



Cycle: 2018-2021

ASSOCIATE IN APPLIED SCIENCE WITH A MAJOR IN INDUSTRIAL MAINTENANCE TECHNOLOGY

Program Mission Statement:

The Industrial Maintenance Technology program provides students with fundamental mechanical skills associated with entry-level maintenance positions and prepares students for careers in large manufacturing companies as industrial machinery and maintenance technicians. Industrial maintenance technicians keep machinery and equipment in the plant up and running so that production can continue.

Division: Technical and General Education

AVP: Dan Averette

Department Chair: Shawn Reed

Director:

SACSCOC Standard: 8.2A

Accrediting Agency: Yes No

Name: NA

Certification Exam(s): Yes No

Agency Name: NA

Credential: Associate Degree

Program Student Learning Outcome	Monitoring Year
Determine the proper publication for guidance in the performance of the specific task assigned.	2018-2019
Combine basic theoretical knowledge and understanding of the Industrial Maintenance Field and practical laboratory experience to set up and repair industrial equipment and facilities.	2019-2020
Compare various electrical and hydraulic circuits and outline the differences between them.	2019-2020
Apply theoretical study and the knowledge of metering tools to troubleshoot mechanical, electrical, and electromechanical systems and repair them.	2020-2021
Determine the correct procedures to set up and repair industrial equipment and facilities.	2020-2021

STUDENT LEARNING OUTCOMES FOR 47.0303 2018-2019

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Determine the proper publication for guidance in the performance of the specific task assigned.	IMT 233	The IMT student will install, edit, and troubleshoot Programmable Logic Controllers.	100% of the student will score a 70% or greater on the PLC final lab assessment in IMT 233.	Spring 2019	12 out of 12 (100%) students scored a 70% or greater and the class average was 79.17%.	The expected learning outcome was met. Faculty will offer additional mock labs to help students master the outcome.

STUDENT LEARNING OUTCOMES FOR 47.0303 2019-2020

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Combine basic theoretical knowledge and understanding of the Industrial Maintenance Field and practical laboratory experience to set up and repair industrial equipment and facilities.	IMT 161	The IMT student will be introduced to typical equipment failure areas and how preventive maintenance can reduce those failures.	100% of IMT graduates will score a 70% or above on class exercise 4 in IMT 161.	Fall 2019	Class average was 86.9% and all 18 of 18 (100%) students made a 70% or above.	Benchmark was exceeded. The faculty would like to investigate a different assessment tool to evaluate this PSLO in the future.

STUDENT LEARNING OUTCOMES FOR 47.0303 2019-2020

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Compare various electrical and hydraulic circuits and outline the differences between them.	IMT 131	The IMT student will design, install, and test basic pneumatic and hydraulic circuits.	100% of IMT graduates will score a 70% or above on hydraulic lab project 3 in IMT 131.	Spring 2020	Class average was 82.6% and 14 of 15 students made a 70% or above.	This benchmark was not met. The faculty will enforce remediation for students with high absenteeism before allowing them to take the test.

STUDENT LEARNING OUTCOMES FOR 47.0303 2020-2021

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Apply theoretical study and the knowledge of metering tools to troubleshoot mechanical, electrical, and electromechanical systems and repair them.	IMT 140	Students will construct series and parallel circuits.	100% of the graduates will score a 70% or higher on lab exercise 7 series and parallel circuits in IMT 140.	FALL 2020	Class average was as follows: 96.6% for parallel circuits and a lower value of 80% for series circuits. However, the benchmark was met with 21 of 21 students scoring at 70% or above.	The faculty will enforce remediation for students with high absenteeism before allowing them to take the laboratory tests on Parallel and Series Circuits.

STUDENT LEARNING OUTCOMES FOR 47.0303 2020-2021

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Determine the correct procedures to set up and repair industrial equipment and facilities.	IMT 161	The IMT student will explore various mechanical components found in industrial facilities.	100% of the students will make a grade of 70% or above on lab project 5.	Fall 2020	Class average was 97.1% with one student scoring an 80%. 14 out of 14 students (100%) made a 70% or above.	Benchmark was met. The faculty will continue to utilize mechanical trainers and E-learning software to improve student engagement and scores on this laboratory project.

