



BCT 486 Project Controls

Established in Cycle: 2010-2011

Average scores were all passing with exception of 1 quiz. Some had perfect scores. Plan to evaluate low scoring questio...

M 2:M1.2 -- ABET-GCa -- Exit/Alumni Survey Results

M1.2: (ABET-GCa) Exit and Alumni Survey results for ABET General Criteria 'a'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

80% of scores on the evaluation category supporting ABET General Criteria 'a' will have a minimum rating of "satisfactory" (3 or higher out of 5).

Findings (2011-

Average scores were all passing with exception of 1 quiz. Some had perfect scores. Plan to evaluate low scoring questio...

M 15:M8.1 -- ABET-GCh -- Assessment Aggregates

M8.1: (ABET-GCh) Aggregate of assessments for ABET General Criteria 'h'.

Source of Evidence: Academic direct measure of learning - other

Target:

80% of scores on the evaluation category supporting ABET General Criteria 'i' will have a minimum rating of "satisfactory" (3 or higher out of 5).

Findings (2011-2012) - Target: Not Reported This Cycle

SLO 10:OBJ10 -- ABET General Criteria j

BCT students will have a knowledge of the impact of engineering technology solutions in a societal and global context. (ABET General Criteria 'j')

Related Measures:

M 19:M10.1 -- ABET-GCj -- Assessment Aggregates

M10.1: (ABET-GCj) Aggregate of assessments for ABET General Criteria 'j'.

Source of Evidence: Academic direct measure of learning - other

Target:

80% of students receive a score of 70 (out of 100) or better on assessments supporting ABET General Criteria 'j'.

Findings (2011-2012) - Target: Met

84% (302 of 359) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'j' FA11: F-F = 96% (96 of 100); ONL = 74% (90 of 122); SP12: F-F = 0% (0 of 0); ONL = 85% (116 of 137);

M 20:M10.2 -- ABET-GCj -- Exit/Alumni Survey Results

M10.2: (ABET-GCj) Exit and Alumni Survey results for ABET General Criteria 'j'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

80% of scores on the evaluation category supporting ABET General Criteria 'j' will have a minimum rating of "satisfactory" (3 or higher out of 5).

Findings (2011-2012) - Target: Not Reported This Cycle

SLO 11:OBJ11 -- ABET General Criteria k

BCT students will have a commitment to quality, timeliness, and continuous improvement. (ABET General Criteria 'k')

Related Measures:

M 21:M11.1 -- ABET-GCk -- Assessment Aggregates

M11.1: (ABET-GCk) Aggregate of assessments for ABET General Criteria 'k'.

Source of Evidence: Academic direct measure of learning - other

Target:

80% of students receive a score of 70 (out of 100) or better on assessments supporting ABET General Criteria 'k'.

Findings (2011-2012) - Target: Met

89% (2,923 of 3,296) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'k' FA11: F-F = 89% (597 of 673); ONL = 88% (1,009 of 1,147); SP12: F-F = 92% (316 of 344); ONL = 88% (1,001 of 1,132);

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

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

BCT 205 Surveying

Established in Cycle: 2010-2011

Review and help sessions will be conducted before midterm and final exam.

M 22:M11.2 -- ABET-GCk -- Exit/Alumni Survey Results

M11.2: (ABET-GCk) Exit and Alumni Survey results for ABET General Criteria 'k'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

80% of scores on the evaluation category supporting ABET General Criteria

M 26:M13.2 -- ABET-ADb -- Exit/Alumni Survey Results

M13.2: (ABET-ADb) Exit and Alumni Survey results for ABET Associate Degree Program Specific Criteria 'b'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

80% of scores on the evaluation category supporting ABET Associate Degree Program Specific Criteria 'b' will have a minimum rating of "satisfactory" (3 or higher out of 5).

Findings (2011-2012) - Target:

Target:

80% of scores on the evaluation category supporting ABET Associate Degree Program Specific Criteria 'c' will have a minimum rating of "satisfactory" (3 or higher out of 5).

Findings (2011-2012) - Target: Not Reported This Cycle

SLO 15:OBJ15 -- ABET Associate Criteria d

BCT graduates are capable of performing tasks that require the application of knowledge and skills in the field of study.

Findings (2011-2012) - Target: Met

88% (2,605 of 2,967) of student work samples (projects, exams, quizzes,

Findings (2011-

M 40:M20.2 -- ABET-BSc -- Exit/Alumni Survey Results

M20.2: (ABET-BSc) Exit and Alumni Survey results for ABET Baccalaureate Degree Program Specific Criteria 'c'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

80% of scores on the evaluation category supporting ABET Baccalaureate Degree Program Specific Criteria 'c' will have a minimum rating of "satisfactory" (3 or higher out of 5).

Findings (2011-2012) - Target: Not Reported This Cycle

SLO 21:OBJ21 -- ABET BS Criteria d

BCT graduates are capable of applying principles of construction law and ethics. (ABET Baccalaureate Degree Program Specific Criteria 'd')

Related Measures:

M 41:M21.1 -- ABET-BSd -- Assessment Aggregates

M21.1: (ABET-BSd) Aggregate of assessments for ABET Baccalaureate Degree Program Specific Criteria 'd'.

Source of Evidence: Academic direct measure of learning - other

Target:

80% of students receive a score of 70 (out of 100) or better0 0 1 23798ea11(t)-4(ud)3(en)3(t)

Measure: M1.1 -- ABET-GCa -- Assessment Aggregates | **Outcome/Objective:**
OBJ01 -- ABET General Criteria a

Measure: M11.1 -- ABET-GCk -- Assessment Aggregates | **Outcome/Objective:**
OBJ11 -- ABET General Criteria k

Measure: M12.1 -- ABET-ADa -- Assessment Aggregates | **Outcome/Objective:**
OBJ12 -- ABET Associate Criteria a

Measure: M14.1 -- ABET-ADc -- Assessment Aggregates | **Outcome/Objective:**
OBJ14 -- ABET Associate Criteria c

Measure: M17.1 -- ABET-ADf -- Assessment Aggregates | **Outcome/Objective:**
OBJ17 -- ABET Associate Criteria f

Measure: M18.1 -- ABET-BSa -- Assessment Aggregates | **Outcome/Objective:**
OBJ18 -- ABET BS Criteria a

Measure: M23.1 -- ABET-BSf -- Assessment Aggregates

the way to go and await results in this semester's 8 wk session in which I will accelerate for time on this topic.

Established in Cycle: 2010-2011
Implementation Status: In-Progress
Priority: Medium

Relationships (Measure | Outcome/Objective):

Measure: M1.1 -- ABET-GCa -- Assessment Aggregates | **Outcome/Objective:** OBJ01 -- ABET General Criteria a
Measure: M12.1 -- ABET-ADa -- Assessment Aggregates | **Outcome/Objective:** OBJ12 -- ABET Associate Criteria a
Measure: M17.1 -- ABET-ADf -- Assessment Aggregates | **Outcome/Objective:** OBJ17 -- ABET Associate Criteria f
Measure: M18.1 -- ABET-BSa -- Assessment Aggregates | **Outcome/Objective:** OBJ18 -- ABET BS Criteria a
Measure: M19.1 -- ABET-BSb -- Assessment Aggregates | **Outcome/Objective:** OBJ19 -- ABET BS Criteria b
Measure: M22.1 -- ABET-BSe -- Assessment Aggregates | **Outcome/Objective:** OBJ22 -- ABET BS Criteria e
Measure: M6.1 -- ABET-GCf -- Assessment Aggregates | **Outcome/Objective:** OBJ06 -- ABET General Criteria f

Responsible Person/Group: Jeff hannon

Analysis Questions and Analysis Answers

What specifically did your assessments show regarding proven strengths or progress you made on outcomes/objectives?

The Architectural Engineering Technology (ACT), Construction Engineering Technology (BCT), Industrial Engineering Technology (IET) programs in the School of Construction have undergone a complete overhaul of the assessment plan for the 2010-2011 assessment cycle. The plan, described fully in the "Continuous Improvement Initiatives" and "Closing the Loop" sections of WeaveOnline, is closely tied to our external accreditation agency: Technology Accreditation Commission-Accreditation Board for Engineering and Technology (TAC-ABET). We believe this approach will provide the faculty with a much easier reporting mechanism yet more thorough and accurate picture of assessment at both the course level and the program level.

