This document crosswalks the definition of global competence, as defined by the Asia Society (http://asiasociety.org/files/book-globalcompetence.pdf) to the Common Career Technical Core (CCTC), a state-led initiative to establish a set of rigorous, high-quality standards for Career Technical Education, managed by Advance CTE (https://www.careertech.org/cctc). The definition of global competence and the CCTC were developed separately by state education leaders as well as diverse groups of teachers, business and industry experts, administrators, and researchers.

* Please note, if the URL links do not work, copy and paste them into your browser.

Information Technology Career Cluster© (IT)

	Cluster Element	Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
1	Demonstrate effective professional communication skills and practices that enable positive customer relationships.		X	X			
2	Use product or service design processes and guidelines to produce a quality information technology (IT) product or service.	X	X	X		Use the International Business Cultures and Marketing Strategy lesson plan from the Alabama Learning Exchange, to apply to an IT product or service.	http://alex.state.al.us/lesson_view.php?id=24801
3	Demonstrate the use of cross-functional teams in achieving IT project goals.		X	X		Share the Aperian Global infographic, *How to Make Virtual Meetings Work*, with students and discuss how cross-functional teams can also be international. Discuss what role they think IT has in making these relationships productive.	http://www.aperianglobal.com/how-to-make-virtual-meetings-work/
4	Demonstrate positive cyber citizenry by applying industry-accepted ethical practices and behaviors.	X	X	X		Use the Earthday Network lesson plan, *Technology: Conveniences and Consequences*, for students to analyze the impact of ethical technology.	http://www-tc.pbs.org/wgbh/americanexperience/media/uploads/earthdays_tg_technology.pdf
5	Explain the implications of IT on business development.	X	X	X		Have students read pages 14–20 on the student project *The Age of Globalization: Impact of Informaton Technology on Business Strategies*. In groups, have students select one of the implications the author suggests and research its impact on global business development. Students can present the findings from their research to the class. After the presentations, ask students to predict what the next emerging trend will be for influencing technology practices.	http://digitalcommons.bryant.edu/cgi/viewcontent.cgi?article=1000&context=honors_cis
6	Describe trends in emerging and evolving computer technologies and their influence on IT practices.	X	X	X			
7	Perform standard computer backup and restore procedures to protect IT information.						

#	Cluster Element	Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
8	Recognize and analyze potential IT security threats to develop and maintain security requirements.		X	X		Ask students to read the section on "Policy Challenge: Alternative Views of the Internet" from the U.S. Department of State article, *International Cybersecurity Strategy: Deterring Foreign Threats and Building Global Cyber Norms*, and write a one-page opinion paper on the policy challenges presented. - See also the cybersecurity lesson plans on AsiaSociety.org/CTE.	http://www.state.gov/s/cyberissues/releasesandremarks/257719.htm
9	Describe quality assurance practices and methods employed in producing and providing quality IT products and services.						
10	Describe the use of computer forensics to prevent and solve information technology crimes and security breaches.	X		X		Have students search for a computer forensic news article related to another country. Discuss ways to prevent such breaches.	
11	Demonstrate knowledge of the hardware components associated with information systems.						
12	Compare key functions and applications of software and determine maintenance strategies for computer systems.						

Information Support & Services Career Pathway (IT-SUP)

	Cluster Element	Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
1	Provide technology support to maintain service.						
2	Manage operating systems and software applications, including maintenance of upgrades, patches, and service packs.						
3	Apply appropriate troubleshooting techniques in resolving computer hardware, software, and configuration problems.						
4	Perform installation, configuration and maintenance of operating systems.						
5	Demonstrate the use of networking concepts to develop a network.						
6	Evaluate the effectiveness of an information system.						

		Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
7	Employ system installation and maintenance skills to set up and maintain an information system.						
8	Employ system administration and control skills to monitor the performance of an information system.						
9	Employ technical writing and documentation skills in support of an information system.		X	X		Have students write a technical report on an aspect of the information system. Then have students read *10 Tips for Writing International Technical Content,* from Content Wrangler, and evaluate their own (or someone else's) paper.	http://thecontentwrangler.com/2011/07/08/10-tips-for-writing-international-technical-content/
10	Apply quality assurance processes to maximize information system operation.						

Network Systems Career Pathway (IT-NET)

Cluster Element		Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
1	Analyze customer or organizational network system needs and requirements.		X	X			
2	Analyze wired and wireless network systems to determine if they meet specifications (e.g., IEEE, power, security).						
3	Design a network system using technologies, tools, and standards.						
4	Perform network system installation and configuration.						
5	Perform network administration, monitoring, and support to maintain a network system.						

Programming & Software Development Career Pathway (IT-PRG)							
Cluster Element		*Investigate the World*	*Recognize Perspectives*	*Communicate Ideas*	*Take Action*	*International Application*	*Resources*
1	Analyze customer software needs and requirements.		X	X			
2	Demonstrate the use of industry standard strategies and project planning to meet customer specifications.						
3	Analyze system and software requirements to ensure maximum operating efficiency.						
4	Demonstrate the effective use of software development tools to develop software applications.						
5	Apply an appropriate software development process to design a software application.						
6	Program a computer application using the appropriate programming language.						
7	Demonstrate software testing procedures to ensure quality products.						
8	Perform quality assurance tasks as part of the software development cycle.						
9	Perform software maintenance and customer support functions.		X	X			
10	Design, create, and maintain a database.						

Web & Digital Communications Career Pathway (IT-WD)

	Cluster Element	Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
1	Analyze customer requirements to design and develop a web or digital communication product.		X	X			
2	Apply the design and development process to produce user-focused web and digital communications solutions.	X	X	X	X	Use the lesson plan to teach students how to edit digital video. Collaborate with the business teacher on the international cell phone company project (see Business Management Crosswalk: AsiaSociety.org/CTE). Have students write, design, develop, and edit a video for use as the commercial for the company, using the business students as the customers.	http://www.uen.org/Lessonplan/preview.cgi?LPid=9565
3	Write product specifications that define the scope of work aligned to customer requirements.	X	X	X	X		
4	Demonstrate the effective use of tools for digital communication production, development, and project management.	X	X	X	X		
5	Develop, administer, and maintain web applications.						
6	Design, create, and publish a digital communication product based on customer needs.	X	X	X	X	Use the lesson plan to teach students how to edit digital video. Collaborate with the business teacher on the international cell phone company project (see Business Management Crosswalk: AsiaSociety.org/CTE). Have students write, design, develop, and edit a video for use as the commercial for the company, using the business students as the customers.	http://www.uen.org/Lessonplan/preview.cgi?LPid=9565
7	Evaluate the functionality of a digital communication product using industry accepted techniques and metrics.						
8	Implement quality assurance processes to deliver quality digital communication products and services.						
9	Perform maintenance and customer support functions for digital communication products.						
10	Comply with intellectual property laws, copyright laws, and ethical practices when creating web/digital communications.	X	X			Compare the U.N. Office of Human Rights' Right to Privacy in a Digital Age with domestic policies and laws.	http://www.ohchr.org/EN/Issues/DigitalAge/Pages/DigitalAgeIndex.aspx