CONTINUOUS STUDENT IMPROVEMENT

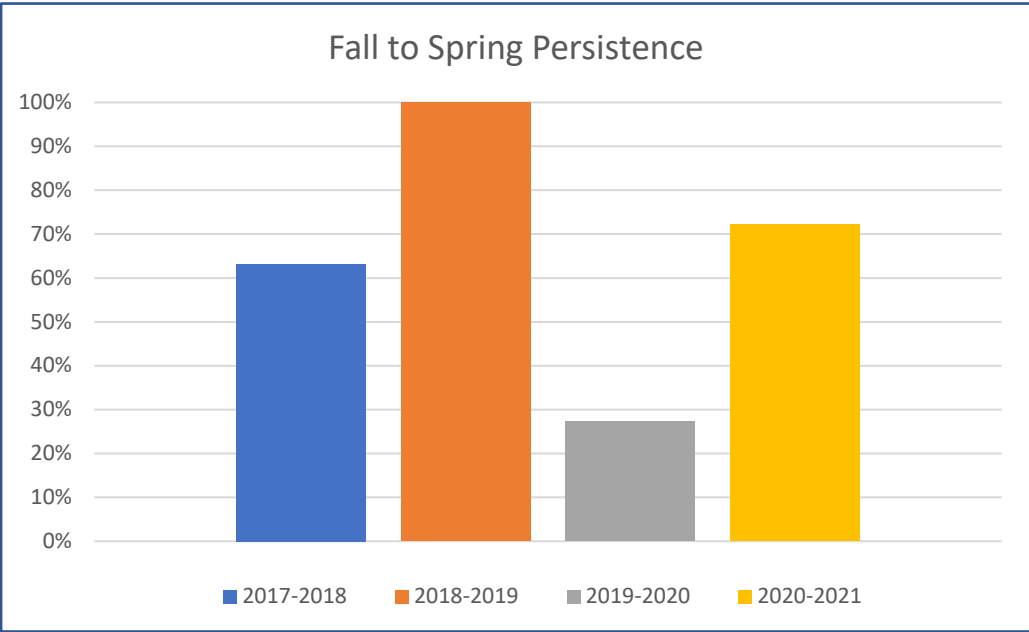
In comparison to the last cycle the IMT department has been able to identify the short falls in tracking student improvement by creating an assessment map so all data is gathered at set times. The program in this cycle has been focusing on more hands-on projects to evaluate student learning outcomes because we feel this approach gives us a more accurate method to determine mastery of the concept.

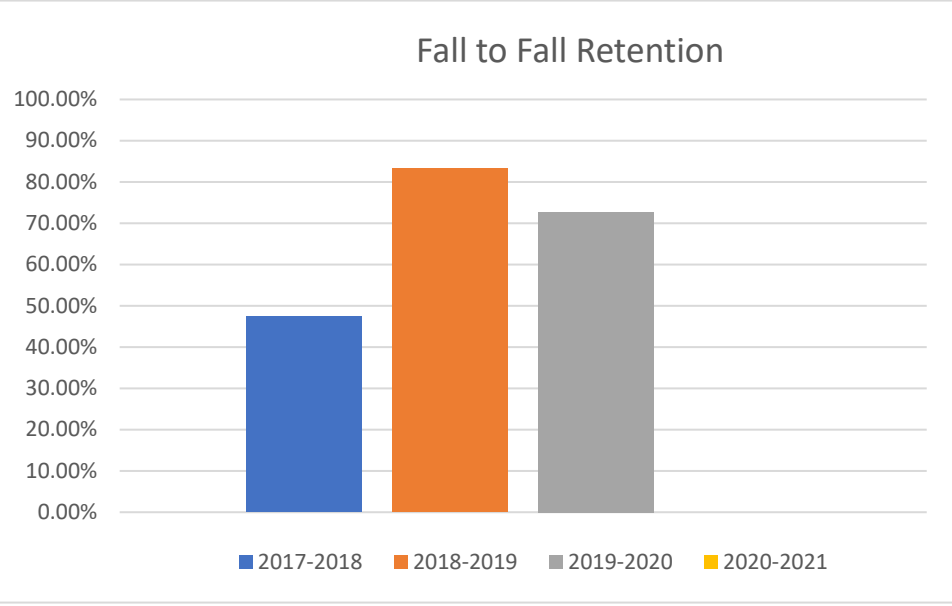
The program's one major short fall from last cycle to this would be in the IMT 131 hydraulic lab project 3. The IMT students did struggle with the design, assembly, and testing of the basic pneumatic and hydraulic circuits. The faculty has started to address this issue by requiring the students to inform the instructor of the required steps in completing the project before the first attempt.

Overall, the IMT faculty feels that student performance will continue to improve. All the IMT students from these different cohorts are working in the field.

