help-desk support system

The Database Analyst:

- Develop a database system through an entire life-cycle
- Program data queries and analyze data using business intelligence tools

PROGRAM REQUIREMENTS (TOTAL CREDITS = 31)

| General Education | Major Requirements | Other Required Courses |
|---|--|------------------------|
| | CIS 105 Introduction to Software for Business | 3 |
| | CIS 110 Introduction to Computer Information Systems | 3 |
| | CNT 120 Network Communication Technology I | 3 |
| | | 9 |
| Support Specialist Concentration | Database Analyst Concentration | |
| CIS 126 Computer Hardware | CIS 135 Intermediate Spreadsheet Application | 3 |
| CIS 131 Operating Systems | CIS 140 Intermediate Database Management | 3 |
| CIS 135 Intermediate Spreadsheet Applications | CIS 224 Intro Systems Analysis and Design | 4 |
| CIS 140 Intermediate Database Management | CIS 241 Database Administration I | 3 |
| CIS 222 Intro to Windows Servers | CIS 245 Database Programming | 3 |
| CIS 227 Technical Support | CIS 257 Data Warehouse | 3 |
| CISE 100 Information Security Fundamentals | Database-Related Elective* | 3 |
| | 22 | 22 |

*Students are to select 3- credits from the following courses: CIS 222, 239, 243, 258 264; WEB 143.

Note: Grades of C, or higher, are required for all computer-related courses (CIS, CISE, CNT, CPS, GIS and WEB) and in all certificate concentrations for graduation.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Support Specialist Concentration

| Summer | | Fall Semester I | | Spring Semester I | |
|---------|---|-----------------|---|-------------------|---|
| CIS 105 | 3 | CIS 110 | 3 | CIS 131 | 3 |
| CNT 120 | 3 | CIS 126 | 4 | CIS 140 | 3 |
| | | CIS 135 | 3 | CIS 227 | 3 |
| | | CIS 222 | 3 | CISE 100 | 3 |

Database Analyst Concentration

| Summer | | Fall Semester I | | Spring Semester II | |
|---------|---|--------------------|---|--------------------|---|
| CIS 105 | 3 | CIS 110 | 3 | CIS 224 | 4 |
| CNT 120 | 3 | CIS 135 | 3 | CIS 241 | 3 |
| | | CIS 140 | 3 | CIS 245 | 3 |
| | | Database Elective* | 3 | CIS 257 | 3 |