What specifically did your assessments show regarding any outcomes/objectives that will require continued attention?

At the program level, the performance targets for all objectives were met. The process we have developed allows micro- or macro-level views of the assessment outcomes. There are a few course level assessments that have been reported in WeaveOnline due to not meeting the performance target at the course-level.

Annual Report Section Responses

Program Summary

The Construction Engineering Technology Program at Southern Miss is the preferred program in the Gulf South for providing a well-rounded construction management education, engaging and empowering graduates to transform the built environment

adequate resolution from program level to course level. The organization of supporting materials and student samples of work was also extremely difficult to collect and organize in a meaningful manner. It was decided then to reorganize the program learning outcomes to exactly map to the TAC-ABET general and program specific criteria with direct linkages from each course in the program that supported a particular criterion. For the Construction Engineering Technology program, these criteria are:

General Criteria for all programs For baccalaureate degree programs, these student outcomes must include, but are not limited to, the following learned capabilities: a. an ability to select and apply the knowledge, techniques, skills, and modern tools of their disciplines to broadly-defined engineering technology activities, 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, c. an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes, d. an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives, e. an ability to function effectively as a member or leader on a technical team, f. an ability to identify, analyze, and solve broadly-defined engineering technology problems, g. an ability to communicate effectively regarding broadly-defined engineering technology activities, h. an understanding of the need for and an ability to engage in self-directed continuing professional development, i. an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity, j. a knowledge of the impact of engineering technology solutions in a societal and global context, and k. a commitment to quality, timeliness, and continuous improvement. Criteria Specific to Construction Engineering Technology Associate degree programs (and our corresponding lower-division) must demonstrate that graduates are capable of: a. utilizing modern instruments, methods and techniques to implement construction contracts, documents, and codes; b. evaluating materials and methods for construction projects; c. utilizing modern surveying methods for construction layout; d. determining forces and stresses in elementary structural systems; e. estimating material quantities and costs; f. employing productivity software to solve technical problems

Baccalaureate degree programs must demonstrate that graduates, in addition to the competencies above, are capable of: a. producing and utilizing design, construction, and operations documents; b. performing economic analyses and cost estimates related to design, construction, and maintenance of systems in the construction technical specialties; c. selecting appropriate construction materials and practices; d. applying principles of construction law and ethics; e. applying basic technical concepts to the solution of construction problems involving hydraulics and hydrology, geotechnics, structures, construction scheduling and management, and construction safety; and f. performing standard analysis and design in at least one recognized technical specialty within construction engineering technology that is appropriate to the goals of the program.

Faculty then mapped each of their course objectives to the TAC-ABET criteria using a listing of the tools/methods for assessing each objective/criteria. This provided evidence of which courses in the program inventory were supporting any given TAC-ABET criteria and also provided a simple index system for staff to organize supporting materials by criteria for inspection. And, while TAC-ABET only requires summative evidence, this approach easily provides for formative inspection of the curriculum. WeaveOnline Objectives reflect the exact TAC-ABET criteria with two measures for each criteria: one direct and one indirect. The direct measures are the aggregated assessments for all student work samples (projects, exams, quizzes, papers) as determined by the faculty in their mapping exercise. The indirect measures will be the graduate exit surveys and alumni surveys rewritten to also reflect the TAC-ABET criteria; these have not yet been implemented for this cycle. Faculty then reported their findings for each section of their courses for fall 2010 and spring 2011. At the course

level, it was decided to begin this process using targets of 80% of students would achieve 70 (out of 100) on the assessments. The findings were separated by program area the course might serve; for example, a course might have Architectural Engineering Technology (ACT), Construction Engineering Technology (BCT), Industrial Engineering Technology (IET), or other (OTHER) students. These findings were organized in a master spreadsheet organized so that the findings for each criteria for