Program Outcomes Assessment
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## 2012-2013 Assessment Cycle

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## 2013-2014 Assessment Cycle

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## 2014-2015 Assessment Cycle

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<td>Action Plan</td>
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## 2015-2016 Assessment Cycle

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## 2016-2017 Assessment Cycle

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<tr>
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General Information (Program Outcomes Assessment)
Standing Requirements

Mission Statement

The Master of Science in Technology Management (MSTM) Program is meant to further the academic preparation and professional advancement of the baccalaureate graduate with a degree in and professional orientation toward technology management or similar industrial-technical fields. The program provides theoretical and practical learning experiences to prepare graduates for leadership positions in industry and/or prepare them for doctoral level programs such as the Ph.D. in Technology Management.

Outcomes Library

MS in Technology Management Outcome Set - November 2012

<table>
<thead>
<tr>
<th>Program Outcomes</th>
<th>Mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The student will be able to perform a variety of technical activities the student is likely to manage.</td>
<td>No Mapping</td>
</tr>
<tr>
<td>2. The student will be able to communicate effectively in the technical environment.</td>
<td>No Mapping</td>
</tr>
<tr>
<td>3. The student will demonstrate the ability to solve problems individually and as a member of a team.</td>
<td>No Mapping</td>
</tr>
<tr>
<td>4. The student will demonstrate the ability to make management related decisions.</td>
<td>No Mapping</td>
</tr>
<tr>
<td>5. The student will demonstrate appropriate professional and ethical behavior.</td>
<td>No Mapping</td>
</tr>
<tr>
<td>6. The student will be able to use, perform, and disseminate research.</td>
<td>No Mapping</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Demonstrate mastery of the technical activities of the technology management profession</td>
<td>No Mapping</td>
</tr>
<tr>
<td>2.1 Communicate effectively in the technical environment</td>
<td>No Mapping</td>
</tr>
<tr>
<td>3.1 Ability to solve problems individually and as a team member</td>
<td>No Mapping</td>
</tr>
<tr>
<td>4.1 Ability to make management related decisions</td>
<td>No Mapping</td>
</tr>
<tr>
<td>5.1 Demonstrates appropriate professional and ethical behavior</td>
<td>No Mapping</td>
</tr>
</tbody>
</table>
6.1 Use, perform, and disseminate research

No Mapping

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**Curriculum Map**

**Active Curriculum Maps**

- **Audit (Course-Outcomes Assessment Matrix)** (See appendix)
  
  **Alignment Set:** MS in Technology Management Outcome Set - November 2012
  
  **Created:** 11/12/2012 2:52:02 pm CST
  
  **Last Modified:** 11/12/2012 2:57:37 pm CST

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**Communication of Outcomes**

The student learning outcomes are posted on the program’s web site.
Archive (This area is to be used for archiving pre-TaskStream assessment data and for current documents.)
2012-2013 Assessment Cycle

Assessment Plan

Outcomes and Measures

MS in Technology Management Outcome Set - November 2012

Student Learning Outcomes

1.1 Demonstrate mastery of the technical activities of the technology management profession

Measure: ATMAE Certified Technical Manager Exam
Direct - Exam

Details/Description: This exam is a national certification exam for technology management professionals. The exam is offered annually in the spring semester to students by the department.
Target: 70% of the students will pass the entire exam in the appropriate cycle
Implementation Plan (timeline): Spring 2013, 2016, 2019
Responsible Individual(s): department chair

Assessment Findings

Finding per Measure

MS in Technology Management Outcome Set - November 2012

Student Learning Outcomes

1.1 Demonstrate mastery of the technical activities of the technology management profession

Measure: ATMAE Certified Technical Manager Exam
Direct - Exam

Details/Description: This exam is a national certification exam for technology management professionals. The exam is offered annually in the spring semester to students by the department.
Target: 70% of the students will pass the entire exam in the appropriate cycle
Implementation Plan (timeline): Spring 2013, 2016, 2019
Responsible Individual(s): department chair

Findings for ATMAE Certified Technical Manager Exam
### Summary of Findings
In the spring semester, a total of 7 MSTM students took the exam and 6 of those passed for an 86% pass rate.

### Results
Target Achievement: Exceeded

### Recommendations

### Reflections/Notes

### Substantiating Evidence:
- ATMAE Certification Exam Results (Excel Workbook (Open XML)) (See appendix)

<table>
<thead>
<tr>
<th>4.1 Ability to make management related decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measure:</strong> ATMAE Certified Technical Manager Exam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Details/Description:</th>
<th>This exam is a national certification exam for technology management professionals. The exam is offered annually in the spring semester to students by the department.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target:</strong></td>
<td>70% of the students will pass the entire exam in the appropriate cycle</td>
</tr>
<tr>
<td><strong>Implementation Plan (timeline):</strong></td>
<td>Spring 2013, 2016, 2019</td>
</tr>
<tr>
<td><strong>Responsible Individual(s):</strong></td>
<td>department chair</td>
</tr>
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</table>

