

The University of Southern Mississippi

Detailed Assessment Report 2010-2011 Architectural Engineering Technology BS

Mission / Purpose

The University of Southern Mississippi Architectural Engineering Technology (ACT) program provides students with a broad-based education with an emphasis on critical thinking, technical problem-solving ability, and computer applications in addition to a background in architectural design. The ACT program is committed to producing graduates who possess the necessary skills, critical thinking, discipline and work ethics to enter the A/E/C industry fully capable of performing entry-level tasks at the office and in the field.

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

SLO 1:OBJ01 -- ABET General Criteria a

ACT students will have an ability to select and apply the knowledge, techniques, skills, and modern tools of their disciplines to broadly-defined engineering technology activities. (ABET General Criteria 'a')

Related Measures:

M 1:M1.1 -- ABET-GCa -- Assessment Aggregates

Aggregate of assessments for ABET General Criteria 'a'.

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 'a'.

Findings (2010-2011) - Target: Met

90% (732 of 816) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'a'. FA10: F-F = 88% (117 of 133); ONL = 83% (29 of 35); SP11: F-F = 90% (519 of 577); ONL = 94% (67 of 71);

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

For full information, see the *Action Plan Detail* section of this report.

ACT 465 Architectural Design IV

Established in Cycle: 2010-2011

In this case, 3 of 5 ACT students (60%) are performing at or above 70, which is less than the target level of 80% of total stude...

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

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 (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 2:OBJ02 -- ABET General Criteria b

ACT students will have 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. (ABET General Criteria 'b')

Related Measures:

M 3:M2.1 -- ABET GCb -- Assessment Aggregates

Aggregate of assessments for ABET General Criteria 'b'.

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 'b'.

Findings (2010-2011) - Target: Met

84% (108 of 128) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'b'. FA10: F-F = 75% (12 of 16); ONL = 73% (40 of 55); SP11: F-F = 100% (14 of 14); ONL = 98% (42 of 43);

M 4:M2.2 -- ABET-GCb -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET General Criteria 'b'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 3:OBJ03 -- ABET General Criteria c

ACT students will have an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes. (ABET General Criteria 'c')

Related Measures:

M 5:M3.1 -- ABET-GCc -- Assessment Aggregates

Aggregate of assessments for ABET General Criteria 'c'.

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 'c'.

Findings (2010-2011) - Target: Met

85% (96 of 113) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'c'. FA10: F-F = 83% (20 of 24); ONL = 83% (29 of 35); SP11: F-F = 81% (21 of 26); ONL = 93% (26 of 28);

M 6:M3.2 -- ABET-GCc -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET General Criteria 'c'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 4:OBJ04 -- ABET General Criteria d

ACT students will have an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives. (ABET General Criteria 'd')

Related Measures:

M 7:M4.1 -- ABET-GCd -- Assessment Aggregates

Aggregate of assessments for ABET General Criteria 'd'.

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 'd'.

Findings (2010-2011) - Target: Met

82% (119 of 146) of student work samples (projects, exams, quizzes,

papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'd'. FA10: F-F = 75% (12 of 16); ONL = 56% (19 of 34); SP11: F-F = 91% (73 of 80); ONL = 94% (15 of 16);

M 8:M4.2 -- ABET-GCd -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET General Criteria 'd'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 5:OBJ05 -- ABET General Criteria e

ACT students will have an ability to function effectively as a member or leader on a technical team. (ABET General Criteria 'e')

Related Measures:

M 9:M5.1 -- ABET-GCe -- Assessment Aggregates

Aggregate of assessments for ABET General Criteria 'e'.

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 'e'.

Findings (2010-2011) - Target: Met

93% (56 of 60) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'e'. FA10: F-F = 0% (0 of 0); ONL = 88% (22 of 25); SP11: F-F = 100% (8 of 8); ONL = 96% (26 of 27);

M 10:M5.2 -- ABET-GCe -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET General Criteria 'e'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 6:OBJ06 -- ABET General Criteria f

ACT students will have an ability to identify, analyze, and solve broadly-defined engineering technology problems. (ABET General Criteria 'f')

Related Measures:

M 11:M6.1 -- ABET-GCf -- Assessment Aggregates

Aggregate of assessments for ABET General Criteria 'f'.

