



Certificate 1312 Computer Information Systems
Effective Fall 2019

31 Credits

This is an overview of the program. Any suggested course sequencing is meant to serve as a guideline for your semester planning. Students are expected to see their assigned advisor to develop and review their individual educational plans. The scheduling of courses, program sequencing and curriculum are subject to change.

Developmental Courses (as determined through College Placement Testing)* and Prerequisites:							
<i>* Zero level courses must be completed with a C grade or higher.</i>							
<input type="checkbox"/>	ESL classes	<input type="checkbox"/>	ENGL 050	<input type="checkbox"/>	MATH 006	<input type="checkbox"/>	MATH 033
<input type="checkbox"/>	ENGL 002	<input type="checkbox"/>	ENGL 051	<input type="checkbox"/>	MATH 090	<input type="checkbox"/>	MATH 044
<input type="checkbox"/>	ENGL 003	<input type="checkbox"/>	ENGL 057	<input type="checkbox"/>	MATH 008	<input type="checkbox"/>	
<input type="checkbox"/>	ENGL 007			<input type="checkbox"/>	MATH 022	<input type="checkbox"/>	

*See counselor/advisor to discuss this course or options to self-remediate and successfully place into higher- or college-level course.

Required Program Courses			
CIS 105	3cr	Introduction to Software for Business	Prerequisites: ENGL 057 or a combination of ENGL 003, or 007 and 051 with grades of C or higher or their equivalents
CIS 110	3cr	Introduction to Computer Information Systems	Prerequisites: Eligibility for enrollment into ENGL 101 and completion of all developmental reading and writing courses with a grade of C or higher
CNT 120	3cr	Computer Networking Technology I	Prerequisites: Eligibility for enrollment into ENGL 101 and MATH 055 (or MATH 051) or MATH 045; or permission of the Instructor

Choose one of the concentrations below:

Computer Support Specialist Concentration (SUPP)			
CIS 127	3cr	Introduction to Microsoft Windows	Prerequisites: CIS 105 with a grade of C or higher; or permission of the Instructor
CIS 135 or CIS 140	3cr	Intermediate Spreadsheet Applications or Intermediate Database Management	CIS 105 with a grade of C or higher; or permission of the Instructor CIS 105 or WEB 143 with a grade of C or higher; or permission of the Instructor
CIS 222	3cr	Introduction to Windows Servers	Prerequisite: CNT 120 with a grade of C or higher
CIS 227	3cr	Technical Support	Prerequisite: CNT 120, and CIS 222 or 249 or 264 or 265 with grades of C or higher
CISE 200	3cr	Information Security Fundamentals	Prerequisite: ENGL 101, CNT 120, and CIS 222, 264, or 249 with grades of C or higher; or permission of the Instructor
ELEC 125	3cr	Introduction to PC Technology	Prerequisite: Familiarity with word processing and MS Windows Operating Systems
ELEC 126	4cr	Installing and Troubleshooting	Prerequisite: ELEC 125; or CIS 127 and 210 with grades of C or higher

Database Analyst Concentration (DATA)			
CIS 135	3cr	Intermediate Spreadsheet Application	Prerequisite: CIS 105 with a grade of C or higher; or permission of the Instructor
CIS 140	3cr	Intermediate Database Management	Prerequisite: CIS 105 or WEB 143 with a grade of C or higher; or permission of the Instructor
CIS 224	4cr	Introduction to Systems Analysis and Design	Prerequisite: CNT 120 with a grade of C or higher; and one of the following with a grade of C or higher: CIS 238, 245; CPS 115, 121, 135, 230; WEB 140, 143, 144, 220, 240, 242, 244, 246
CIS 241	3cr	Database Administration I	Prerequisite: CIS 140 or WEB 143 with a grade of C or higher; or permission of the Instructor

CIS 245	3cr	Database Programming	Prerequisite: CIS 140 or WEB 143 with a grade of C or higher; or permission of the Instructor
CIS 257	3cr	Data Warehouse	Prerequisite: CIS 140 or 241 with a grade of C or higher; or permission of the Instructor
WEB 143	3c	Development Fundamentals	Prerequisite: CIS 110; or WEB 101 or 102 with a grade of C or higher. Co-requisite: WEB 125

Advising Notes

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

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

Computer Support Specialist Concentration (SUPP)

Summer		Fall 1		Spring 1	
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

Recommended Sequence For Full-Time Students

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

Database Analyst Concentration (DATA)

Summer		Fall 1		Spring 1	
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

Counselor/Advisor Contact Information by Campus:

<u>Gettysburg</u>	<u>Harrisburg</u>	<u>Lancaster</u>	<u>Lebanon</u>	<u>York</u>
Student Services	Counseling and Advising	Counseling and Advising	Receptionist Desk	Counseling and Advising
Lobby	Cooper 219	221 Main	Lobby	Leader Suite 104
717-337-3855	717-780-2498	717-358-2988	717-270-4222	717-801-3213