

COMPUTER INFORMATION SYSTEMS, Certificate Program - 1312

Engineering & Technology 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. Graduates of both options apply their cumulative knowledge and skills through a capstone experience, which results in the completion of an individual electronic portfolio. Students can complete this program (both concentrations) at the Harrisburg Campus by taking courses through Virtual Learning. The **Support Specialist Concentration** can also be completed at the Lancaster, Lebanon and York campuses by taking some courses through Virtual Learning. The **Database Analyst Concentration** can be completed through Virtual Learning.

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) Link to Occupational profiles on O*NET:

<http://www.onetcodeconnector.org/>

Application and admission information: <http://www.hacc.edu/Admissions/Apply/index.cfm>

Competency Profile

These degree concentrations are designed to prepare students to:

The Support Specialist:

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

The Database Analyst:

- Manage database management systems
- Develop a database system through an entire life-cycle

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	<u>3</u>
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Support Specialist Concentration

CIS 127 MS Operating Systems	3
CIS 135 Intermediate Spreadsheet Applications or	3
CIS 140 Intermediate Database Management	(3)
CIS 222 Intro to Windows Servers	3
CIS 227 Technical Support	3
CISE 200 Information Security Fundamentals	3
ELEC 125 Introduction to PC Technology	3
ELEC 126 Installing & Troubleshooting PCs	<u>4</u>
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Database Analyst Concentration

CIS 135 Intermediate Spreadsheet Application	3
CIS 140 Intermediate Database Management	3
CIS 224 Intro Systems Analysis and Design	4
CIS 241 Database Administration I	3
CIS 245 Database Programming	3
CIS 257 Data Warehouse	3
WEB 143 Development Fundamentals	<u>3</u>
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Note: Grades of C, or higher, are required for all computer-related courses (CIS, CISE, CNT, CPS, ELEC, GIS, and WEB) and in all certificate concentrations for graduation.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS**Support Specialist Concentration**

Summer	Fall Semester I	Spring Semester I
CIS 105 3	CIS 110 3	CIS 135 or 140 3
CNT 120 3	CIS 127 3	CIS 227 3
	CIS 222 3	CISE 200 3
	ELEC 125 3	ELEC 126 4

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
	WEB 143 3	CIS 257 3

Please see the College's website at <http://www.hacc.edu/ProgramsandCourses/Computer-Information-Systems-1312.cfm> for the most current Gainful Employment Information.