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 'f'.

Findings (2010-2011) - Target: Met

87% (558 of 641) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'f'. FA10: F-F = 85% (188 of 221); ONL = 63% (25 of 40); SP11: F-F = 91% (303 of 332); ONL = 88% (42 of 48);

M 12:M6.2 -- ABET-GCf -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET General Criteria 'f'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 7:OBJ07 -- ABET General Criteria g

ACT students will have an ability to communicate effectively regarding broadly-defined engineering technology activities. (ABET General Criteria 'g')

Related Measures:

M 13:M7.1 -- ABET-GCg -- Assessment Aggregates

Aggregate of assessments for ABET General Criteria 'g'.

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 'g'.

Findings (2010-2011) - Target: Met

89% (485 of 547) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments

supporting ABET General Criteria 'g'. FA10: F-F = 92% (163 of 178); ONL = 57% (4 of 7); SP11: F-F = 87% (252 of 290); ONL = 92% (66 of 72);

M 14:M7.2 -- ABET-GCg -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET General Criteria 'g'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 8:OBJ08 -- ABET General Criteria h

ACT students will have an understanding of the need for and an ability to engage in self-directed continuing professional development. (ABET General Criteria 'h')

Related Measures:

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

Aggregate of assessments for ABET General Criteria 'h'.

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 'h'.

Findings (2010-2011) - Target: Met

85% (187 of 220) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'h'. FA10: F-F = 92% (90 of 98); ONL = 56% (15 of 27); SP11: F-F = 87% (66 of 76); ONL = 84% (16 of 19);

M 16:M8.2 -- ABET-GCh -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET General Criteria 'h'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 9:OBJ09 -- ABET General Criteria i

ACT students will have an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity. (ABET General Criteria 'i')

Related Measures:

M 17:M9.1 -- ABET-GCi -- Assessment Aggregates

Aggregate of assessments for ABET General Criteria 'i'.

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 'i'.

Findings (2010-2011) - Target: Met

91% (283 of 311) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'i'. FA10: F-F = 92% (110 of 120); ONL = 57% (4 of 7); SP11: F-F = 91% (115 of 127); ONL = 95% (54 of 57);

M 18:M9.2 -- ABET-GCi -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET General Criteria 'i'.

Source of Evidence: Academic indirect indicator 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 (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 10:OBJ10 -- ABET General Criteria j

ACT 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

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 (2010-2011) - Target: Met

91% (338 of 373) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'j'. FA10: F-F = 96% (47 of 49); ONL = 57% (4 of 7); SP11: F-F = 91% (277 of 306); ONL = 91% (10 of 11);

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

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 (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 11:OBJ11 -- ABET General Criteria k

ACT 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

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 (2010-2011) - Target: Met

90% (753 of 840) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET General Criteria 'k'. FA10: F-F = 87% (229 of 263); ONL = 88% (22 of 25); SP11: F-F = 91% (404 of 446); ONL = 92% (98 of 106);

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

For full information, see the *Action Plan Detail* section of this report.

ACT 262 Architectural Design I

Established in Cycle: 2010-2011

In this case, 11 of 18 ACT students (61%) are performing at or above 70, which is less than the target level of 80% of total stu...

ACT 465 Architectural Design IV

Established in Cycle: 2010-2011

In this case, 3 of 5 ACT students (60%) are performing at or above 70, which is less than the target level of 80% of total stude...

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

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 'k' will have a minimum rating of "satisfactory" (3 or higher out of 5).

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 12:OBJ12 -- ABET Associate Criteria a

ACT graduates are capable of employing concepts of architectural theory and design in a design environment. (ABET Associate Degree Program Specific Criteria 'a')

Related Measures:

M 23:M12.1 -- ABET-ADa -- Assessment Aggregates

Aggregate of assessments for ABET Associate Degree Program Specific Criteria 'a'.

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 Associate Degree Program Specific Criteria 'a'.

Findings (2010-2011) - Target: Met

86% (845 of 987) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Associate Degree Program Specific Criteria 'a'. FA10: F-F = 84% (492 of 583); ONL = 63% (25 of 40); SP11: F-F = 90% (276 of 307); ONL = 91% (52 of 57);

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

For full information, see the *Action Plan Detail* section of this report.