### Findings for ATMAE Certified Technical Manager Exam

<table>
<thead>
<tr>
<th>Summary of Findings:</th>
<th>In the spring semester, a total of 7 MSTM students took the exam and 6 of those passed for an 86% pass rate.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Results:</strong></td>
<td>Target Achievement: Exceeded</td>
</tr>
<tr>
<td><strong>Recommendations:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Reflections/Notes:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Substantiating Evidence:</strong></td>
<td>ATMAE Certification Exam Results (Excel Workbook (Open XML)) (See appendix)</td>
</tr>
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</table>

### Overall Recommendations
No text specified

### Overall Reflection
No text specified

### Action Plan

#### Actions

#### Action Plan 2012-13

#### Outcome

#### Action Plan
- **Action:** Encourage more participation in the exam
This Action is associated with the following Findings
No supporting Findings have been linked to this Action.

**Action Details:** Since 86% is higher than expected the faculty will not modify curriculum at this time. Faculty will encourage more participation in the exam for the future. Additionally, the faculty will continue to develop an exit survey useful in measuring the intended outcomes.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:**

**Measures:**

**Resource Allocations:**

**Priority:** Medium

---

**Status Report**

**Action Statuses**

**Action Plan 2012-13**

**Outcome**

**Action Plan**

**Action:** Encourage more participation in the exam

**Action Details:** Since 86% is higher than expected the faculty will not modify curriculum at this time. Faculty will encourage more participation in the exam for the future. Additionally, the faculty will continue to develop an exit survey useful in measuring the intended outcomes.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:**

**Measures:**

**Resource Allocations:**

**Priority:** Medium

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**Status Summary**

*No text specified*
Summary of Next Steps

No text specified
2013-2014 Assessment Cycle

Assessment Plan

Outcomes and Measures

MS in Technology Management Outcome Set - November 2012

Student Learning Outcomes

2.1 Communicate effectively in the technical environment

Measure: ATMAE Certified Technical Manager Exam
Direct - Exam

Details/Description: This exam is a national certification exam for technology management professionals. The exam is offered annually in the spring semester to students by the department.
Target: 70% of the students will pass the entire exam in the appropriate cycle
Responsible Individual(s): department chair

Assessment Findings

Finding per Measure

MS in Technology Management Outcome Set - November 2012

Student Learning Outcomes

2.1 Communicate effectively in the technical environment

Measure: ATMAE Certified Technical Manager Exam
Direct - Exam

Details/Description: This exam is a national certification exam for technology management professionals. The exam is offered annually in the spring semester to students by the department.
Target: 70% of the students will pass the entire exam in the appropriate cycle
Responsible Individual(s): department chair

Findings for ATMAE Certified Technical Manager Exam
**3.1 Ability to solve problems individually and as a team member**

<table>
<thead>
<tr>
<th>Measure: ATMAE Certified Technical Manager Exam</th>
</tr>
</thead>
</table>

**Details/Description:** This exam is a national certification exam for technology management professionals. The exam is offered annually in the spring semester to students by the department.

**Target:** 70% of the students will pass the entire exam in the appropriate cycle

**Implementation Plan (timeline):** Spring 2014, 2017, 2020

**Responsible Individual(s):** department chair

---

**Findings for ATMAE Certified Technical Manager Exam**

**Summary of Findings:** In the Spring of 2014, 4 students took the exam. Three of those four passed the exam.

**Results:** Target Achievement: Exceeded

**Recommendations:**

**Reflections/Notes:**

**Substantiating Evidence:**

[ATMAE Certification Exam Results (Excel Workbook (Open XML)) (See appendix)](attachment:ATMAE_Certification_Results.xlsx)

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**Overall Recommendations**

*No text specified*

**Overall Reflection**

*No text specified*

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**Action Plan**

**Actions**

**Action Plan 2012-13**

**Outcome**

**Action Plan**

*Action: Encourage more participation in the exam*
This Action is associated with the following Findings
No supporting Findings have been linked to this Action.

Action Details: Since 75% is higher than expected the faculty will not modify curriculum at this time. Faculty will encourage more participation in the exam for the future. Additionally, the faculty will continue to develop an exit survey useful in measuring the intended outcomes to be implemented in the spring of 2015.

Implementation Plan (timeline):

Key/Responsible Personnel:

Measures:

Resource Allocations:

Priority: Medium

Status Report

Action Statuses

Action Plan 2012-13

Outcome

Action Plan

Action: Encourage more participation in the exam

Action Details: Since 75% is higher than expected the faculty will not modify curriculum at this time. Faculty will encourage more participation in the exam for the future. Additionally, the faculty will continue to develop an exit survey useful in measuring the intended outcomes to be implemented in the spring of 2015.

