

High School Name:
Community College Name:
CTE Program of Study Name:
Date:

Mountainside High School
Portland Community College
Engineering
4/30/2017

Engineering Technology Cluster

2016

Skills-to-Course Matrix

Instructions: 1) Enter your high school name above. 2) Enter the community college name. 3) Enter the Program of Study name. 4) Enter the date. 5) Click on Course 1, Course 2, etc. below and replace with your POS course names (or numbers). 6) Check those courses that trigger the TSA for this POS. 7) Finally, check those standards that are taught with intent and purpose, and are assessed in each course. Note: You only need to use the optional Focus Area tabs below if you are using those skill sets for multiple options in a Program of Study or if you want to use another set of industry validated standards.

Cluster Knowledge and Skills (CTE standards)

CCTC	Code Number	KS Statement	Engineering 1	Engineering 2	Drafting 1	Drafting 2	Course 5	Course 6
			TSA? - No	TSA? - Yes	TSA? Yes	TSA? Yes	TSA?	TSA?
	EN01	Use effective communication skills with a variety of audiences.	X	X	TBD	TBD		
	EN02	Exhibit integrity and professionalism in engineering cluster occupations.	X	X	TBD	TBD		
	EN03	Use technology such as computers and design software to solve engineering problems.	X	X	TBD	TBD		
	EN04	Understand and use applied mathematics and science for engineering cluster careers.	X	X	TBD	TBD		
	EN05	Develop and implement a career plan within the engineering cluster occupations.			TBD	TBD		
	EN06	Use teamwork, critical thinking and problem solving skills to address complex problems in engineering.	X	X	TBD	TBD		
	EN07	Understand the role of engineering in society throughout history and how it is affected by economics, regulations, politics, and corporate culture.		X	TBD	TBD		
	EN08	Apply design principles and life-cycle methodology to create products, systems, and processes using appropriate technology.	X	X	TBD	TBD		
	EN09	Understand the impact personal characteristics, such as creativity, resourcefulness, the ability to visualize and the ability to think abstractly have on engineers and their ability to design.	X	X	TBD	TBD		
	EN10	Understand and adhere to safety, health, and environmental standards and regulations.	X	X	TBD	TBD		