

High School Name: **Tualatin High School**
Community College Name: **Portland Community College**
CTE Program of Study Name: **Advanced Manufacturing**
Date: **6/28/2016**

Health, Safety & Environmental Assurance Focus Area

Skills-to-Course Matrix

Instructions: 1) Click on Sample High School above and 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 in each course.

Focus Area Knowledge and Skills (CTE standards)

Focus Area Knowledge and Skills (CTE standards)		PCC MCH 100	TSA?	PCC MCH 272	TSA?	PCC MCH 290	TSA?	PCC MCH 292	TSA?	PCC 123	TSA?	PCC MCH 121	TSA?
Code Number	KS Statement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF01.01	Ensure that equipment is used safely in the workplace.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF02.01	Plan for safety in new production processes.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF03.01	Conduct health, safety and/or environmental incident and hazard investigations.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF04.01	Conduct preventive health, safety and/or environmental incident and hazard inspections.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF05.01	Implement health, safety, and/or environmental programs, projects, policies or procedures.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF06.01	Implement continuous improvement in health, safety and/or environmental practices.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF07.01	Promote health, safety and/or environmental assurance programs.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF08.01	Conduct job safety and health analysis for jobs, equipment and processes.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF09.01	Maintain a safe and productive workplace.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPF10.01	Train workers in health, safety and/or environmental issues.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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Date:

6/28/2016

Industrial & Engineering Systems Focus Area

Skills-to-Course Matrix

Instructions: 1) Click on Sample High School above and 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 in each course.

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Code Number	KS Statement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPH10.01	Perform skills necessary to operate metalforming equipment.	☐		☒		☒		☒		☒		☒	
MNPH10.02	Handle materials used in metalforming operations.	☐		☐		☐		☒		☒		☒	
MNPH10.03	Perform skills necessary in planning and controlling metalforming operations.	☒		☒		☒		☒		☒		☒	
MNPH10.04	Perform bench operations related to machining.	☐		☐		☐		☒		☒		☒	
MNPH10.05	Perform metal cutting operations on a lathe.	☐		☐		☐		☐		☐		☒	
MNPH10.06	Perform metal cutting operations on a mill.	☐		☐		☐		☐		☐		☒	
MNPH10.07	Perform metal cutting operations using contour sawing and electric discharge.	☐		☐		☐		☐		☐		☒	
MNPH10.08	Perform metal cutting operations using a drill press.	☐		☐		☐		☐		☐		☒	
MNPH10.09	Perform metal cutting operations using grinding equipment.	☐		☐		☐		☒		☒		☒	
MNPH10.10	Perform inspection and quality assurance procedures in machining.	☒		☒		☒		☒		☒		☒	
MNPH10.11	Understand properties of materials and their relationship to machining processes.	☒		☒		☒		☒		☒		☒	
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High School Name:
Community College Name:
CTE Program of Study Name:
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Tualatin High School
Portland Community College
Advanced Manufacturing
6/28/2016

Manufacturing Production Process Development

Focus Area

Skills-to-Course Matrix

Instructions: 1) Click on Sample High School above and 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 in each course.

Focus Area Knowledge and Skills (CTE standards)

Code Number	KS Statement
MNPA02.01	Communicate with others to ensure that the manufacturing production process meets requirements.
MNPA06.01	Monitor, promote and maintain a safe and productive workplace using a variety of techniques and solutions to ensure safe production of products.
MNPA10.01	Produce a product that demonstrates the relationship between production processes and meeting customer needs.
MNPA10.02	Implement manufacturing processes to manage production of new and/or improved products.
MNPA10.03	Implement continuous improvement processes in order to maintain quality within the manufacturing production process.
MNPA10.04	Recommend and/or implement continuous improvement activities in order to ensure production of high quality products that meet customer expectations.
MNPA10.05	Produce a product to demonstrate use of manufacturing production process development strategies and techniques.
MNPA10.06	Improve production processes in order to achieve manufacturing goals and meet customer and product standards.

PCC MCH 100	TSA?	PCC MCH 272	TSA?	PCC MCH 290	TSA?	PCC MCH 292	TSA?	PCC 123	TSA?	PCC MCH 121	TSA?
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Community College Name: _____
CTE Program of Study Name: _____
Date: _____

**Tualatin High School
Portland Community College
Advanced Manufacturing
6/30/2012**

Mechanical CAD/Drafting Focus Area

Skills-to-Course Matrix

Instructions: 1) Click on Sample High School above and 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 in each course.

Focus Area Knowledge and Skills (CTE standards)

Focus Area Knowledge and Skills (CTE standards)		PCC MCH 100	TSA?	ARCH 101	TSA?	DRF 117	TSA?	DRF 270	TSA?	ARCH 111	TSA?	ARCH 126	TSA?
Code Number	KS Statement	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MNPJ10.01	Apply measurement and scale concepts in drafting and design.	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
MNPJ10.02	Interpret engineering documents and control documents.	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
MNPJ10.03	Create technical sketches using drafting procedures.	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
MNPJ10.04	Use a CADD system and procedures.	☐	☒	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒
MNPJ10.05	Detail projection views/components.	☒	☐	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒
MNPJ10.06	Explore mechanical drafting/design concepts and problems.	☐	☐	☒	☒	☒	☒	☒	☐	☒	☐	☐	☐
MNPJ10.07	Demonstrate drafting/design concepts as related to basic manufacturing processes.	☐	☐	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐
MNPJ10.08	Incorporate geometric dimensioning and tolerancing (GDT) standards.	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
MNPJ10.09	Depict assemblies of components.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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High School Name:
Community College Name:
CTE Program of Study Name:
Date:

Tualatin High School
Portland Community College
Advanced Manufacturing
6/28/2016

Secondary Wood Products Focus Area

Skills-to-Course Matrix

Instructions: 1) Click on Sample High School above and 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 in each course.

Focus Area Knowledge and Skills (CTE standards)

Code Number	KS Statement
MNPI10.01	Understand manufacturing processes related to secondary wood products.
MNPI10.02	Understand characteristics and properties of materials used in manufacturing secondary wood products.
MNPI10.03	Use appropriate techniques in manufacturing of secondary wood products.

	PCC MCH 100	TSA?	PCC MCH 272	TSA?	PCC MCH 290	TSA?	PCC MCH 292	TSA?	PCC 123	TSA?	PCC MCH 121	TSA?
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High School Name: **Tualatin High School**
Community College Name: **Portland Community College**
CTE Program of Study Name: **Advanced Manufacturing**
Date: **6/28/2016**

Welding Focus Area

Skills-to-Course Matrix

Instructions: 1) Click on Sample High School above and 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 in each course.

Focus Area Knowledge and Skills (CTE standards)

[illegible]