Implementation Plan (timeline):

Key/Responsible Personnel:

Measures:

Resource Allocations:

Priority: Medium

Status for Encourage more participation in the exam

No Status Added

Status Summary

No text specified

Summary of Next Steps

No text specified
## Assessment Plan

**Outcomes and Measures**

### MS in Technology Management Outcome Set - November 2012

#### Student Learning Outcomes

| 5.1 Demonstrates appropriate professional and ethical behavior | Measure: ATMAE Certified Technical Manager Exam  
Direct - Exam |
| --- | --- |
| Details/Description: This exam is a national certification exam for technology management professionals. The exam is offered annually in the spring semester to students by the department.  
Target: 70% of the students will pass the entire exam in the appropriate cycle  
Implementation Plan (timeline): Spring 2015, 2018, 2021  
Responsible Individual(s): department chair |
| Measure: Survey of graduating students  
Indirect - Survey |
| Details/Description: The survey assessing all SLO’s will be administered in the spring semester to graduating seniors of the spring/summer session of the appropriate cycle.  
Target: 70% of the students taking the survey will report at least a 70% confidence in achievement of the questions associated with this SLO.  
Implementation Plan (timeline): Spring 2015, 2018, 2021  
Responsible Individual(s): department chair |
| 6.1 Use, perform, and disseminate research | Measure: Comprehensive Evaluation Rubric  
Direct - Student Artifact |
| Details/Description: The comprehensive evaluation of every student prior to graduation. Of the 3 questions asked, one will be focused on research methodology, one on the management of technology, and one on the student’s technical concentration. A rubric will be devised.  
Target: 70% of the students will score better than 70% on the rubric for the comprehensive exam.  
Implementation Plan (timeline): Spring 2015, 2018, 2021  
Responsible Individual(s): department chair |
| Measure: Thesis or Major Project rubric  
Direct - Student Artifact |
| Details/Description: The major project or thesis of every student in the appropriate class (697 or 699) in the appropriate cycle semester will be evaluated using a rubric designed to assess the achievement of the student learning outcomes.  
Target: 70% of the students will score better than 70% on the thesis/major project rubric assessing this SLO.  
Implementation Plan (timeline): Spring 2015, 2018, 2021 |

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### MS in Technology Management Outcome Set - November 2012

#### Student Learning Outcomes

| 5.1 Demonstrates appropriate professional and ethical behavior | **Measure:** ATMAE Certified Technical Manager Exam  
Direct - Exam |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Details/Description:</strong> This exam is a national certification exam for technology management professionals. The exam is offered annually in the spring semester to students by the department.</td>
<td></td>
</tr>
</tbody>
</table>
**Target:** 70% of the students will pass the entire exam in the appropriate cycle  
**Implementation Plan (timeline):** Spring 2015, 2018, 2021  
**Responsible Individual(s):** department chair |
| **Findings** for ATMAE Certified Technical Manager Exam | No Findings Added |

| **Measure:** Survey of graduating students  
Indirect - Survey |
<table>
<thead>
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<tbody>
<tr>
<td><strong>Details/Description:</strong> The survey assessing all SLO's will be administered in the spring semester to graduating seniors of the spring/summer session of the appropriate cycle.</td>
</tr>
</tbody>
</table>
**Target:** 70% of the students taking the survey will report at least a 70% confidence in achievement of the questions associated with this SLO.  
**Implementation Plan (timeline):** Spring 2015, 2018, 2021  
**Responsible Individual(s):** department chair |
| **Findings** for Survey of graduating students | No Findings Added |

| 6.1 Use, perform, and disseminate research | **Measure:** Comprehensive Evaluation Rubric  
Direct - Student Artifact |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Details/Description:</strong> The comprehensive evaluation of every student prior to graduation. Of the 3 questions asked, one will be focused on research methodology, one on the management of technology, and one on the student’s technical concentration. A rubric will be devised.</td>
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</table>
**Target:** 70% of the students will score better than 70% on the rubric for the comprehensive exam.  
**Implementation Plan (timeline):** Spring 2015, 2018, 2021  
**Responsible Individual(s):** department chair |
| **Findings** for Comprehensive Evaluation Rubric |
Measure: Thesis or Major Project rubric
Direct - Student Artifact

Details/Description: The major project or thesis of every student in the appropriate class (697 or 699) in the appropriate cycle semester will be evaluated using a rubric designed to assess the achievement of the student learning outcomes.

Target: 70% of the students will score better than 70% on the thesis/major project rubric assessing this SLO.

Implementation Plan (timeline): Spring 2015, 2018, 2021

Responsible Individual(s): department chair

Findings for Thesis or Major Project rubric
No Findings Added

Overall Recommendations
No text specified

Overall Reflection
No text specified

Action Plan

Status Report
2015-2016 Assessment Cycle

- Assessment Plan
- Assessment Findings
- Action Plan
- Status Report
2016-2017 Assessment Cycle

Assessment Plan

Assessment Findings
2017-2018 Assessment Cycle

Assessment Plan

Assessment Findings
2018-2019 Assessment Cycle

Assessment Plan

Assessment Findings
2019-2020 Assessment Cycle

Assessment Plan

Assessment Findings
Appendix

A. Audit (Course-Outcomes Assessment Matrix) (Curriculum Map)
B. ATMAE Certification Exam Results (Excel Workbook (Open XML))
C. ATMAE Certification Exam Results (Excel Workbook (Open XML))
D. ATMAE Certification Exam Results (Excel Workbook (Open XML))
E. ATMAE Certification Exam Results (Excel Workbook (Open XML))