

# COMPUTER TECHNOLOGY (NETWORKING) - ASSOCIATE OF APPLIED SCIENCE

**(60-64 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.

Degree requires a minimum of 60 credits and a cumulative GPA of 2.0. If a student has no basic typing skills, OATS 101 Keyboarding Basics is a prerequisite for all CTEC, CSEC, and OECS courses.

NOTE: Students must earn a final grade of C- or better in all Major Requirements courses and achieve a cumulative grade-point average of at least 2.0. A grade of C- or better is required in ENGL 1110G Composition I and designated Mathematics courses.

Students must complete all University degree requirements, which include: General Education requirements and elective credits to total at least 63 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.

Semester 1		Credits
Area I: Communications - English Composition Level 1		4
ENGL 1110G	Composition I	
Area IV: Social/Behavioral Sciences - Choose one from the following:		3
CJUS 1110G	Introduction to Criminal Justice	
ECON 1110G	Survey of Economics	
ECON 2110G	Macroeconomic Principles	
ECON 2120G	Principles of Microeconomics	
GNDR 2110G	Introduction to Women, Gender, and Sexuality Studies	
GNDR 2120G	Representing Women Across Cultures	
PSYC 1110G	Introduction to Psychology	
SOCI 1110G	Introduction to Sociology	
Choose one from the following:		3-4
MATH 1215	Intermediate Algebra	
MATH 1220G	College Algebra	
MATH 1250G	Trigonometry & Pre-Calculus	
MATH 1350G	Introduction to Statistics	
MATH 1430G	Applications of Calculus I	
MATH 1511G	Calculus and Analytic Geometry I	
MATH 1521G	Calculus and Analytic Geometry II	
OATS 106	Business Mathematics	
OR Appropriate Technology-Related Math Course		
CTEC 120 or OECS 185	IT Infrastructure Support I or PC Maintenance and Repair I	3
CTEC 135 or OECS 207	Windows Workstation or Windows	3
<b>Credits</b>		<b>16-17</b>

## Semester 2

General Education - Choose one course from different NM General Education Areas II, V, or VI in the NMSU/DACC Catalog.		3-4
Area III: Laboratory Sciences - Choose one from the following:		4
ASTR 1120G	The Planets Lecture & Laboratory	
C S 171G	Introduction to Computer Science	
PHYS 1115G	Survey of Physics with Lab	
PHYS 1230G or PHYS 1230L	Algebra-Based Physics I or Algebra-Based Physics I Lab	
PHYS 1240G or PHYS 1240L	Algebra-Based Physics II or Algebra-Based Physics II Lab	
CTEC 130 or OECS 204	Linux Workstation or Linux Operating System	3
CTEC 140 or OECS 220	Introduction to Database Design or Database Application and Design	3
Approved Computer-Related Elective - Choose one from the following:		3
CTEC 145 or OECS 235	Introduction to Database Management or Structured Query Language (SQL)	
CTEC 150 or OECS 145	Mobile Application Programming or Mobile Application Development	
CTEC 152 or OECS 195 or C S 152	JAVA Programming or Java Programming I or Java Programming	
CTEC 154 or OECS 192 or C S 151	C++ Programming or C++ Programming I or C++ Programming	
CTEC 156	Python Programming	
CTEC 158	Visual Basic Programming	
CTEC 240	Fundamentals of Database Management	
CTEC 245	Fundamentals of Cloud Based Data Systems	
OR Any Appropriate C S Course (EXCLUDING C S 110/BCIS 1110 and courses used to fulfill Technical/Major Requirements.)		

**Credits 16-17**

## Semester 3

General Education Elective - Area I: Communications - English Composition Level 2		3
ENGL 2210G or ENGL 2221G	Professional & Technical Communication or Writing in the Humanities and Social Science	
Concentration Courses (choose three) - Select 9 credits from the following (EXCLUDING courses used to fulfill Technical/Major Requirements):		9
CTEC 145 or OECS 235	Introduction to Database Management or Structured Query Language (SQL)	
CTEC 156	Python Programming	
CTEC 185 or OECS 262	Routing and Switching Essentials or Essentials of Routing and Switching	
CTEC 230 or OECS 234	Introduction to Linux Server Administration or Linux Server	
CTEC 235 or OECS 237	Introduction to Windows Server Administration or Windows Server	
CTEC 280 or OECS 263	Scaling Networks or Network Fundamentals	
CTEC 285 or OECS 264	Connecting Networks or Network Routing Protocols	
E T 253	Networking Operating Systems II	
OECS 230	Data Communications and Networks I	
OECS 231	Data Communications and Networks II	
Choose one from the following:		3-4
CTEC 180	Introduction to Networking	

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E T 153	Fundamentals of Networking Communications	
E T 155	Network Operating Systems I	
E T 273	Advanced Networking Communications	
OECS 261	Introduction to Networks	
<b>Credits</b>		<b>15-16</b>
<b>Semester 4</b>		
Concentration Courses (choose one) - Select 4 credits from the list of Concentration Courses in Semester 2.		4
CTEC 220 or OECS 221	Internship or Internship I	3
CTEC 290 or CTEC 285 or OECS 269	Network Security or Connecting Networks or Network Security	3-4
Approved Computer-Related Elective - A list of approved electives can be found in Semester 2.		3
<b>Credits</b>		<b>13-14</b>
<b>Total Credits</b>		<b>60-64</b>