



## Iowa Advanced Manufacturing Consortium Curriculum Review Rubric

**Signature Program:** Industrial Maintenance Technology

**College:** Southwestern Community College (SWCC)

**Reviewer Name:** Allan Robertson

**Reviewer Signature:**

**Date:** 03/2016

### 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.

| - Program Introduction & Overview<br>- Program Pathway<br>- Curriculum Map  | 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           |           |                        |     | Pathway from certificate, diploma, AAS, and BS is included. This pathway also includes admission, compass test, advising and scheduling of classes with an advisor. This pathway allows students to earn a credential after one semester or choice to continue classes or go to work. |
| 2. Priority 1, Strategy 1: Program outcomes aligned to relevant industry certifications                                   |             | x         |                        |     | Students can obtain the traditional certificate, diploma or AAS degree. Relevant industry certifications are OSHA 1 and National Career Readiness Certificate.  |
| 3. Priority 1, Strategy 1: Instructors certified per industry standards   |             | x         |                        |     | Instructors have industry certifications such as OSHA 10, CWA welding educator, and master electrician.   |
| 4. Priority 1, Strategy 1: NCRC incorporated into signature program curriculum  |             | x         |                        |     | This certification is embedded and all students are required to participate in this credential process  |
| 5. Priority 1, Strategy 2: Noncredit offering aligned to credit programming   |             | x         |                        |     | This program has a non-credit to credit pathway.  |
| 6. Priority 2, Strategy 4: UofI online BAS incorporated into program pathway  |             | x         |                        |     | A BS degree from U of I is part of the program pathway.   |

| - 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         |                        |     | Students complete classes in subjects such as electricity, motor controls, PLCs, fluid power, machine shop, blueprint reading, safety and robotics. These classes are typical for an industrial maintenance program.                        |
| 2. Priority 1, Strategy 1: Instructional materials are reflect current industry standards      |             | x         |                        |     | Text books used are relevant to typical industrial maintenance program. Some of the examples given were National Electric Codes NFPA 70, Motor Controls by Herman, Microsoft Office, Schoolcraft, and the Ugly's series used in electricity |



|   |   |   |  |  |   |
|---|---|---|--|--|---|
| 3. Priority 2, Strategy 5: Online and blended delivery options for courses as appropriate                                   | x |   |  |  | Online options and blended learning were used by the instructor. AMATROL software and e-learning material is used with Vision Inspection System.  |
| 4. Priority 2, Strategy 5: Incorporate simulators and state-of-the-art technology into curriculum                           | x |   |  |  | Examples of equipment used by students are a pick and place robot, mechatronics trainer with gauging and indexing capacity, and servo and robotic assembly. Students are exposed to pneumatics, electrical, fiber optic, automation and PLCs. |
| 5. Priority 2, Strategy 5: Incorporate online manufacturing training options as appropriate to supplement hands-on training |   | x |  |  | Online learning modules are used.   |

| - 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         |                        |     | The implementation of this program allowed SWCC to develop and establish a policy to award credit for prior work.   |
| 2. Priority 2, Strategy 1: Digital literacy incorporated into curriculum                             | x           |           |                        |     | The industry base that is supporting this program insisted that a computer literacy course be included in the program development. A three credit hour course was established to help students with limited computer exposure. Online classwork has been embedded within this program to help students improve in digital literacy. |
| 3. Priority 2, Strategy 1: Evidence of plan for remediation and contextualized learning              | x           |           |                        |     | This program uses an advising model that follows students from start to finish. An admissions representative, advisors and success coordinators monitors students using instructor feedback and a referral system that alerts the coordinator if a student starts to have problems in the classroom.                                |
| 4. Priority 3, Strategy 2: Evidence of intensive advising incorporated into program                  | x           |           |                        |     | This program incorporates advising from start to finish. The program pathway is very clear on when a student enrolls, test, meets with an advisor, career path and credentials. The same advisor is assigned to all of the industrial maintenance students.   |



|   |   |  |  |   |
|---|---|--|--|---|
| 5. Priority 3, Strategy 1: Evidence of industry input/standards in program design and curricular components | x |  |  | Industrial support is evident from job shadowing, donations, career fairs and internships. SWCC is working with the Southwest Iowa Manufacturing Sector board and the local Workforce Development. Eight new businesses have formed partnerships with this program. |
|---|---|--|--|---|

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/>. 