

COMPUTER INFORMATION SYSTEMS, Associate in Arts Degree - 1792

Technology Division

The CIS degree program allows for specialization as a Computer Support Specialist or Database Analyst. Students complete 22 credits in general education plus program-specific requirements and electives, and additional credits in the area of concentration. Students are encouraged to meet with an advisor upon entering the program, and again to assist in scheduling higher-level courses. Students entering the CIS program are expected to be competent in the skills included in CIS 105 (Introduction to Software for Business, see College Catalog). Students who believe they have a working knowledge of Microsoft Office are encouraged to contact a program coordinator or full-time faculty member for permission to waive this prerequisite. Students must earn grades of C or higher in all computer-related courses (CAD, CIS, CNT, CPS, CTEC, ELEC, GIS, or WEB). The complete Computer Support Specialist concentration is available only at the Harrisburg and Lancaster Campuses. The complete Database Analyst concentration is available only at the Harrisburg Campus. Most of the courses are available at the Lebanon, Gettysburg, York and Virtual Campuses, and at other off-campus locations.

Career Opportunities

Graduates from the CIS Computer Support Specialist degree concentration find employment as computer operators, technicians, and technical-support specialists, where an understanding of the interplay of software, hardware, networking, security and the Internet are critical to job performance. These jobs can include performing equipment-related activities, converting system design into computer language, installing and supporting personal computer equipment and software, troubleshooting client and/or server problems, and determining procedural and software solutions.

Graduates from the CIS Database Analyst degree concentration find employment as database analysts and data modelers. They use data modeling techniques and tools to analyze, tune, and specify data usage within an application area.

Students graduating with a degree are prepared to assume positions involving management and supervision.

Competency Profile

These degree concentrations are designed to prepare students to:

- Use professionally developed computer software
- Adapt to changing computer software and hardware environments
- Understand local area networks (LANs), data communications, and multi-user systems
- Troubleshoot and install computer software and hardware
- Configure computer information systems
- Demonstrate a working knowledge of Web and Internet usage
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Understand how specialized training fits into the larger management and societal context

PROGRAM REQUIREMENTS (TOTAL CREDITS = 68)

General Education		Major	
ENGL 101 English Composition I	3	CIS 110 Introduction to Computer Information Systems	3
ENGL 102 English Composition II or		CIS 127 Introduction to Microsoft Windows	3
ENGL 106 Business Communications or		CNT 120 Network Communication Technology I or	
ENGL 104 Report and Technical Writing	3	CIS 115 Fundamentals of Network Communication or	
SPCH 101 Effective Speaking or		CTEC 102 Network Communication Technology	3
SPCH 104 Interpersonal Communication	3	MATH 202 Introduction to Statistics or	
Core A Elective	3	ACCT 101 Principles of Accounting	3-4
Core B Elective	3	MGMT 121 Small Business Development and Management or	
Core C Elective	3	MGMT 201 Principles of Management or	
Free Elective	3	MGMT 204 Human Relations in Business	3
Physical Education & Wellness	1	Computer Programming Elective *	3
	22		18

* Select one of the following programming courses: CIS 238; CPS 115, 121, 135, 141, 151, 230; WEB 125, 140, 143, 240, 247, 253, 255, 256

Computer Support Specialist Option

CIS 135 Intermediate Spreadsheet Applications	3
CIS 140 Intermediate Database Management	3
CIS 222 Introduction to Windows Servers	3
CIS 227 Technical Support <u>or</u>	
CIS 150 Desktop Support	3
CISE 200 Information Security Fundamentals	3
ELEC 125 Introduction to PC Technology <u>or</u>	
CIS 210 Hardware Exploration	3
ELEC 126 Installing and troubleshooting PC's	4
Computer Related Elective**	6
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Database Analyst Option

CIS 140 Intermediate Database Management	3
CIS 224 Systems Analysis and Design	4
CIS 241 Database Administration I	3
CIS 243 Database Administration II	3
CIS 245 Database Programming	3
CIS 247 Database Backup and Recovery	3
CIS 278 Advanced Database Project	3
Computer Related Elective**	3
Database Related Elective***	3
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** Select Computer Related Elective from the following subjects: CAD; CIS (except CIS 100, 105); CISE; CNT, CPS; CTEC; ELEC; GIS; and WEB

***Select any Database Related Elective from the following: CIS 222, 249, 264, and WEB 126

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

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

Computer Support Specialist

Semester I	Semester II	Summer	Semester III	Semester IV
CIS 110 3	CIS 127 3	CIS 222 3	Programming Elective 3	Core C Elective 3
SPCH 101 or 104 3	PE & W 1	ELEC 125 <u>or</u>	Core B Elective 3	Free Elective 3
ENGL 101 3	CIS 140 3	CIS 210 3	MGMT Elective 3	CIS 227 <u>or</u> 150 3
MATH 202 or	ENGL 102/104/104 3		CISE 200 3	Computer Electives 6
ACCT 101 3-4	Core A Elective 3		ELEC 126 4	
CIS 135 3	CNT 120 <u>or</u> CIS 115			
	<u>or</u> CTEC 102 3			

Database Analyst

Semester I	Semester II	Summer	Semester III	Semester IV
CIS 110 3	CIS 127 3	Database Elective 3	CIS 243 3	CIS 224 4
SPCH 101 or 104 3	PE & W 1	Programming Elec. 3	Core B Elective 3	CIS 247 3
ENGL 101 3	CIS 241 3		CIS 245 3	CIS 278 3
MATH 202 or	ENGL 102/104/104 3		Computer Elective 3	MGMT Elective 3
ACCT 101 3-4	Core A Elective 3		Core C Elective 3	Free Elective 3
CIS 140 3	CNT 120 <u>or</u> CIS 115			
	<u>or</u> CTEC 102 3			

Effective Fall 2008 all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements.