# Valencia College Advanced Manufacturing Programs (AMP) Subject Matter Expert (SME) Curriculum Review Form Training Programs-Non-Credit

Thank you for agreeing to be a SME reviewer for curriculum developed through Valencia College's Advance Manufacturing Program, funded by the US Department of Labor's Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant. In compliance with grant requirements, AMP must identify a SME with demonstrated experience in developing and/or implementing similar training and educational deliverables. SME's review of course curriculum will be documented utilizing the rubric provided. Upon completion, both the curriculum reviewed and the completed rubric will be uploaded to SkillsCommons.org, a repository for all grantees to share curriculum and resources created with grant funding. Please follow the steps provided below:

### Step 1: Program and Reviewer Information

Program/Course	Electronic Board Assembly
Reviewed By	Gary Archibald
Date	9/23/2018

#### **Step 2: Reviewer Credentials**

Please provide a thorough overview of your credentials and qualifications.

#### **Credentials**

(certificates, degrees, industry certifications)

Director of Operations, MtronPTI

B.S. Electrical Engineering University of Central Florida

M.S. Electrical Engineering University of Central Florida

ASQ Lean Six Sigma Black Belt (certification number 14156)

# Professional Qualifications

As Director of Operations, I am involved in all aspects of MtronPTI's operations including the production level work. MtronPTI routinely builds products for military and aerospace customers requiring the highest level of IPC workmanship for soldered assemblies. I personally is very familiar with the IPC standards and the level of soldering workmanship needed to achieve not only Class 3, but also FS (space addendum).

#### **Step 3: Complete the Rubric**

Please review the curriculum provided utilizing the rubric on the following pages. For each item, provide a rating. The SME reviewer is required to provide general comments, strengths and/or recommendations for each rating, in order to help other grantees incorporate the recommended changes into the pre-existing curriculum for their use. The following identifies the scale definitions within the rubric:

**Exceptional:** Content is robust and rigorous. Content utilizes "best practices" for instruction.

**Effective:** Content is complete with only small tweaks that may need to be made.

**Acceptable:** Content is adequate but there are opportunities for improvement.

**Developing:** Content is weak and requires significant improvement.

N/A: Content has not been provided/does not apply for a given section.

Section A: Syllabus and/or Course Outline  Materials that are given and/or displayed to the student at the beginning of class that provide an overview of the course						
	Exceptional	Effective	Acceptable	Developing	N/A	
Initial course information is easily identifiable (course title, course description, objectives/outcomes, credit hours, textbook(s) used, etc.)	$\checkmark$					
Course includes objectives and/or outcomes that relate to the course and are appropriate for the course	$\overline{\checkmark}$					
Course objectives and/or outcomes are measureable	$\checkmark$	× ·				
Assessment methods are described (grading policy, grading scale, types of assessments, etc.)	$\checkmark$					
Course schedule is outlined and appropriately paced	V					

## **General Comments, Strengths, and/or Recommendations:**

(If you are commenting on a specific document(s), please provide the name of the document(s) you are referencing)

Course syllabus is extremely clear as to goals, outline, time lines, grading methods and performance objectives. The pace of the class is defined and sufficient to meet all objectives.

	Exceptional	Effective	Acceptable	Developing	N/A
Materials relate to course objectives and/ or outcomes	$\overline{\mathbf{V}}$				
Materials are presented in an appropriate format for the learner to understand (ex: language is at a level that is easily understandable, sufficient information has been provided for the learner to understand a concept, visuals have been provided as needed, concepts can be connected to real-world examples, etc.)	<b>V</b>				
Instruction follows a logical format. The instruction and materials are appropriately organized and provide clear structure.	V				
Instruction and materials reflect direct application to current industry standards and practices					-
Provides option(s) for multiple learning styles in order to engage students	$\overline{\checkmark}$				
Materials are aesthetically pleasing	$\overline{\mathbf{V}}$				
Materials are appropriately cited					

#### **General Comments, Strengths, and/or Recommendations:**

(If you are commenting on a specific document, please provide the name of the document you are referencing)

IPC-610, J-STD-001, IPC-620 standards are all utilized and all extremely important in the electronics field. Teaching methods include both audible, visual as well as hands on. For those students that do not learn well from the typical class room materials will have the ability to learn by hands on activities. Materials are all full of photos and easy to

	Section C: Learning Activities  Activities utilized to engage students to learn a specific concept(s)				
<b>经验证证证证证证证证证证证证证证证证证证证证证证</b> 证证证证证证证证证证证证证证	Exceptional	Effective	Acceptable	Developing	N/A
Activities clearly support course objectives	$\checkmark$				
Activities utilize various learning styles and provide opportunities for interaction	$\overline{\checkmark}$				
Activities allow students to connect the content they are learning to real-world application	$\checkmark$				
Activities are easy to understand and follow	$\sqrt{}$				
Activities can be modified to accommodate various learning needs	$\checkmark$				

### **General Comments, Strengths, and/or Recommendations:**

(If you are commenting on a specific document, please provide the name of the document you are referencing)
All activities are tied to real world examples simply by the hands on experiences and following the appropriate IPC standards. Teaching and testing to a standard is very much in line with industrial practices. Training materials can easily be modified to spend more time on particular industrial needs.

Section D: Assessments/Evaluation Assessments or evaluation utilized to gauge student understanding- can be formal or informal						
	Exceptional	Effective	Acceptable	Developing	N/A	
Assessments accurately measure the stated learning objectives and align with course content taught	V					
Assessments are rigorous and require higher-order thinking		$\checkmark$				
The assessment instrument used is appropriate to measure student understanding and mastery of concept(s)/skill(s)			v			

# **General Comments, Strengths, and/or Recommendations:**

(If you are commenting on a specific document, please provide the name of the document you are referencing)

The IPC standards and tests that are required are very clear in regards to what is needed to be compliant and pass. It clearly will define if the student has mastered the concepts, but as with anything, if the students do not continue to hone their craft, the skills can be lost.

#### **Section E: Final Comments**

Please provide any closing comments, recommendations, and/or suggestions for the curriculum reviewed

The class has allowed MtronPTI to field candidates to fulfill open assembly positions. The Valencia team has worked well with MtronPTI allowing us to present real world examples to classes. Overall, this is a great program and allows students to learn a craft that is not commonly taught anywhere else and allows for individuals to grow their career beyond typical hourly employment.

Valencia College is an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities.

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