

New Mexico State University

Detailed Assessment Report

As of: 12/14/2015 12:14 PM MDT

2014 - 2015 Engineering Technology – Mechanical

(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)

Mission / Purpose

Our mission is to provide students with a quality engineering technology and surveying education that links theory and application, provide rigorous, fundamental education, and gives students enhanced career opportunities.

Goals/Objectives

G 1:Knowledge base

Prepare the graduate with the knowledge base, problem solving abilities, and practical skills of mechanical aptitude necessary to enter a professional career that involved the design, installation, manufacture, testing, evaluation, technical sales, or maintenance of mechanical systems, encountered in industry, consulting, or government.

G 2:Analyze

Prepared the graduate to analyze, perform applied design, develop, implement, or oversee advanced mechanical systems and processes.

G 3:Competence

Demonstrate competence in a technical specialty area, or in the management of technical personnel, following 2-5 years of employment in a field-related area.

G 4:Compete

Prepared to compete in a changing world

G 5:Writing QI

Develop students written communication skills

Student Learning Outcomes, with Any Associations and Related Measures, Targets, Findings, and Action Plans

S 1:Communication ABET related g

Possess good oral, technical written, graphical communication skills

Relevant Associations:

Standard Associations:

ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs

3.2.7 (g) an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;

Related Measures:

M 18:ET 426 Analysis/Design of Machine Elements - Project and Presentation

Course Description: Analysis of machine elements including columns, springs, shafts, coupling mechanisms, gears, belts and chain drives, clutches, brakes, and bearings

Source of Evidence: Project, either individual or group

Target:

70% of the students will receive 70% or better on the class project. Design for Everything Project which requires an interpretation of supplied customer requirements to produce an oral presentation based on a rubric as well as a technical report with CAD drawings required in the appendix

Findings (2014 - 2015) - Target: Met

XX student out of XX (XX%) received 70% or better on the class project.

S 2:Effectively apply appropriate techniques -ABET related a, b, c, d, f

Effectively apply appropriate techniques to solve mechanical, thermal, and fluid systems problems as well as display and understanding of basic circuits and controls

Relevant Associations:

Standard Associations:

ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs

3.2.1 (a) an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;

3.2.2 (b) an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies;

3.2.3 (c) an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes;

3.2.4 (d) an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives;

3.2.6 (f) an ability to identify, analyze, and solve broadly-defined engineering technology problems;

Related Measures:

M 12:ET 306 Fundamental and Applied Thermodynamics- Exam

Course Description: First and second laws, properties of substances, thermodynamic cycles including power generation and refrigeration.

Source of Evidence: Standardized test of subject matter knowledge

Target:

75% of the students will earn 60% or better on the Thermodynamics section of the Senior Competency Exam. 90% of the students will earn 80% or better on the design exercise of the final exam.

Findings (2014 - 2015) - Target: Met

80% of the students earned 60% or better on the Thermodynamics section of the Senior Competency Exam. 92% of the students earned 80% or better on the design exercise of the final exam.

Related Action Plans (by Established cycle, then alpha):

For full information, see the *Details of Action Plans* section of this report.

Action to be taken.

Established in Cycle: 2014 - 2015

Outcomes Assessment Action: Based on these results, no corrective action is considered necessary at present.

M 14:ET 308 Fluid Technology - Exam

Course Description: Application of basic principles of fluid mechanics to practical applied problems.

Source of Evidence: Standardized test of subject matter knowledge

Target:

70% of the students will receive 70% or better on the exams

Findings (2014 - 2015) - Target: Met

XX student out of XX (XX%) received 70% or better on the exam

M 15:ET 310L Applied Strength of Materials Lab - Lab Report

Course description: Testing Physical Properties of Materials.

Source of Evidence: Academic direct measure of learning - other

Target:

The class average will be greater than or equal to 70% on the lab report Static Tensile Test of Metal Rods.

Findings (2014 - 2015) - Target: Met

The class average for the Static Tensile Test of Metal Rods report was 76.74%, Std. Dev. = 30.15

S 3:Apply basic modeling and simulation techniques -related ABET a,c,f

Effectively apply basic modeling and simulation techniques that would aid with the design, improvement, implementation, or repair of mechanical systems

Relevant Associations:

Standard Associations:

ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs

3.2.1 (a) an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;

3.2.3 (c) an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes;

3.2.6 (f) an ability to identify, analyze, and solve broadly-defined engineering technology problems;

Related Measures:

M 6:ET 210 Computer-Aided Design - Solid Works Certification Exam

Course description: Computer-aided design using 3-D solid modeling software, with introduction to FEA simulation

Source of Evidence: Certification or licensure exam, national or state

Target:

70% of the students in ET 210 will pass the SolidWorks Associate Certification Exam.

Findings (2014 - 2015) - Target: Not Met

61.9% (26/42) of the students in ET 210 passed the SolidWorks Associate Certification Exam.

Related Action Plans (by Established cycle, then alpha):

For full information, see the *Details of Action Plans* section of this report.

ET 210 CAD Action Plan

Established in Cycle: 2014 - 2015

The action plan to meet the target it, to implement an assessment evaluation at the beginning of the semester to identify the st...

Improve Pass Rate of SolidWorks Asst. Cert. Exam

Established in Cycle: 2014 - 2015

Action 1) A practice exam followed with feedback will be given to the students prior to the SolidWorks Associate Certification E...

M 16: ET 328 Kinematics of Machines - Project

Course description: Kinematic analysis of machine elements with topics of linkages, cams, and gears. Graphical and analytical solutions using computer techniques.

Source of Evidence: Project, either individual or group

Target:

Average project score greater than or equal to 85%

Findings (2014 - 2015) - Target: Met

Average report score = 88.2%, Std. Dev. = 8.81 Average presentation score = 88.1%, Std. Dev. = 9.54

S 4:Manufacturing Processes and methodologies -related ABET a,d,f

Effectively apply basic manufacturing processes and methodologies

Relevant Associations:

Standard Associations:

ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs

- 3.2.1 (a) an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;
- 3.2.4 (d) an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives;
- 3.2.6 (f) an ability to identify, analyze, and solve broadly-defined engineering technology problems;

Related Measures:

M 7:ET 217 Manufacturing Processes - Class Average

Course description: Manufacturing methods and industrial processes which include casting, forming and machining. Introduction to the composition, fabrication, characteristics, and applications of industrial material.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Target:

ET 217 class average is greater than or equal to 70%.

Findings (2014 - 2015) - Target: Met

ET 217 Class (lecture) for Spring of 2015 had 27 students. The average final grade of these 27 students was 84.27%.

M 8:ET 217 Manufacturing Processes - Lab Average

Course description: Manufacturing methods and industrial processes which include casting, forming and machining. Introduction to the composition, fabrication, characteristics, and applications of industrial material.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Target:

ET 217 lab average is greater than or equal to 70%.

Findings (2014 - 2015) - Target: Met

ET 217 lab for Spring of 2015 had 28 students. The average final grade of these 28 students was 93.03.

S 5: Collaboration, leadership and teamwork - ABET related e,i

Effectively collaborate with others by leading projects, being a team-player, valuing diversity, and listening to stakeholders

Relevant Associations:

Standard Associations:

ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs

- 3.2.5 (e) an ability to function effectively as a member or leader on a technical team;
- 3.2.9 (i) an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;

Related Measures:

M 9:ET 305 Design for Manufacturing - Final Report

The process of product design and development from concept to manufacturing to insure manufacturability, quality, cost effectiveness, and customer satisfaction

Source of Evidence: Written assignment(s), usually scored by a rubric

Target:

Average project score for Final Report and Presentation is greater than or equal to 85%.

Findings (2014 - 2015) - Target: Met

Average Final Report and Presentation score = 90.9%, Std. Dev. = 2.83

Note: Previous performance may have indicated a need to make changes, but this outcome indicates we should be mindful of making significant changes based on one data point.

S 6:Critically thinking, evaluation and problem solving - ABET related a,b,c,d,f,g

Be able to think critically, evaluate situations, trouble-shoot, problem-solve, apply knowledge, and know how to draw from resources

Relevant Associations:

Standard Associations:

ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs

- 3.2.1 (a) an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;
- 3.2.2 (b) an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies;
- 3.2.3 (c) an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes;
- 3.2.4 (d) an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives;
- 3.2.6 (f) an ability to identify, analyze, and solve broadly-defined engineering technology problems;
- 3.2.7 (g) an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;

Related Measures:

M 13:ET 306L Thermodynamics Lab Oral Presentation

Course description: Application of thermodynamic theory to lab devices. Practice in testing, instrumentation, and data collection.

Source of Evidence: Presentation, either individual or group

Target:

80% of students will earn 75% or greater on their individual oral presentation.

Findings (2014 - 2015) - Target: Met

87% of students earned 75% or greater on their individual oral presentation.

Related Action Plans (by Established cycle, then alpha):

For full information, see the *Details of Action Plans* section of this report.

Action to be taken.

Established in Cycle: 2014 - 2015

Outcomes Assessment Action: Based on these results, no corrective action is considered necessary at present.

M 22:ET 435 Senior Project - Critical Thinking & Problem Solving

Course description: Capstone course. Practical application of student's cumulative knowledge to assigned design projects that require implementation of standards analysis techniques and design principles, teamwork, and project management skills. Stresses importance of codes, standards, and economics in design practice. Demonstration of written and oral communication skills via project documentation and presentation of results.

Source of Evidence: Academic direct measure of learning - other

Target:

70% of students will earn 80% or above on project final report. and 90% of students will earn 90% or above on Client Satisfaction Evaluation Form. and 70% of students will earn 75% or above on Student Outcomes Assessment Evaluation Form for Capstone Design.

Findings (2014 - 2015) - Target: Met

78% of students earned 80% or above on project final report. and 94% of students earned 90% or above on Client Satisfaction Evaluation Form. and 77% of students earned 75% or above on Student Outcomes Assessment Evaluation Form for Capstone Design.

Related Action Plans (by Established cycle, then alpha):

For full information, see the *Details of Action Plans* section of this report.

Action to be taken.

Established in Cycle: 2014 - 2015

Outcomes Assessment Action: Based on these results, corrective action is not of pressing urgency at present. However, addition...

ET 435 CT & PS

Established in Cycle: 2014 - 2015

Determining methods of assessments

M 23:FE Practice Exam

Practice exam for the FE Exam in the senior seminar course

Source of Evidence: Faculty pre-test / post-test of knowledge mastery

Target:

60% of the students will get 60% or better on the practice exam

Findings (2014 - 2015) - Target: Not Met

0 out of 8 (0%) got a 60% or better.

Related Action Plans (by Established cycle, then alpha):

For full information, see the *Details of Action Plans* section of this report.

FE Sample exam - Better Counsel

Established in Cycle: 2014 - 2015

Better counseling of students on how to prepare and sit for the FE Exam.
New assessment added for 14/15 cycle. Determining what...

S 7:Adapt to change - ABET related e,k

Effectively adapt to change, including changes in projects, responsibilities, and timelines

Relevant Associations:

Standard Associations:

ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs

3.2.5 (e) an ability to function effectively as a member or leader on a technical team;

3.2.11 (k) a commitment to quality, timeliness, and continuous improvement.

Related Measures:

M 11:ET 305 Design for Manufacturing - Evaluation Form

Course description: The process of product design and development from concept to manufacturing to insure manufacturability, quality, cost effectiveness, and customer satisfaction.

Source of Evidence: Academic direct measure of learning - other

Target:

Average Client Satisfaction & Project Evaluation Form score greater than or equal to 85 on a 5-point likert scale.

Findings (2014 - 2015) - Target: Met

Average score on Client Satisfaction & Project Evaluation Form = 91.7,
Std. Dev. = 12.31

M 19:ET 435 Senior Project - Capstone Project Evaluation Form

Capstone course. Practical application of student's cumulative knowledge to assigned design projects that require implementation of standards analysis techniques and design principles, teamwork, and project management skills. Stresses importance of codes, standards, and economics in design practice. Demonstration of written and oral communication skills via project documentation and presentation of results

Source of Evidence: Capstone course assignments measuring mastery

Target:

90% of the students will earn 90% or better on the Client Satisfaction

Evaluation Form and 70% of the students will earn 75% or better on the Project Evaluation Form.

Findings (2014 - 2015) - Target: Met

96% of the students earned 90% or better on the Client Satisfaction Evaluation Form and 80% of the students earned 75% or better on the Project Evaluation Form.

Related Action Plans (by Established cycle, then alpha):

For full information, see the *Details of Action Plans* section of this report.

Action to be taken.

Established in Cycle: 2014 - 2015

Outcomes Assessment Action: Based on these results, no corrective action is necessary at present.

S 8: Innovation and entrepreneurship - ABET related a,d,j

Recognize the importance of innovation and entrepreneurship

Relevant Associations:

Standard Associations:

ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs

3.2.1 (a) an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;

3.2.4 (d) an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives;

3.2.10 (j) a knowledge of the impact of engineering technology solutions in a societal and global context; and

Related Measures:

M 10:ET 305 Design for Manufacturing

The process of product design and development from concept to manufacturing to insure manufacturability, quality, cost effectiveness, and customer satisfaction

Source of Evidence: Academic direct measure of learning - other

Target:

Average project score for Innovative and Entrepreneurial Spirit Scoring in Final Project greater than or equal to 85%.

