Cisco Academy courses cross walked with the Texas CTE clusters

IT Cluster

Networking Systems

COURSES

NETWORKING SYSTEMS

LEVEL 1

Computer Science I
- *Python Essentials*
- *Programming Essentials in C*
- *Programming Essentials in C++*

Principles of Information Technology

Principles of Cloud Computing (TBD)
- *Under development*

LEVEL 2

Internetworking Technologies I
- *Introduction to Networking (CCNA 1)*

Computer Maintenance/Lab
- *IT Essentials*

AP Computer Science Principles
- *Advanced Programming in C++*

Cloud Networking (TBD)

LEVEL 3

Internetworking Technologies II
- *Switching, Routing, and Wireless Essentials (CCNA 2)*

Networking/Lab
- *Enterprise Networking, Security, and Automation (CCNA 3)*

LEVEL 4

Practicum in Information Technology
- *Enterprise Networking, Security, and Automation (CCNA 3)*

Practicum in Entrepreneurship (TBD)

Project Based Research

Career Preparation I

Networking Systems

Computer Science I

- ***Programming Essentials In Python***
  - *70 hours*
  - *PCAP – Certified Associate in Python Programming*

- ***Programming Essentials in C***
  - *70 hours*
  - *C Programming Language Certified Associate Certification (CLA)*

- ***Programming Essentials in C++***
  - *70 hours*
  - *C++ Certified Associate Programmer Certification (CPA)*
  - *Part 1 of 2 needed for C++ Certified Professional Programmer Certification (CPP)*

Principles of Information Technology

Principles of Cloud Computing (TBD)

- *Under development*

Networking Systems

Internetworking Technologies I

- ***Introduction to Networking (CCNA 1)***
  - *70 hours*
  - *Networking Academy badge*
  - *Cisco Certified Technician Routing and Switching – CCT-RSTech*

Computer Maintenance/Lab

- ***IT Essentials***
  - *70 hours*
  - *CompTIA A+ Certification*

AP Computer Science Principles

- ***Advanced Programming in C++***
  - *70 hours*
  - *C++ Certified Professional Programmer Certification (CPP)*

Cloud Networking (TBD)

Networking Systems

Internetworking Technologies II

- ***Switching, Routing, and Wireless Essentials (CCNA 2)***
    - *70 hours*
    - *Networking Academy badge*

Networking/Lab

- ***Enterprise Networking, Security, and Automation (CCNA 3)***
    - *70 hours*
    - *Networking Academy badge*
    - *CCNA: Switching, Routing, and Wireless Essentials*

Networking Systems

Practicum in Information Technology

- Could use ENSA course here instead of above (3rd CCNA course)

Practicum in Entrepreneurship (TBD)
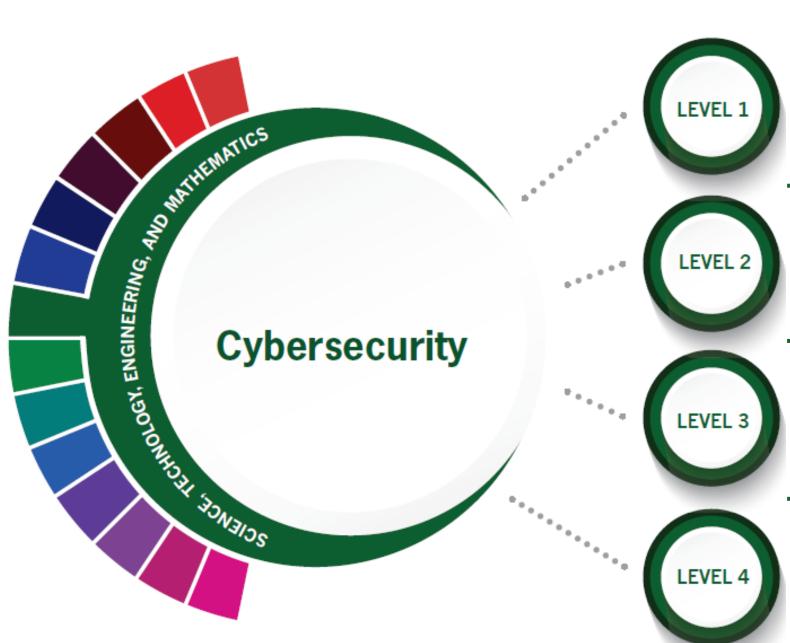
Project Based Research

