

# COMPUTER INFORMATION SYSTEMS - ASSOCIATE OF APPLIED SCIENCE

## Doña Ana Community College 2023-2024 Catalog (60-61 credits)

Students must complete all University degree requirements, which include: General Education requirements and elective credits to total at least 60 credits. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

The New Mexico General Education Requirements (<http://catalogs.nmsu.edu/dona-ana/general-education-and-transfer-options/transfer-new-mexico-institutions/>) can be found in the section titled, "Transfer Among New Mexico Institutions of Higher Education".

Prefix	Title	Credits
<b>General Education</b>		
<i>This degree requires courses from Areas I, II, III, and V; student do not need to take additional courses to complete the General Education requirements.</i>		17-18
Area I: Communications		
ENGL 1110G	Composition I <sup>1</sup>	
Area II: Mathematics		
Choose one from the following for three - four credits:		
MATH 1220G	College Algebra <sup>1</sup>	
MATH 1250G	Trigonometry & Pre-Calculus <sup>1</sup>	
MATH 1350G	Introduction to Statistics <sup>1</sup>	
MATH 1430G	Applications of Calculus I <sup>1</sup>	
MATH 1511G	Calculus and Analytic Geometry I <sup>1</sup>	
Area III: Laboratory Sciences		
C S 171G	Modern Computing in Practice <sup>1</sup>	
Area V: Humanities		
Choose one from the following for three credits:		
PHIL 1120G	Logic, Reasoning, & Critical Thinking <sup>1</sup>	
or PHIL 2110G	Introduction to Ethics	
<i>General Education Elective</i>		
ENGL 2210G	Professional & Technical Communication <sup>4</sup>	
<b>Major Requirements</b>		
CTEC 120	IT Infrastructure Support I	3
or CTEC 127	Introduction to Internet of Things	
or OECS 185	PC Maintenance and Repair I	
CTEC 140	Introduction to Database Design	3
or OECS 220	Database Application and Design	
CTEC 145	Introduction to Database Management	3
or OECS 235	Structured Query Language (SQL)	
CTEC 152	JAVA Programming	3
or OECS 195	Java Programming I	
or C S 152	Java Programming	
CTEC 156	Python Programming	3
CTEC 158	Visual Basic Programming	3
or CTEC 150	Mobile Application Programming	

or OECS 145	Mobile Application Development	
CTEC 180	Introduction to Networking	4
or OECS 261	Introduction to Networks	
CTEC 290	Network Security	3
or CTEC 285	Connecting Networks	
or OECS 269	Network Security	
CSEC 280	Introduction to Cyber Defense	3
or CSEC 285	Introduction to Managing Information Security	
At least 15 credits of courses with the following prefixes <sup>2</sup>		15
BCIS, C S, CTEC, CSEC, E T, ICT or OECS		
<b>Total Credits</b>		<b>60-61</b>

<sup>1</sup> Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

<sup>2</sup> Note the total required credits must equal at least 60 credits.

### (60-61 credits)

#### A Suggested Plan of Study

The contents of this roadmap may vary depending on initial student placement in mathematics and English. This is only a suggested plan of study for students, and is not intended as a contract. Individual student academic plans may vary. Please contact your academic advisor to create a plan that works for you. Course availability may vary from fall to spring semester and may be subject to modification or change.

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#### First Year

Fall		Credits
ENGL 1110G	Composition I	4
CTEC 180	Introduction to Networking	4
or OECS 261	Introduction to Networks	
CTEC 120	IT Infrastructure Support I	3
or CTEC 127	Introduction to Internet of Things	
or OECS 185	PC Maintenance and Repair I	
CTEC 140	Introduction to Database Design	3
or OECS 220	Database Application and Design	
Elective <sup>1</sup>		3
<b>Credits</b>		<b>17</b>

#### Spring

ENGL 2210G	Professional & Technical Communication	3
Choose one from the following:		
MATH 1220G	College Algebra	3-4
MATH 1250G	Trigonometry & Pre-Calculus	
MATH 1350G	Introduction to Statistics	
MATH 1430G	Applications of Calculus I	
MATH 1511G	Calculus and Analytic Geometry I	
CTEC 145	Introduction to Database Management	3
or OECS 235	Structured Query Language (SQL)	

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CTEC 158 or CTEC 150 or OECS 145	Visual Basic Programming or Mobile Application Programming or Mobile Application Development	3
Elective <sup>1</sup>		3
<b>Credits</b>		<b>15-16</b>
<b>Second Year</b>		
<b>Fall</b>		
C S 171G	Modern Computing in Practice	4
CTEC 290 or CTEC 285 or OECS 269	Network Security or Connecting Networks or Network Security	3
CTEC 152 or OECS 195 or C S 152	JAVA Programming or Java Programming I or Java Programming	3
CTEC 156	Python Programming	3
Elective Course		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
PHIL 1120G or PHIL 2110G	Logic, Reasoning, & Critical Thinking or Introduction to Ethics	3
CSEC 280 or CSEC 285	Introduction to Cyber Defense or Introduction to Managing Information Security	3
Elective <sup>1</sup>		6
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>60-61</b>

<sup>1</sup> Approved Elective with prefix of BCIS, C S, CTEC, E T, ICT, or OECS