## AS Computer Network Technology -- Network Security and Administration

The Computer Networking Technology program prepares students for a variety of career opportunities including the networking field. CNT classes prepare students for Cisco CCNA and CCNP certification tests, Microsoft MCSE and MCSA tests, and CompTIA Net+, Security+ and A+ tests. Constantly evolving and modernizing classes include targeted skills training in Emerging Technologies like Wireless, VoIP, VPN, Computer Forensics, Incident Response, Network Security and OS Hardening. Many of these subjects have become basic required knowledge even in other career fields. Students in Business, the Sciences, Arts and Administration of Justice will all need skills in network technologies to excel in their fields. The Certifications for Achievement and Career Certifications provide quick paths to validate training in today's important tech knowledge areas. The program also includes an AS degree in Network Security Administration. This degree incorporates the latest in Emerging Technologies and skills employers are seeking.

#### **SEMESTER 1 - FALL**

| Courses  | Units | Prerequisites/Strongly Recommended  | Semesters<br>Offered      |
|--|-------|---|---------------------------|
| CIS 50 (Intro to Computer Info Tech)   | 3     |   | Fall, Spring, &<br>Summer |
| CNT 50 (Introduction to Desktop Operating Systems) OR CIS 65 (Introduction to Desktop Operating Systems) | 2     | CIS 50 (Strongly Recommended)   | Fall & Spring             |
| ENG 1A (Critical Reading and Composition)  | 3     | ENG 104 or ENG 105 with a "Pass" or ESL 25 or equiv course or appropriate skill level demonstrated through the Eng assessment process (Pre-Requisite) | Fall, Spring &<br>Summer  |
| MATH 55 (Intermediate Algebra)   | 5     | MATH 65 or MATH 65B (Pre-Requisite)   | Fall, Spring &<br>Summer  |
| SEMESTER TOTAL   | 13    |   |                           |

#### **SEMESTER 2 - SPRING**

| Courses   | Units | Prerequisites/Strongly Recommended | Semesters<br>Offered     |
|---|-------|------------------------------------|--------------------------|
| CNT 51 (CompTIA's A+ Certification Computer Technician)                 | 2     | CNT 50 (Strongly Recommended)      | Fall & Spring            |
| CNT 51B (A+ Operating System Fundamentals)                              | 2     | CNT 51A (Strongly Recommended)     | Fall & Spring            |
| Course has been deactivated - CNT dept must provide substitution course |       |                                    |                          |
| CNT 52 (Networking Fundamentals)  | 3     | CIS 50 (Strongly Recommended)      | Fall & Spring            |
| General Education Course (Social & Behavioral Science)                  | 3     |                                    | Fall, Spring &<br>Summer |
| General Education Course (Natural Science)                              | 3     |                                    | Fall, Spring &<br>Summer |
| SEMESTER TOTAL  | 13    |                                    |                          |

## **SEMESTER 3 - SUMMER**

| Courses  | Units | Prerequisites/Strongly Recommended | Semesters<br>Offered     |
|--|-------|------------------------------------|--------------------------|
| General Education Course<br>(Humanities/American Cultures) | 3     |                                    | Fall, Spring &<br>Summer |
| General Education Course (Kinesiology)                     | 1     |                                    | Fall, Spring &<br>Summer |
| SEMESTER TOTAL   | 4     |                                    |                          |

# SEMESTER 4 - FALL

| Courses                                   | Units | Prerequisites/Strongly Recommended | Semesters<br>Offered |
|---|-------|------------------------------------|----------------------|
| CNT 43 (Professional Communications)      | 3     | ENG 1A (Pre-Requisite)             | Fall & Spring        |
| CNT 62A (Cisco Networking Academy CCNA I) | 4     | CIS 50 (Strongly Recommended)      | Fall                 |
| Elective Tracks***                        | 3-4   | See Below                          | See Below            |
| Elective Tracks***                        | 3-4   | See Below                          | See Below            |
| SEMESTER TOTAL                            | 13-15 |                                    |                      |

