

COMPUTER INFORMATION SYSTEMS, Associate in Applied Science Degree - 1796

Engineering & Technology Department

The Computer Information Systems AAS degree 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. 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 **Database Analyst**, which emphasizes database management and administration. Graduates of both concentrations apply their cumulative knowledge and skills through a capstone experience, which results in the completion of an individual electronic portfolio. The complete program is available at the Harrisburg campus by students taking courses through Virtual Learning. The **Support Specialist concentration** can be completed at the Lancaster and York campuses by students taking 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

Competency Profile

These degree concentrations are designed to prepare students to:

- Work individually and as team members on computer projects
- Write and speak effectively

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 = 61)

General Education		Major Requirements		Other Required Courses	
ENGL 101 English Composition I	3	CIS 105 Introduction to Software for Business	3	Computer-Related Elective**	3
COMM 101 Effective Speaking (or)	3	CIS 110 Introduction to Computer Information Systems	3		
COMM 203 Interpersonal Communication	(3)	CIS 135 Intermediate Spreadsheet Application	3		
Humanities & Arts Elective*	3	CIS 140 Intermediate Database Management	3		
Social & Behavioral Science Elective	3	CNT 120 Network Communication Technology I	3		
First-Year-Seminar Elective	1		15		
Wellness	1				
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*Students are to select from the following courses: ART 181, 182; ENGL 206; HUM 101, 115, 201; MUS 104; PHIL 200; THTR 101; or a foreign language course.

**Students are to select from the following subject areas: CIS (except CIS 100), CISE, CNT, GIS, and WEB.

Support Specialist Concentration

CIS 127 MS Operating Systems	3
CIS 222 Introduction to Windows Servers	3
CIS 227 Technical Support	3
CIS 266 Support Specialist Capstone	3
CISE 200 Information Security Fundamentals	3
ELEC 125 Introduction to PC Technology	3
ELEC 126 Installing & Troubleshooting PCs	4
Mathematics or Science Elective	3
WEB 102 Web Exploration & Design	3
Computer-Programming Elective***	3
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Database Analyst Concentration

CIS 224 Systems Analysis and Design	4
CIS 239 Database Report Development	3
CIS 241 Database Administration I	3
CIS 243 Database Administration II	3
CIS 245 Database Programming	3
CIS 257 Data Warehouse	3
CIS 278 Business Intel & Database Analyst Capstone	3
Mathematics or Science Elective (MATH 202)	4
Database-Related Elective****	3
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*** Select one of the following computer-programming electives: CIS 238; CPS 121; WEB 125 or 143; and WEB course 240-259.

****Select any database-related elective from the following: CIS 222, 247, 249, 258, 264; or WEB 126, 143.

Note: Grades of C, or higher, are required for all computer-related courses (CIS, CISE, CNT, CPS, ELEC, GIS, and WEB) and in all degree concentrations for graduation (MATH). Students must complete CIS 105 with a grade of C, or higher, prior to enrolling into certain courses within the major. They may test out of CIS 105 through a Credit by Examination.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

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

Support Specialist Concentration

Fall Semester I		Spring Semester I		Summer	Fall Semester II		Spring Semester II		
CIS 105	3	CIS 127	3	CIS 222	3	CISE 200	3	CIS 227	3
CIS 110	3	CIS 135	3			ELEC 126	4	CIS 266	3
CNT 120	3	CIS 140	3			Programming Elective	3	Computer Elective	3
COMM 101 or 203	3	ELEC 125	3			Social/Behavioral Science Elective	3	Humanities/Arts Elective	3
ENGL 101	3	WEB 102	3			Wellness	1	Math/Science Elective	3
FYS Elective	1								

Database Analyst Concentration

Fall Semester I		Spring Semester I		Summer	Fall Semester II		Spring Semester II		
CIS 105	3	CIS 135	3	CIS 241	3	CIS 239	3	CIS 224	4
CIS 110	3	CIS 140	3			CIS 243	3	CIS 245	3
CNT 120	3	Humanities/Arts Elective	3			CIS 257	3	CIS 278	3
COMM 101 or 203	3	MATH 202	4			Computer Elective	3	Social/Behavioral Science Elective	3
ENGL 101	3					Database Elective	3	Wellness	1
FYS Elective	1								