

Course Code: CTE 1302

**For: High School
IT Essentials**

Only applicants who meet the following criteria are eligible to apply for this workshop:

- Priority 1: Will be given to high schools that currently have an IT Essentials Program, have required Cisco equipment, and need to train an instructor for SY 2013-2014.
- Priority 2: Will be given to high schools that plan to implement an IT Essentials Program, have required Cisco equipment, and need to train an instructor for SY2013-2014.

Maximum Number of Participants:	Number of participants allocated to DoDDS Europe	Number of participants allocated to DoDDS Pacific and DDESS Guam	Number of participants allocated to DDESS and DoDDS Cuba
3	1	1	1

Location	Hotel Check-in Date	Session Begin Date	Session End Date	Hotel Check-Out Date
VTC/DCO/WebEx	None	TBD (June 23)	TBD (July 31)	None

Number of Workshop Days	Community Strategic Plan Goal (s):	Number of semester credit hours offered
5	3B	TBD

Connection of this course and the objectives as related to increasing student achievement:
This course is directly related to increasing student knowledge, understanding and skills in working, planning, executing and remediating a Cisco system.

Level of Training:

Level Three: Application of skills and transfer to classroom settings; implementation and modification of new practices

Professional Development Knowledge and Targeted Competencies:

- Mastering Content and Curriculum;
- Presenting Organized Instruction;
- Monitoring and Assessing Student Achievement;
- Responding to Professional Responsibilities;
- Evaluating student progress and assesses student instructional needs;

Course Description:

This course prepares a teacher to teach a course on personal computer hardware and software. In this course, the participants will learn how to build a computer, install and manage Windows-based operating systems, add peripheral devices and multimedia capabilities, and connect the computer to a local area network and the Internet. Further study will cover local area network architecture, networking protocols, the OSI Model, TCP/IP utilities, wireless technologies, and new PDA/Smart Devices. The course will also include an orientation to the Cisco Academy course management system.

This is a hands-on, lab-oriented course that stresses laboratory safety and working effectively in a group environment. This course will help prepare participants for the CompTIA A+ certification.

Selected participants will be required to download and read the entire course curriculum prior to attending this course. This is a very rigorous and fast-paced curriculum that requires participants to be familiar with the course material prior to the start of the course. **Participants are expected to bring a laptop computer that can be connected to a network.**

Objectives: Educators will be able:

1. To set up a personal computer system;
2. To plan and install a small network connecting to the internet;
3. To troubleshoot network and internet connectivity;
4. To share resources through a server;
5. To recognize and mitigate networking security;
6. To configure an integrated wireless access point and client;
7. To understand the structure of the internet and how communication occurs;
8. To install, configure, and troubleshoot Cisco IOS devices;
9. To implement basic WAN connectivity using Telco services;
10. To demonstrate proper disaster recovery procedures and perform server backups.

Description of how this course will apply Using Data to Differentiate Instruction as the framework for professional development focus:

1. To define Information Technology;
2. To protect student against accident and injury;
3. To perform a step by step assembly of a personal computer;
4. To explain the purpose of preventive maintenance and identify the elements of the troubleshooting process;
5. To explain, install, navigate, perform preventive maintenance on, and begin troubleshooting an operating system, laptop, and printer/scanner;
6. To describe, install, perform preventive maintenance on, and begin troubleshooting a network;
7. To describe, install, perform preventive maintenance on, and begin troubleshooting security;
8. To describe and apply good communication skills and professional behavior while working with customers;
9. To upgrade hardware and software;

Description of how this course will apply Responsive and Inclusive Teaching and Learning as the framework for professional development focus:

This is an industry standard course that is a skill based intensive course for teachers as well as for their students. Teachers will be able to transfer the skills on building, maintaining a fully operational computer from this course into the classroom environment where they can differentiate the content, process, and product according to students' interests. This course is rich in project-based problem solving.

Correlation of this course to:

- Standards: IT Essential has industry developed standards which have been adopted nation-wide and by DoDEA.
- Curriculum: The curriculum for this course is founded in science and mathematics. The concepts and principles are based upon the development and maintenance of a computer system.
- Instruction: Pedagogy is not the focus of this course. Skill development is the focus.
- Assessment: Assessment is ongoing element of this course. Assessment is used to inform instruction and to exemplify assessment of learning.

Expectations upon return to the teaching and learning environment:

Within one week of the end of this course, participants will be required to submit a certificate of successful completion. **Passing this course and the final exam is a requirement to teach this course in DoDEA.**

Online evaluation:

Upon completion of this professional development, participants will be required to complete an online evaluation of this session.

Point of Contact:

Hoa Nguyen; DoDEA CTE ISS, DODEA HQ, Arlington, VA; Phone: 571-372-6019.

Applicants need to know that completing this form and submitting it does not constitute acceptance or clearance into this or any workshop. This is merely an application process and not an acceptance process. Applicants will be notified on April 29, 2013 by their supervisors if they have been accepted into a workshop by DoDEA Headquarters.