Findings (2014 - 2015) - Target: Met

Average project score for Innovative and Entrepreneurial Spirit Scoring in Final Project = 93.9%, Std. Dev. = 4.08

S 9: Upholding commitments and meet expectations - ABET related e,k

Be committed to upholding commitments and meet expectations

Relevant Associations:

Standard Associations:**ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs**

- 3.2.5 (e) an ability to function effectively as a member or leader on a technical team;
- 3.2.11 (k) a commitment to quality, timeliness, and continuous improvement.

Related Measures:**M 4:ET 110 Introduction to Computer-Aided Drafting and Design - Homework**

Introduction to computer-aided drafting and design using 3-D solid modeling software.

Source of Evidence: Academic direct measure of learning - other

Target:

Average homework score greater than or equal to 70%.

Findings (2014 - 2015) - Target: Met

Average homework score = 84%, Std. Dev. = 19.4

M 5: ET 110 Introduction to Computer-Aided Drafting and Design - Attendance

Course description: Introduction to computer-aided drafting and design using 3-D solid modeling software.

Source of Evidence: Academic direct measure of learning - other

Target:

90% of students will not miss more than 3 class periods in ET 110. Note: As a first-semester freshman course, it is believed that attendance is a good measure of upholding commitments and meeting expectations.

Findings (2014 - 2015) - Target: Not Met

84% of students who missed 3 classes or less in ET 110.

Related Action Plans (by Established cycle, then alpha):

For full information, see the *Details of Action Plans* section of this report.

ET 110 Attendance Action Plan

Established in Cycle: 2014 - 2015

To achieve target of 90% of students not missing more than 3 class periods, unannounced quizzes will be given throughout the sem...

S 10:High Level of Integrity and trust - ABET e,i

Recognize the importance of maintaining a high level of integrity and trust

Relevant Associations:**Standard Associations:****ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs**

- 3.2.5 (e) an ability to function effectively as a member or leader on a technical team;

3.2.9 (i) an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;

S 11: Commitment to Life Long learning - ABET related: h,i,j,k

A commitment to lifelong learning, continuous improvement, and an understanding of the impact of Engineering Technology on society and the world.

Relevant Associations:

Standard Associations:

ABET (ETAC) 2014-2015 General Criteria for Engineering Technology Programs

- 3.2.8 (h) an understanding of the need for and an ability to engage in self-directed continuing professional development;
- 3.2.9 (i) an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;
- 3.2.10 (j) a knowledge of the impact of engineering technology solutions in a societal and global context; and
- 3.2.11 (k) a commitment to quality, timeliness, and continuous improvement.

Related Measures:

M 17:ET 410 Senior Seminar - Class Average

Course description: Transition from academics to business and industry.

Source of Evidence: Academic direct measure of learning - other

Target:

70% of the students will receive satisfactory grade.

Findings (2014 - 2015) - Target: Met

XX student out of XX (XX%) earned a satisfactory grade.

M 21:ET 435 Senior Project - Questionnaire

Course description: Capstone course. Practical application of student's cumulative knowledge to assigned design projects that require implementation of standards analysis techniques and design principles, teamwork, and project management skills. Stresses importance of codes, standards, and economics in design practice. Demonstration of written and oral communication skills via project documentation and presentation of results

Source of Evidence: Academic direct measure of learning - other

Target:

90% of the students will be members of a Professional Society by the completion of their final academic semester as documented on Survey Questionnaire.

Findings (2014 - 2015) - Target: Not Met

33% of the students were members of a Professional Society upon the completion of their final academic semester.

Related Action Plans (by Established cycle, then alpha):

For full information, see the *Details of Action Plans* section of this report.

Action to be taken.

Established in Cycle: 2014 - 2015

Outcomes Assessment Action: Based upon these results, corrective action is considered necessary. Other measures and incentive...

Questionnaire

Established in Cycle: 2014 - 2015

The questionnaire is being developed.

S 12:WQI

Student will have an ability to apply written communication in both technical and non-technical environments.

Related Measures:

M 1:WQI Sophomore Level (ET 262)

Writing rubric for Sophomore level engineering courses.

Source of Evidence: Written assignment(s), usually scored by a rubric

Target:

50%,60%,70% of students scored a 11 out of 16 (aprox. 70%) or better on matrix. Sample 3 assignments(beginning, middle, end) each semester/year. Record findings of the 3 assignments.

Connected Document

- *Writing Sophomore Level Matrix*

M 2:WQI Junior Level (ET 305)

Writing rubric for Junior level engineering courses:

Source of Evidence: Written assignment(s), usually scored by a rubric

Target:

50%,60%,70% of students scored a 17 out of 24 (aprox. 70%) or better on matrix. Sample 3 assignments(beginning, middle, end) each semester/year. Record findings of the 3 assignments.