ACT 262 Architectural Design I

Established in Cycle: 2010-2011

In this case, 11 of 18 ACT students (61%) are performing at or above 70, which is less than the target level of 80% of total stu...

M 24:M12.2 -- ABET-ADa -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Associate Degree Program Specific Criteria 'a'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

80% of scores on the evaluation category supporting ABET Associate Degree

Program Specific Criteria 'a' will have a minimum rating of "satisfactory" (3 or higher out of 5).

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

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

For full information, see the *Action Plan Detail* section of this report.

ACT 465 Architectural Design IV

Established in Cycle: 2010-2011

In this case, 3 of 5 ACT students (60%) are performing at or above 70, which is less than the target level of 80% of total stude...

SLO 13:OBJ13 -- ABET Associate Criteria b

ACT graduates are capable of utilizing modern instruments, methods and techniques to produce A/E documents and presentations. (ABET Associate Degree Program Specific Criteria 'b')

Related Measures:

M 25:M13.1 -- ABET-ADb -- Assessment Aggregates

Aggregate of assessments for ABET Associate Degree Program Specific Criteria 'b'.

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 Associate Degree Program Specific Criteria 'b'.

Findings (2010-2011) - Target: Met

85% (203 of 239) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Associate Degree Program Specific Criteria 'b'. FA10: F-F = 80% (68 of 85); ONL = 57% (8 of 14); SP11: F-F = 88% (84 of 96); ONL = 98% (43 of 44);

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

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 (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction

was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 14:OBJ14 -- ABET Associate Criteria c

ACT graduates are capable of conducting standardized field and laboratory testing on construction materials. (ABET Associate Degree Program Specific Criteria 'c')

Related Measures:

M 27:M14.1 -- ABET-ADc -- Assessment Aggregates

Aggregate of assessments for ABET Associate Degree Program Specific Criteria 'c'.

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 Associate Degree Program Specific Criteria 'c'.

Findings (2010-2011) - Target: Met

84% (52 of 62) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Associate Degree Program Specific Criteria 'c'. FA10: F-F = 83% (20 of 24); ONL = 100% (6 of 6); SP11: F-F = 81% (21 of 26); ONL = 83% (5 of 6);

M 28:M14.2 -- ABET-ADc -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Associate Degree Program Specific Criteria 'c'.

Source of Evidence: Academic indirect indicator of learning - other

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 (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 15:OBJ15 -- ABET Associate Criteria d

ACT graduates are capable of utilizing modern instruments and research techniques for site development and building layout. (ABET Associate Degree Program Specific Criteria 'd')

Related Measures:

M 29:M15.1 -- ABET-ADd -- Assessment Aggregates

Aggregate of assessments for ABET Associate 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 better on assessments supporting ABET Associate Degree Program Specific Criteria 'd'.

Findings (2010-2011) - Target: Met

89% (273 of 308) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Associate Degree Program Specific Criteria 'd'. FA10: F-F = 75% (15 of 20); ONL = 0% (0 of 0); SP11: F-F = 90% (258 of 288); ONL = 0% (0 of 0);

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

For full information, see the *Action Plan Detail* section of this report.

ACT 465 Architectural Design IV

Established in Cycle: 2010-2011

In this case, 3 of 5 ACT students (60%) are performing at or above 70, which is less than the target level of 80% of total stude...

M 30:M15.2 -- ABET-ADd -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Associate Degree Program Specific Criteria 'd'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 16:OBJ16 -- ABET Associate Criteria e

ACT graduates are capable of determining forces and stresses in elementary structural systems. (ABET Associate Degree Program Specific Criteria 'e')

Related Measures:

M 31:M16.1 -- ABET-ADe -- Assessment Aggregates

Aggregate of assessments for ABET Associate Degree Program Specific Criteria 'e'.

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 Associate Degree Program Specific Criteria 'e'.