PROGRAM VITAL STATISTICS

Indicator	Trend Analysis	Action Plans										
<div style="border: 1px solid #2c3e50; padding: 10px;"> <p style="text-align: center; margin: 0;">Program Enrollment</p> <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Year</th> <th>Enrollment</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>37</td> </tr> <tr> <td>2018-2019</td> <td>24</td> </tr> <tr> <td>2019-2020</td> <td>32</td> </tr> <tr> <td>2020-2021</td> <td>34</td> </tr> </tbody> </table> </div>	Year	Enrollment	2017-2018	37	2018-2019	24	2019-2020	32	2020-2021	34	<p>The IMT program has a healthy enrollment for one instructor. Faculty did see a dip in enrollment for the 2018-2019 year and that is the same time an instructor change took place.</p>	<p>The IMT faculty will continue to reach out to local industry and high schools in hopes of increasing enrollment.</p>
Year	Enrollment											
2017-2018	37											
2018-2019	24											
2019-2020	32											
2020-2021	34											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Fall to Spring Persistence</p>  <table border="1" data-bbox="128 183 1150 810"> <caption>Fall to Spring Persistence Data</caption> <thead> <tr> <th>Year</th> <th>Persistence Rate</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>63%</td> </tr> <tr> <td>2018-2019</td> <td>100%</td> </tr> <tr> <td>2019-2020</td> <td>27%</td> </tr> <tr> <td>2020-2021</td> <td>72%</td> </tr> </tbody> </table>	Year	Persistence Rate	2017-2018	63%	2018-2019	100%	2019-2020	27%	2020-2021	72%	<p>The decrease in persistence in the 2019-2020 year is directly related to the lower enrollment that occurred in 2018-2019. In addition, the root cause could be due to the change of instructor and the increase of rigor added to the program.</p>	<p>The faculty will try to identify those students who are struggling during the fall semester earlier and use both online and face to face tutoring methods to increase the fall to spring persistence rate.</p>
Year	Persistence Rate											
2017-2018	63%											
2018-2019	100%											
2019-2020	27%											
2020-2021	72%											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Fall to Fall Retention</p>  <table border="1" data-bbox="115 186 1060 787"> <caption>Fall to Fall Retention Data</caption> <thead> <tr> <th>Year</th> <th>Retention Rate</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>48.00%</td> </tr> <tr> <td>2018-2019</td> <td>83.00%</td> </tr> <tr> <td>2019-2020</td> <td>73.00%</td> </tr> <tr> <td>2020-2021</td> <td>-</td> </tr> </tbody> </table>	Year	Retention Rate	2017-2018	48.00%	2018-2019	83.00%	2019-2020	73.00%	2020-2021	-	<p>The Fall to Fall retention rate has remained fairly stable for the last 3 years and we expect that will continue on that path for the next cycle.</p>	<p>New equipment has been purchased to allow a more hands-on approach for instruction which should lead to a better mastery of skills exhibited by the students.</p>
Year	Retention Rate											
2017-2018	48.00%											
2018-2019	83.00%											
2019-2020	73.00%											
2020-2021	-											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Graduation Rates</p> <table border="1"> <caption>Graduation Rates Data</caption> <thead> <tr> <th>Year</th> <th>Graduation Rate</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>100%</td> </tr> <tr> <td>2018-2019</td> <td>~89.5%</td> </tr> <tr> <td>2019-2020</td> <td>100%</td> </tr> <tr> <td>2020-2021</td> <td>100%</td> </tr> </tbody> </table>	Year	Graduation Rate	2017-2018	100%	2018-2019	~89.5%	2019-2020	100%	2020-2021	100%	<p>Graduation Rates shown are misleading since we have students who may start out in the certificate program and then change curriculum to the degree mid-year.</p>	<p>The IMT faculty will make sure curriculum changes are made in a timely manner.</p>
Year	Graduation Rate											
2017-2018	100%											
2018-2019	~89.5%											
2019-2020	100%											
2020-2021	100%											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Job Placement Rates</p> <p>The chart displays job placement rates for four consecutive periods. The y-axis represents the percentage of graduates placed in jobs, ranging from 0% to 100% in 10% increments. The x-axis lists the periods: 2017-2018, 2018-2019, 2019-2020, and 2020-2021. All four bars are at the 100% level, indicating a consistent 100% job placement rate for all periods shown.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Placement Rate</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>100%</td> </tr> <tr> <td>2018-2019</td> <td>100%</td> </tr> <tr> <td>2019-2020</td> <td>100%</td> </tr> <tr> <td>2020-2021</td> <td>100%</td> </tr> </tbody> </table>	Year	Placement Rate	2017-2018	100%	2018-2019	100%	2019-2020	100%	2020-2021	100%	<p>Placement rates for this program has always been outstanding and the faculty does not see any reason for this to change.</p>	<p>The faculty will continue to work closely with our local industries to insure placement of our graduates.</p>
Year	Placement Rate											
2017-2018	100%											
2018-2019	100%											
2019-2020	100%											
2020-2021	100%											