### **SEMESTER 5 - SPRING**

| Courses                                    | Units | Prerequisites/Strongly Recommended | Semesters<br>Offered     |
|--|-------|------------------------------------|--------------------------|
| CNT 62B (Cisco Networking Academy CCNA II) | 4     | CNT 62A (Pre-Requisite)            | TBA                      |
| Elective Tracks***                         | 3-4   | See Below                          | See Below                |
| Elective Tracks***                         | 3-4   | See Below                          | See Below                |
| Elective Course (AA-Degree Applicable)     | 3     |                                    | Fall, Spring &<br>Summer |
| Elective Course (AA-Degree Applicable)     | 0-3   |                                    | Fall, Spring &<br>Summer |
| SEMESTER TOTAL                             | 13-18 |                                    |                          |
| Total Major Coursework                     | 32    |                                    |                          |
| Total Units Required (Minimum)             | 60    |                                    |                          |

| ELECTIVE TRACKS (Complete one track in its entirety. If the track is not 12 units, then complete additional |   |  |      |  |
|---|---|--|------|--|
| coursework from other tracks to obtain a minimum of 12 units)***  |   |  |      |  |
| CCNP Track  |   |  |      |  |
| CNT 63 (CISCO CCNP Semester 5 – Advanced Routing)   |   | COURSE NO LONGER OFFERED   |      |  |
| CNT 64 (CISCO CCNP Semester 6 – Remote Access)  |   | COURSE NO LONGER OFFERED   |      |  |
| CNT 65 (CISCO CCNP Semester 7 – Multilayer Switching)   |   | COURSE NO LONGER OFFERED   |      |  |
| CNT 66 (CISCO CCNP Semester 9  –Internetworking   |   | COURSE NO LONGER OFFERED   |      |  |
| Network and Wireless Security Track   |   |  |      |  |
| CNT 67 (WUFU Cisco & CWNA)  | 3 | CIS 50 (Strongly Recommended) OR CNT 55 (Strongly Recommended)       | TBA  |  |
| CNT 68 (Computer Forensics I)   | 3 | CIS 50 (Strongly Recommended)  | TBA  |  |
| CNT 69 (Network Security Sec+)  | 3 | CNT 51B (Strongly Recommended) OR CIS 50 and CNT 51A (Strongly Rec.) | Fall |  |
|   |   |  |      |  |

| Network Administration Track                                      |   |  |        |
|---|---|--|--------|
| CNT 55 (Windows Server)   | 3 | CNT 51B and CNT 52 (Strongly Recommended)                            | Spring |
| CNT 56 (Implementing Windows Network Infrastructure)              | 3 |  | Fall   |
| CNT 57 (Implementing Windows Active Directory Services)           | 3 |  | TBA    |
| Network Analysis Track  |   |  |        |
| CNT 74.1 (Introduction to Linux/Unix, Linux+)                     | 4 | CIS 50 (Strongly Recommended)  | Fall   |
| CNT 75.1 (WhiteHat Hacker Penetration Testing)                    | 4 | One of the following: CNT 67, 69, 62A, 57, 55 (Strongly Recommended) | Spring |
| CNT 75.2 (Wireshark, TCP/IP Analysis and Network Troubleshooting) | 4 | CIS 50 (Strongly Recommended)  | TBA    |
| Computer Operating System Security                                |   |  |        |
| Track   |   |  |        |
| CNT 55 (Windows Server)   | 3 | CNT 51B and CNT 52 (Strongly Recommended)                            | Spring |
| CNT 69 (Network Security Sec+)                                    | 3 | CNT 51B (Strongly Recommended) OR CIS 50 and CNT 51A (Strongly Rec.) | Fall   |
| CNT 74.1 (Introduction to Linux/Unix, Linux+)                     | 4 | CIS 50 (Strongly Recommended)  | Fall   |
| CNT 75.2 (Wireshark, TCP/IP Analysis and Network Troubleshooting) | 4 | CIS 50 (Strongly Recommended)  | ТВА    |
| Computer Forensics Track  |   |  |        |
| CNT 68 (Computer Forensics I)                                     | 3 | CIS 50 (Strongly Recommended)  | TBA    |
| CNT 70 (Computer Forensics II)                                    | 3 | CIS 50 OR CNT 68 (Strongly Recommended)                              | TBA    |
| CNT 75.1 (WhiteHat Hacker Penetration Testing)                    | 4 | One of the following: CNT 67, 69, 62A, 57, 55 (Strongly Recommended) | Spring |

**NOTE:** Completion of LPC's General Education Pattern for Associate in Science Degree is required.

Last Updated: 12/15/16