Findings (2010-2011) - Target: Met

82% (58 of 71) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Associate Degree Program Specific Criteria 'e'. FA10: F-F = 75% (12 of 16); ONL = 55% (11 of 20); SP11: F-F = 100% (14 of 14); ONL = 100% (21 of 21);

M 32:M16.2 -- ABET-ADe -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Associate Degree Program Specific Criteria 'e'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 17:OBJ17 -- ABET Associate Criteria f

ACT graduates are capable of estimating material quantities for technical projects. (ABET Associate Degree Program Specific Criteria 'f')

Related Measures:

M 33:M17.1 -- ABET-ADf -- Assessment Aggregates

Aggregate of assessments for ABET Associate Degree Program Specific Criteria 'f'.

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 Associate Degree Program Specific Criteria 'f'.

Findings (2010-2011) - Target: Met

81% (47 of 58) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Associate Degree Program Specific Criteria 'f'. FA10: F-F = 92% (11 of 12); ONL = 57% (8 of 14); SP11: F-F = 85% (11 of 13); ONL = 89% (17 of 19);

M 34:M17.2 -- ABET-ADf -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Associate Degree Program Specific Criteria 'f'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 18:OBJ18 -- ABET Associate Criteria g

ACT graduates are capable of calculating basic loads and demands in mechanical and electrical systems. (ABET Associate Degree Program Specific Criteria 'g')

Related Measures:

M 35:M18.1 -- ABET-ADg -- Assessment Aggregates

Aggregate of assessments for ABET Associate Degree Program Specific Criteria 'g'.

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 Associate Degree Program Specific Criteria 'g'.

Findings (2010-2011) - Target: Met

87% (94 of 108) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Associate Degree Program Specific Criteria 'g'. FA10: F-F = 0% (0 of 0); ONL = 57% (8 of 14); SP11: F-F = 90% (65 of 72); ONL = 95% (21 of 22);

M 36:M18.2 -- ABET-ADg -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Associate Degree Program Specific Criteria 'g'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 19:OBJ19 -- ABET Associate Criteria h

ACT graduates are capable of utilizing codes, contracts and specifications in design, construction and inspection activities. (ABET Associate Degree Program Specific Criteria 'h')

Related Measures:

M 37:M19.1 -- ABET-ADh -- Assessment Aggregates

Aggregate of assessments for ABET Associate Degree Program Specific Criteria 'h'.

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 Associate Degree Program Specific Criteria 'h'.

Findings (2010-2011) - Target: Met

89% (355 of 401) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Associate Degree Program Specific Criteria 'h'. FA10: F-F = 88% (71 of 81); ONL = 57% (8 of 14); SP11: F-F = 90% (240 of 266); ONL = 90% (36 of 40);

M 38:M19.2 -- ABET-ADh -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Associate Degree Program Specific Criteria 'h'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 20:OBJ20 -- ABET Associate Criteria i

ACT graduates are capable of employing productivity software to solve technical problems. (ABET Associate Degree Program Specific Criteria 'i')

Related Measures:

M 39:M20.1 -- ABET-ADi -- Assessment Aggregates

Aggregate of assessments for ABET Associate Degree Program Specific Criteria 'i'.

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 Associate Degree Program Specific Criteria 'i'.

Findings (2010-2011) - Target: Met

86% (640 of 747) of student work samples (projects, exams, quizzes,

papers) were scored 70 (out of 100) or better on all assessments supporting ABET Associate Degree Program Specific Criteria 'i'. FA10: F-F = 84% (341 of 405); ONL = 57% (4 of 7); SP11: F-F = 88% (273 of 312); ONL = 96% (22 of 23);

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

Exit and Alumni Survey results for ABET Associate Degree Program Specific Criteria 'i'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 21:OBJ21 -- ABET BS Criteria a

ACT graduates are capable of creating, utilizing and presenting design, construction, and operations documents. (ABET Baccalaureate Degree Program Specific Criteria 'a')

Related Measures:

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

Aggregate of assessments for ABET Baccalaureate Degree Program Specific Criteria 'a'.

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 Baccalaureate Degree Program Specific Criteria 'a'.

