

Computer Specialist – Network Technology and Security A.A.S. (CST)

This program prepares students who are new to the industry or upgrading an existing skill set for jobs in the networking, telecommunications and cyber security fields. Graduates are eligible to take appropriate certification exams and can expect to work as entry-level engineers, administrators, or help desk technicians. The program has a problem-based learning approach that focuses on the needed skills of design, implementation, and troubleshooting to a variety of implementations and platforms such as Microsoft Windows, Linux and Cisco. Our hands-on philosophy starts with ensuring basic understanding from the hardware level up. Students have an opportunity to apply their skills in an internship. Students wishing to obtain certifications will gain a solid foundation in the material covered on the following exams:

- Comptia A+, Network+, Linux+ and Security+
- MCSA: Windows Server 2016
- Certified Cisco Administrator (CCNA)
- CEH - Certified Ethical Hacker

Upon successful completion of this program, graduates will be able to:

- troubleshoot personal computer hardware and software problems.
- install and administer Windows 2016 Servers.
- demonstrate and apply TCP/IP subnet masking.
- program and configure Cisco routers and switches.
- configure network connectivity in IPv4 and IPv6.
- analyze security needs and implement solutions.
- apply cyber defense methods to prepare a system to repel attacks.

First Semester		Credits
CIS 105	Introduction to Computers and Applications	3
ENG 105	Research and Composition	3
NET 109	Orientation of IT Pro	1
NET 113	A+ IT Technical Support	6
		13

Second Semester		Credits
ENG 107	Writing in the Workplace	3
MAT 120	Survey of Mathematics	3
NET 210	Linux Administration	3.5
NET 237	Identity with Windows Server 2016	3.5
Elective	Science	3-4
		16

Third Semester		Credits
CFS 155	Network Security	3.5
NET 220	CCNA 1–Introduction to Networks (1st 7 weeks)	3.5
NET 225	CCNA 2–Routing & Switching Essentials (2nd 7 weeks)	3.5
NET 236	Networking with Windows Server 2016	3.5
Elective	Social Science or Humanities	3
		17

Fourth Semester		Credits
CFS 206	Ethical Hacker	3.5
NET 136	Installation, Storage and Compute with Windows	3.5
NET 230	CCNA3 - Scaling Networks (1st 7 weeks)	3.5
NET 235	CCNA4 - Connecting Networks (2nd 7 weeks)	3.5
NET 237	Identity with Windows Server 2016	3.5
Elective	Science	3-4
		17-18

Credit Total 63

Students intending to transfer to a four-year college or university are advised to consult that institution’s catalog to determine the appropriate mathematics and English sequence and transferability of courses.

Prior Learning Assessment: Previous job training, certificates and work experience that may qualify for college credit (*see academic advisor*).

Gateway Courses: Based on placement testing in reading, writing and math, these prerequisite courses may have to be taken before placement in College English or Mathematics beginning the first semester and concurrently.

RSS 099	Basic Skills Reading	3
RSS 100	Critical Reading	3
ENG 099	Basic Skills Writing	3
ENG 100	Fundamentals of Writing	3
MAT 090	Mathematical Literacy	6
ESL 251	English for Academic Purpose	6
<i>(Required for ESL students only.)</i>		

Please note, taking gateway courses will increase your time for completion.

Designated DHS/NSA Center of Academic Excellence in Cyber Defense

