



## Iowa Advanced Manufacturing Consortium Curriculum Review Rubric

**Signature Program: Industrial Maintenance (Applied Engineering Technology – AET)**

**College: Des Moines Area Community College (DMACC)**

**Reviewer Name: Allan Robertson**

**Reviewer Signature:**

**Date: March, 2016**

### **Review Definitions & Instructions**

**Exceptional:** Review component is a “best practice” and represents a model for replication.

**Effective:** Review component is complete and effective.

**Opportunity to Improve:** Review component is not complete and/or could be improved.

**N/A:** Review component not reflected or addressed in material.

**Comments and Recommendations:** Remarks should be reflective of the subjects covered in that section. If any review component is marked as an opportunity for improvement, a comment or recommendation must be provided in reference to the rating.



<ul style="list-style-type: none"> <li>- Program Introduction &amp; Overview</li> <li>- Program Pathway</li> <li>- Curriculum Map</li> </ul>	Exceptional	Effective	Opportunity to Improve	N/A	Comments & Recommendations
1. Priority 1: Develop stacked and latticed pathway in signature program providing a clear and logical path to completion		x			Both credit and non-credit have pathways showing how to move from certificate to diploma to degree. Stacked credentials were listed in the college catalog in 2015.
2. Priority 1, Strategy 1: Program outcomes aligned to relevant industry certifications		x			Students are being exposed to the OSHA 10-hr certification CPR and first aid.
3. Priority 1, Strategy 1: Instructors certified per industry standards	x				Faculty are required to obtain 100 hours per 5 year period of continuing education plus have a degree and work experience in their program of study.
4. Priority 1, Strategy 1: NCRC incorporated into signature program curriculum		x			NCRC has been embedded into all non-credit offerings.
5. Priority 1, Strategy 2: Noncredit offering aligned to credit programming	x				Students are able to transfer noncredit to credit with ease. Forms have been developed with much of the information pre-populated. A work group has been formed to review how apprenticeship students can transfer into a degree program.
6. Priority 2, Strategy 4: U of I online BAS incorporated into program pathway		x			Both pathways include an end point of U of I. Campus visits by U of I are made available to students who wish to pursue this option.

- Course Information: Syllabi & Instructional Materials	Exceptional	Effective	Opportunity to Improve	N/A	Comments & Recommendations
1. Priority 1, Strategy 1: Course competencies are aligned to relevant industry certifications	x				This program offers traditional classes for industrial maintenance such as: fluid power, electrical, PLCs, machining, welding, and math. The courses are used across several programs including Applied Engineering Technology Diploma, Applied Engineering Technology-Electro-Mechanical Technologies AAS, Applied Engineering Technology-Wind Turbine Technologies AAS and Electro-Mechanical Technology certificate.
2. Priority 1, Strategy 1: Instructional materials are reflect current industry standards	X				The syllabus listed for each class did not list course competences. A web link was given: <a href="https://go.dmacc.edu/competencies">https://go.dmacc.edu/competencies</a> CurricUNET is used to house all DMACC curriculums. This is a great tool for students and industry to review material in a class.
3. Priority 2, Strategy 5: Online and blended delivery options for courses as appropriate		x			Students are using online material for their OSHA course.
4. Priority 2, Strategy 5: Incorporate simulators and state-of-the-art technology into curriculum				x	Currently this program is not using any type of virtual simulators. I would recommend looking at a welding simulator, robotics training cart, and 3D printing. Simulation software for fluid power or motor controls is also available from many companies.
5. Priority 2, Strategy 5: Incorporate online manufacturing training options as appropriate to supplement hands-on training			x		DMACC is offering a 10 hour OSHA course for students to complete. My recommendation would be to look at additional online IMT material from vendors such as: AMTEC, AMATROL, Tooling U, Lab Volt, Lincoln Welding etc. In many cases this online material can be used to supplement and create a blended learning environment.



- Statement of Grant Impact	Exceptional	Effective	Opportunity to Improve	N/A	Comments & Recommendations
1. Priority 1, Strategy 3: Evidence of strengthened credit for prior learning options within program	x				An awareness campaign was put in place to emphasize credit for prior learning. Policies and easy to use forms were created for students wishing to continue their pathway. Credit and non-credit faculty have been assigned to work together. A work group has been formed to oversee apprenticeship credit towards a degree.
2. Priority 2, Strategy 1: Digital literacy incorporated into curriculum		x			AUTO CAD and an Online OSHA class is part of the curriculum. Information is given to student from Pathway Navigator and the continuing education department regarding free computer classes available to all students.
3. Priority 2, Strategy 1: Evidence of plan for remediation and contextualized learning		x			A basic Skills Specialist was hired to help with math and reading comprehension as needed.
4. Priority 3, Strategy 2: Evidence of intensive advising incorporated into program	x				A Pathway Navigator was hired and worked with students from orientation thru graduation.
5. Priority 3, Strategy 1: Evidence of industry input/standards in program design and curricular components	x				DMACC industry base has helped with advisory board meetings, job fairs and class room visits. This group has input regarding advising of curriculum offerings. Partnerships has been developed with Iowa Workforce Development (IWD) and Workforce Investment Act (WIA).

This workforce solution is funded by the I-AM Consortium which is 100% financed through a \$12,951,165 grant from the Department of Labor's Employment & Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership

This work is licensed under the Creative Commons Attribution 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/3.0/>." 