Connected Document

- *Writing Matrix junior and senior Level*

M 3:WQI Senior Level (ET 435)

Writing rubric for Senior level engineering courses.

Source of Evidence: Written assignment(s), usually scored by a rubric

Target:

50%,60%,70% of students scored a 19 out of 24 (aprox. 80%) or better on matrix. Sample 3 assignments(beginning, middle, end) each semester/year. Record findings of the 3 assignments.

Connected Document

- *Writing Matrix junior and senior Level*

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Action to be taken.

Outcomes Assessment Action: Based on these results, corrective action is not of pressing urgency at present. However, additional assessment tools and targets should be considered for implementation, as the current ones may not yet be sufficiently comprehensive.

Established in Cycle: 2014 - 2015

Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome):

Measure: ET 435 Senior Project - Critical Thinking & Problem Solving | **Outcome:** Critically thinking, evaluation and problem solving - ABET related a,b,c,d,f,g

Action to be taken.

Outcomes Assessment Action: Based on these results, no corrective action is considered necessary at present.

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome):

Measure: ET 306 Fundamental and Applied Thermodynamics- Exam | **Outcome:** Effectively apply appropriate techniques -ABET related a, b, c, d, f

Action to be taken.

Outcomes Assessment Action: Based upon these results, corrective action is considered necessary. Other measures and incentives will need to be implemented.

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome):

Measure: ET 435 Senior Project - Questionnaire | **Outcome:** Commitment to Life Long learning - ABET related: h,i,j,k

Action to be taken.

Outcomes Assessment Action: Based on these results, no corrective action is necessary at present.

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome):

Measure: ET 435 Senior Project - Capstone Project Evaluation Form | **Outcome:** Adapt to change - ABET related e,k

Action to be taken.

Outcomes Assessment Action: Based on these results, no corrective action is considered necessary at present.

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome):

Measure: ET 306L Thermodynamics Lab Oral Presentation | **Outcome:** Critically thinking, evaluation and problem solving - ABET related a,b,c,d,f,g

ET 110 Attendance Action Plan

To achieve target of 90% of students not missing more than 3 class periods, unannounced quizzes will be given throughout the semester.

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome):

Measure: ET 110 Introduction to Computer-Aided Drafting and Design - Attendance | **Outcome:** Upholding commitments and meet expectations - ABET related e,k

ET 210 CAD Action Plan

The action plan to meet the target it, to implement an assessment evaluation at the beginning of the semester to identify the students that need extra guidance. Practice exams will also be provided throughout the semester.

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome):

Measure: ET 210 Computer-Aided Design - Solid Works Certification Exam |

Outcome: Apply basic modeling and simulation techniques -related ABET a,c,f

ET 435 CT & PS

Determining methods of assessments

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome):

Measure: ET 435 Senior Project - Critical Thinking & Problem Solving | **Outcome:** Critically thinking, evaluation and problem solving - ABET related a,b,c,d,f,g

Projected Completion Date: 01/20/2016

Responsible Person/Group: MET assessment and curriculum committee

FE Sample exam - Better Counsel

Better counseling of students on how to prepare and sit for the FE Exam. New assessment added for 14/15 cycle. Determining what area's are needed for improvement.

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome):

Measure: FE Practice Exam | **Outcome:** Critically thinking, evaluation and problem solving - ABET related a,b,c,d,f,g

Projected Completion Date: 01/20/2016

Responsible Person/Group: MET Assessment and Curriculum Committee

Improve Pass Rate of SolidWorks Asst. Cert. Exam

Action 1) A practice exam followed with feedback will be given to the students prior to the SolidWorks Associate Certification Exam. Action 2) Implement pre-course assessment exam to allow students to enroll in the ET 210 course.

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: Medium

Relationships (Measure | Outcome):

Measure: ET 210 Computer-Aided Design - Solid Works Certification Exam |

Outcome: Apply basic modeling and simulation techniques -related ABET a,c,f

Responsible Person/Group: Instructor

Additional Resources Requested: Development of system/process for implementing Action 2.

Questionnaire

The questionnaire is being developed.

Established in Cycle: 2014 - 2015

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome):

Measure: ET 435 Senior Project - Questionnaire | **Outcome:** Commitment to Life Long learning - ABET related: h,i,j,k

Projected Completion Date: 01/20/2016

Responsible Person/Group: MET Assessment and Curriculum Committee