# **Curriculum for an Associate of Applied Science in Technical Studies**

# **Computer & Network Support Specialist Track**

Component I – General Education Core	15
Component II – Technical Core	12
Component III – Occupational Specialty	18
Component IV - On-the-Job Training	15
Total Credit Hours Required	60

# **Component I – General Education Core**

# **Communication and Life Skills**

- ENGL 101 Written English (3) OR
- ENGL 110 Technical Writing & Communication (3)
- Restricted Electives in CAS, COMM, ENGL, ESL, LANG (6)

# **Social Awareness**

- PSYC 203 Introduction to Psychology (3) OR
- SOCI 203 General Sociology (3) OR
- Restricted Electives in ECON, HIST, PSCI, PSYC, SOCI (3)

# **Critical & Analytical Thinking**

- MATH 101 Introduction to Mathematics (3) OR
- Restricted Electives in MATH (3)

**Note:** Electives must be taken from the General Education core competency.

### **Foundation Course**

# **CNC 101 -** Information Technology Fundamentals (3 credits)

This is a hybrid course comprised of: live on-line instructor led instruction, 24/7 cloud based labs that use real operating systems, live one-on-one tutoring and mentoring, group mentoring, certification exam preparation with simulation software and one technician hands-on Saturday. Learn the basics of computer hardware, software, mobile computing and networking. Learn about operating systems, files and folders, basic desktop and network configurations. This course helps prepare the student for the CompTIA IT Fundamentals certificate exam. It provides the basic skills that a student that is new to desktop and network configurations needs to be successful in more advanced courses.

# **Component II – Technical Core**

Each program of study must include a general technical core that meets the goal of developing skills that may be applied to a variety of occupations or that may be specific to an occupation. (12)

# **CNC 102 –** Computer Configuration and Management (6 Credits)

This is a hybrid course comprised of: live on-line instructor led, 24/7 cloud based labs that use real operating systems, live one-on-one tutoring/mentoring, group mentoring, certification exam preparation with simulation software and one technician hands-on Saturday. The student will build working level skills configuring and troubleshooting desktop and network operating systems and hardware. Students will become familiar with cloud computing, desktop and network configurations and securing the computer and network. This can be used as preparation for the CompTIA A+ exams (220-901 and 220-902).

#### Schedule Information:

Dates	Class Days	Times
10/11/2016-04/01/2017	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
10/24/2016-04/01/2017	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
01/03/2017-05/20/2017	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
02/20/2017-07/08/2017	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
04/25/2017-09/09/2017	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
05/22/2017-10/07/2017	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
07/11/2017-11/25/2017	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
08/28/2017-02/03/2018	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
10/17/2017-03/24/2018	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
12/11/2017-05/19/2018	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
01/23/2018-06/16/2018	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
02/26/2018-07/21/2018	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
04/10/2018-08/18/2018	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
06/12/2018-10/27/2018	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.

# **CNC 103 -** Computer and Network Configuration 103 (6 Credits)

This is a hybrid course comprised of: live on-line instructor led instruction, 24/7 cloud based labs that use real operating systems, live one-on-one tutoring/mentoring, group mentoring, certification exam preparation with simulation software. The student will build working level skills configuring and troubleshooting Windows Server 2008 and 2012. Students will learn basic Linux server skills. Students will gain the knowledge and skills required for: troubleshooting, configuring and managing common network devices, understanding basic network design and connectivity, understanding and maintaining network documentation, identifying network limitations and weaknesses, implementing network security, standards and protocols. Can be used as preparation for C CompTIA Network+.

### Schedule Information:

Dates	Class Days	Times
11/29/2016-04/27/2017	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
02/07/2017-06/24/2017	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
04/24/2017-09/09/2017	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
06/27/2017-11/18/2017	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
07/24/2017-12/16/2017	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
10/24/2017-03/24/2018	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
12/11/2017-05/12/2018	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
02/20/2018-07/14/2018	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
12/11/2017-05/12/2018	Monday/Wednesday	7:30 p.m. – 9:30 p.m.

Subtotal Credit Hours Required 12

# Component III – Occupational Specialty

The component consists of technical specialty courses specific to an occupational area. Industry based education and training programs are to be converted to college credit at the ratio of 15:1 and at a rate consistent with the lab hour/credit ratio of the degree granting institution for laboratory credit. (18)

CNC 201 – Advanced Windows Server 2012 Management (6 credits)

This is a hybrid course comprised of: live on-line instructor led instruction, 24/7 cloud based labs that use real operating systems, live one-on-one tutoring and mentoring, group mentoring, certification exam preparation with simulation software. The student will build working level skills required to install, configuring and managing Server 2012. Some of the key features of this course are: plan for a server installation, server roles, Windows PowerShell, disk and storage management, quotas, NTFS, Domain Controller, Active Directory, Hyper-V, virtual disks, DHCP, DNS, Active Directory Domain Services, Group Policy, GPO and UAC. This course can be used

to prepare for Microsoft Certified Solution Associate Exams #70-411 and 70-412

Dates	Class Days	Times
07/17/2017-12/16/2017	Monday/Wednesday	7:30 p.m. – 9:30 p.m.

# **CNC 202** – Network Security & Risk Management (6 Credits)

This is a hybrid course comprised of: live on-line instructor led instruction, 24/7 cloud based labs that use real operating systems, live one-on-one tutoring and mentoring, group mentoring, certification exam preparation with simulation software. The student will build working level skills configuring and troubleshooting the security parameters of a typical client server network. Key elements: network security competency, compliance and operational security, threats and vulnerabilities, host security, access control, identity management and cryptography. This course can be used as a preparation for the CompTIA Security+ Exam #SYO-401. CNC 201 is a prerequisite for CNC 202.

Dates	Class Days	Times
09/11/2017-02/17/2018	Monday/Wednesday	7:30 p.m. – 9:30 p.m.
11/28/2017-04/28/2018	Tuesday/Thursday	7:30 p.m. – 9:30 p.m.
04/23/2018-09/15/2018	Monday/Wednesday	7:30 p.m. – 9:30 p.m.

# Subtotal Credit Hours Required 12

### **CNC 203** - Interconnect Cisco NW Device (6 Credits)

This is a hybrid course comprised of: live on-line instructor led instruction, 24/7 cloud based labs that use real operating systems, live one-on-one tutoring and mentoring, group mentoring, certification exam preparation with simulation software and one technician hands-on Saturday. The student will build working level skills configuring and troubleshooting routed network environments using Cisco network devices. Some of the thing students will learn how to do: secure Cisco networks, develop a security infrastructure, recognize threats and vulnerabilities, mitigate security threats, and develop proper methodologies for solving problems. This course can be used to prepare for the Cisco CCNA exam.

# Subtotal Credit Hours Required 18

# **Component IV – On-the-Job Training**

The component consists of a paid or unpaid OJT, internship, or practicum performed in a business or industry setting in the occupational area. The on-the-job training component is to be converted to credit hours at a ratio of 150:1 with the maximum of 2,080 contact hours allowable. A statement of the total number of contact hours experience through on-the-job training will be placed on the college record. (15)

Subtotal Credit Hours Required 15