Career Preparation I

COURSES

Cybersecurity

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS

LEVEL 1

Principles of Information Technology
Fundamentals of Computer Science
- *Programming Essentials in C*

Foundations of Cybersecurity
- *Introduction to Cybersecurity*
- *Cybersecurity Essentials*
- *Linux Essentials*

LEVEL 2

Internetworking Technologies I
- *Introduction to Networking (CCNA 1)*

Computer Programming I
- *Programming Essentials in C++*

Computer Science I
- *Programming Essentials in Python*

AP Computer Science Principles
Computer Maintenance/Lab
- *IT Essentials*

LEVEL 3

Internetworking Technologies II
- *Switching, Routing, and Wireless Essentials (CCNA 2)*

Engineering Applications of Computer Science Principles
Networking/Lab
- *Enterprise Networking, Security, and Automation (CCNA 3)*

Digital Forensics
AP Computer Science
- *Advanced Programming in C*
- *Advanced Programming in C++*

LEVEL 4

Cybersecurity Capstone
- *CCNA Cybersecurity Operations*

Practicum in Information Technology
Practicum in STEM
Project-Based Research

Cybersecurity

Principles of Information Technology
Fundamentals of Computer Science
- *Programming Essentials in C*
  - *70 hours*
  - *C Programming Language Certified Associate Certification (CLA)*

Foundations of Cybersecurity
- *Introduction to Cybersecurity*
  - *15 hours*
  - *Networking Academy badge*
- *Cybersecurity Essentials*
  - *30 hours*
- *Linux Essentials*
  - *70 hours*
  - *LPI Linux Essentials Professional Development Certificate (PDC)*

Cybersecurity

Internetworking Technologies I
- *Introduction to Networking (CCNA 1)*
  - *70 hours*
  - *Networking Academy badge*
  - *Cisco Certified Technician Routing and Switching – CCT-RSTech*

Computer Programming I
- *Programming Essentials in C++*
  - *70 hours*
  - *C++ Certified Associate Programmer Certification (CPA)*
  - *Part 1 of 2 needed for C++ Certified Professional Programmer Certification (CPP)*

Computer Science I
- *Programming Essentials In Python*
  - *70 hours*
  - *PCAP – Certified Associate in Python Programming*

AP Computer Science Principles
Computer Maintenance/Lab
- *IT Essentials*
  - *70 hours*
  - *CompTIA A+ Certification*

Cybersecurity

Internetworking Technologies II
- *Switching, Routing, and Wireless Essentials (CCNA 2)*
  - *70 hours*
  - *Networking Academy badge*

Engineering Applications of Computer Science Principles

Networking/Lab
- *Enterprise Networking, Security, and Automation (CCNA 3)*
  - *70 hours*
  - *Networking Academy badge*
  - *CCNA: Switching, Routing, and Wireless Essentials*

Digital Forensics

AP Computer Science
- *Advanced Programming in C*
  - *70 hours*
  - *CLP – C Certified Professional Programmer Certification*
- *Advanced Programming in C++*
  - *70 hours*
  - *C++ Certified Professional Programmer Certification (CPP)*

Cybersecurity

LEVEL 4

Cybersecurity Capstone

- *CCNA Cybersecurity Operations*
- *70 hours*
- *Cisco Certified CyberOps Associate certification*

Practicum in Information Technology

Practicum in STEM

Project-Based Research