

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.

Architecture & Construction Career Cluster© (AC)							
Cluster Element		Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
1	Use vocabulary, symbols, and formulas common to architecture and construction.	X		X		Have students select a country of choice and research the architecture in one of its oldest cities. Have students prepare a five-minute electronic presentation to share with the class.	
2	Use architecture and construction skills to create and manage a project.						
3	Comply with regulations and applicable codes to establish and manage a legal and safe workplace.	X		X		Review the International Code Council's standards. Discuss the importance of having an international system.	http://www.iccsafe.org/codes-tech-support/codes/code-development-process/standards-development/standard-development-process/
4	Evaluate the nature and scope of the Architecture & Construction Career Cluster and the role of architecture and construction in society and the economy.	X	X	X		Have students read the article The Social Responsibility of Architects on the Design Intelligence website. Discuss how architecture and construction have an impact within diverse communities here in the United States.	http://www.di.net/articles/the_social_responsibility_architects/
5	Describe the roles, responsibilities, and relationships found in the architecture and construction trades and professions, including labor/management relationships.	X	X	X		Interactive website describes the roles people play in the construction process. What are some of the skills required? How do they align with global competence/workforce readiness skills?	https://www.goconstruct.org/roles-in-construction/
6	Read, interpret, and use technical drawings, documents, and specifications to plan a project.						
7	Describe career opportunities and means to achieve those opportunities in each of the Architecture & Construction Career Pathways.	X		X		Find a job opportunity in another country. Use Lesson 5 in the Asia Society's Global Career Planning Unit to explore the country, and living and working abroad.	http://www.careersinconstruction.com/landingpage/677124/construction-overseas/



Construction Career Pathway (AC-CST)							
Cluster Element		Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
1	Describe contractual relationships between all parties involved in the building process.		X	X		Have students read the first three pages of the article. Discuss the history of project partnering in construction and what students see as considerations or concerns in partnering internationally.	http://fidic.org/sites/default/files/skeggs_all_text_12feb04.pdf
2	Describe the approval procedures required for successful completion of a construction project.		X	X		Read the article Practicing in a Global Market from the American Institute of Architects. Discuss the pros and cons of construction projects with foreign clients – from beginning a project to completion.	http://www.aia.org/aiaucmp/groups/ek_public/documents/pdf/aiab028658.pdf
3	Implement testing and inspection procedures to ensure successful completion of a construction project.						
4	Apply scheduling practices to ensure the successful completion of a construction project.		X	X		Read the article Practicing in a Global Market from the American Institute of Architects. Discuss the pros and cons of construction projects with foreign clients – from beginning a project to completion. Same as AC-CST 2.	http://www.aia.org/aiaucmp/groups/ek_public/documents/pdf/aiab028658.pdf
5	Apply practices and procedures required to maintain jobsite safety.		X	X		Review the OSHA International website to review the updates to OSHA concerns internationally. As a class, discuss some of the current news.	https://www.osha.gov/international/
6	Manage relationships with internal and external parties to successfully complete construction projects.		X	X		Read the article Practicing in a Global Market from the American Institute of Architects, focusing on page 161 and the box on managing foreign client expectations. How do these differ from expectations of clients in the U.S.? Same as AC-CST 2.	http://www.aia.org/aiaucmp/groups/ek_public/documents/pdf/aiab028658.pdf
7	Compare and contrast the building systems and components required for a construction project.						
8	Demonstrate the construction crafts required for each phase of a construction project.						
9	Safely use and maintain appropriate tools, machinery, equipment, and resources to accomplish construction project goals.						



Design/Pre-construction Career Pathway (AC-DES)							
Cluster Element		Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
1	Justify design solutions through the use of research documentation and analysis of data.						
2	Use effective communication skills and strategies (listening, speaking, reading, writing, and graphic communications) to work with clients and colleagues.		X	X		Use the lesson plan on cross-cultural communication and barriers to communication.	http://commfaculty.fullerton.edu/jhayes/000-Web-HCOM100/005-Other%20TA's%20Work/NONVERBAL.ACT_fourstardiversity_blumer.doc
3	Describe the requirements of the integral systems that impact the design of buildings.	X		X	X	Using the lesson plan on Climate and Geographic Design Issues, have students consider various regions of the world.	https://canvas.instructure.com/courses/780681/pages/climate-and-geographic-design-issues?module_item_id=5938116
4	Apply building codes, laws, and rules in the project design.	X		X	X		
5	Identify the diversity of needs, values, and social patterns in project design, including accessibility standards.	X	X	X		Read the article Discovering African Identity in African-American Architecture: Part I, from the <i>AIArchitect</i> magazine. Have students consider the arguments for and against African-American architects incorporating African elements into architecture. Which do they agree with? Why?	http://info.aia.org/aiarchitect/thisweek07/0803/0803rc_face_full.htm
6	Apply the techniques and skills of modern drafting, design, engineering, and construction to projects.						
7	Employ appropriate representational media to communicate concepts and project design.						
8	Apply standards, applications, and restrictions pertaining to the selection and use of construction materials, components, and assemblies in the project design.	X	X			Students can complete the lesson plan on considering local building materials (Straw House with Solar Energy) from the Clean Energy section of the Global CTE toolkit.	AsiaSociety.org/CTEtoolkit



Maintenance/Operations Career Pathway (AC-MO)							
Cluster Element		Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action	International Application	Resources
1	Recognize and employ universal construction signs and symbols to function safely in the workplace.						
2	Use troubleshooting procedures when solving a maintenance problem in buildings.						
3	Apply construction skills when repairing, restoring, or renovating existing buildings.						
4	Determine work required to repair or renovate an existing building.		X	X		Watch the U.S. Department of Overseas Building Operations' video about U.S. Embassies going green in a variety of countries. Discuss how renovations to older buildings to go green can achieve efficient operations, help protect the environment, and increase/decrease maintenance activities. Discuss considerations for building renovations in different parts of the world (could use the countries discussed in the video where the U.S. Embassies have gone green).	http://overseasbuildings.state.gov/spotlights/391/ ; https://www.youtube.com/watch?v=IIO9FeMd2WA
5	Plan and practice preventative maintenance activities to service existing buildings.		X	X			
6	Maintain and inspect building systems to achieve safe and efficient operation of buildings.		X	X			