



**Computer Information Systems  
Concentration: Database Analyst  
Certificate #1312 (31 credits)  
Effective Fall 2020**

\*Students should see their assigned advisor to develop an individual educational plan. The course schedule, program sequencing, and curriculum are subject to change.

**Developmental Courses (as determined through College Placement Testing)\* and Prerequisites:**

*\* Zero level courses must be completed with a C grade or higher.*

<input type="checkbox"/>	ESL classes	<input type="checkbox"/>	ENGL 050	<input type="checkbox"/>	MATH 006
<input type="checkbox"/>	ENGL 002	<input type="checkbox"/>	ENGL 051	<input type="checkbox"/>	MATH 070 – Fundamentals of Quantitative Lit
<input type="checkbox"/>	ENGL 003	<input type="checkbox"/>	ENGL 057		

**Required Program Courses**

		Course Title	Pre/Co-Req/Notes
<b>CIS 105</b>	<b>3</b>	<b>Intro to Software for Business</b>	Pre: ENGL 051 & 003 with C or higher
<b>CIS 110</b>	<b>3</b>	<b>Intro to Computer Information Systems</b>	Pre: ENGL 003 and ENGL 051; Pre or Co-req: CIS 105
<b>CNT 120</b>	<b>3</b>	<b>Network Communication Technology I</b>	Pre: MATH 070 (Advisor Approval) & ENGL 101
<b>CIS 135</b>	<b>3</b>	<b>Intermediate Spreadsheet Application</b>	Pre: CIS 105 with C or higher
<b>CIS 140</b>	<b>3</b>	<b>Intermediate Database Management</b>	Pre: CIS 105 or WEB 143 with C or higher
<b>CIS 224</b>	<b>4</b>	<b>Intro to Systems Analysis &amp; Design</b>	See Advising Notes
<b>CIS 241</b>	<b>3</b>	<b>Database Administration I</b>	Pre: CIS 140 or WEB 143
<b>CIS 245</b>	<b>3</b>	<b>Database Programming</b>	Pre: CIS 140 or WEB 143
<b>CIS 257</b>	<b>3</b>	<b>Data Warehouse</b>	Pre: CIS 140 or 241 or permission of the instructor
<b>Database Elective</b>	<b>3</b>	<b>Choose a course from the following: CIS 222, 239, 243, 258, 264; WEB 126, 143</b>	Prerequisites will vary depending on course selection.

**Advising Notes**

**Prerequisites for CIS 224:** CNT 120 (with a grade of “C” or higher) **and** one of the following: CIS 238, 245, CPS 115, 121, 135, 230, WEB 140, 143, 144, 220, 240, 242, 244, 246 (with a grade of “C” or higher) .

*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.*

**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

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. Program specific questions can be directed to the faculty contacts. The scheduling of courses, program sequencing and curriculum are subject to change.

<b>Counselor/Advisor Contact Information by Campus:</b>				
<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	Welcome Center
Lobby	Cooper	221 Main	Lobby	Leader 102
717-337-3855	717-780-2498	(717) 358-2988	717-270-4222	717-801-3213, ext. 3513

### **Certifications and Certificates for Credit Computer Department ~ April 2017**

Certifications must be current at the time of presentation for this credit.

**\*\*\* Computer industry certifications and transfer of college computer related credits over 7 years of age will not be accepted for students in the following majors: AOM, CIS, CISE, CNT, Computer Repair or WEB. \*\*\***

#### **Software, AOS and Database:**

1. **CAP/CPS** = AOS 101, 110, 203, 225, & 226. (15 credits)
2. **MOS in PowerPoint** = CIS 108
3. **MOS in Word, Access and Excel** = CIS 105
4. **MOS Expert** = no credit
5. **MOS Master**- student must take Word, Access and excel options of the exam to earn credit for CIS 105
6. **MOS Master**- if student takes PowerPoint exam as part of the series, they also would earn CIS 108
7. **Non-credit** certificate in computer proficiency = CIS 105
8. **PHEAA training academy** certificate in PowerPoint = CIS 108
9. **PHEAA training academy** certificate in word, excel and access = CIS 105
10. **MCDBA -Microsoft Certified Database Administrator (MCDBA) credential**, you must pass four exams: equivalent to CIS140 (Access), CIS241 (DBAI), and DB Elective (9 - credits).
11. **Microsoft Solutions Expert in Business Intelligence** certificate = CIS 257

#### **Hardware & Networking:**

1. **A+=** CIS 127, ELEC 125 and ELEC 126= 10 credits
2. **BICSI (Installer 1, Installer 2, Technician)** = credit for CNT 140 can be given (Contact Rich Elwell for ok)
3. **Cisco CCNA** = CNT 240
4. **Cisco CCNA specialty certification - CCNA Wireless** = CNT 260
5. **CCNA specialty cert - CCNA Voice** = CNT 230 (previously a 282 course)
6. **Cisco CCNA specialty cert - CCNA Security** = nothing at this time. See Professor Rich Elwell for any updates.
7. **MCSA** = CIS 127 and 1 computer elective=6 credits
8. **MCSE** = CIS 127, CIS 110 and 2 computer electives=12 credits
9. **MCSE and A+** = CIS 127, CIS 110, ELEC 125, ELEC 126 and 1 computer elective= 16 credits
10. **MCDST** = CIS 127
11. **Network+** = CNT 120
12. **Network+ cert & proof of "On the Job"** experience with networking - credit for CNT 120 & CNT 125 may be given. Student should contact Professor Doug Brown or Professor Rich Elwell for approval
13. **SECURITY+** = CNT Technical Elective
14. **CCNA Security Exam 210-260** (may not be more than 3 years old) = CISE 200