Findings (2010-2011) - Target: Met

85% (694 of 821) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Baccalaureate Degree Program Specific Criteria 'a'. FA10: F-F = 84% (471 of 564); ONL = 63% (25 of 40); SP11: F-F = 90% (123 of 136); ONL = 93% (75 of 81);

M 42:M21.2 -- ABET-BSa -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Baccalaureate Degree Program Specific Criteria 'a'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 22:OBJ22 -- ABET BS Criteria b

ACT graduates are capable of performing economic analyses and cost estimates related to design, construction, and maintenance of building systems in the architectural engineering technical specialties. (ABET Baccalaureate Degree Program Specific Criteria 'b')

Related Measures:

M 43:M22.1 -- ABET-BSb -- Assessment Aggregates

Aggregate of assessments for ABET Baccalaureate Degree Program Specific Criteria 'b'.

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 Baccalaureate Degree Program Specific Criteria 'b'.

Findings (2010-2011) - Target: Met

89% (590 of 665) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Baccalaureate Degree Program Specific Criteria 'b'.
FA10: F-F = 86% (142 of 166); ONL = 57% (8 of 14); SP11: F-F = 91% (384 of 423); ONL = 90% (56 of 62);

M 44:M22.2 -- ABET-BSb -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Baccalaureate Degree Program Specific Criteria 'b'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 23:OBJ23 -- ABET BS Criteria c

ACT graduates are capable of selecting appropriate materials and practices for building construction. (ABET Baccalaureate Degree Program Specific Criteria 'c')

Related Measures:

M 45:M23.1 -- ABET-BSc -- Assessment Aggregates

Aggregate of assessments for ABET Baccalaureate Degree Program Specific Criteria 'c'.

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 Baccalaureate Degree Program Specific Criteria 'c'.

Findings (2010-2011) - Target: Met

88% (174 of 197) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Baccalaureate Degree Program Specific Criteria 'c'.
FA10: F-F = 91% (68 of 75); ONL = 57% (4 of 7); SP11: F-F = 87% (62 of 71); ONL = 91% (40 of 44);

M 46:M23.2 -- ABET-BSc -- Exit/Alumni Survey Results

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 (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 24:OBJ24 -- ABET BS Criteria d

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

Related Measures:

M 47:M24.1 -- ABET-BSd -- Assessment Aggregates

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 better on assessments supporting ABET Baccalaureate Degree Program Specific Criteria 'd'.

Findings (2010-2011) - Target: Met

94% (205 of 219) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Baccalaureate Degree Program Specific Criteria 'd'.

FA10: F-F = 98% (64 of 65); ONL = 57% (4 of 7); SP11: F-F = 92% (103 of 112); ONL = 97% (34 of 35);

M 48:M24.2 -- ABET-BSd -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Baccalaureate Degree Program Specific Criteria 'd'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 25:OBJ25 -- ABET BS Criteria e

ACT graduates are capable of applying basic technical design concepts to the solution of architectural problems involving architectural history, theory and design; codes, contracts and specifications; electrical and mechanical systems, environmental control systems, plumbing and fire protection; site development; structures, material behavior, foundations; construction administration, planning and scheduling. (ABET Baccalaureate Degree Program Specific Criteria 'e')

Related Measures:

M 49:M25.1 -- ABET-BSe -- Assessment Aggregates

Aggregate of assessments for ABET Baccalaureate Degree Program Specific Criteria 'e'.

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 Baccalaureate Degree Program Specific Criteria 'e'.

Findings (2010-2011) - Target: Met

87% (538 of 617) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Baccalaureate Degree Program Specific Criteria 'e'.
FA10: F-F = 86% (118 of 137); ONL = 56% (19 of 34); SP11: F-F = 90% (360 of 401); ONL = 91% (41 of 45);

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

For full information, see the *Action Plan Detail* section of this report.

ACT 465 Architectural Design IV

Established in Cycle: 2010-2011

In this case, 3 of 5 ACT students (60%) are performing at or above 70, which is less than the target level of 80% of total stude...

M 50:M25.2 -- ABET-BSe -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Baccalaureate Degree Program Specific Criteria 'e'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

SLO 26:OBJ26 -- ABET BS Criteria f

ACT graduates are capable of performing standard analysis and design in at least one recognized technical specialty within architectural engineering technology that is appropriate to the goals of the program. (ABET Baccalaureate Degree Program Specific Criteria 'f')

Related Measures:

M 51:M26.1 -- ABET-BSf -- Assessment Aggregates

Aggregate of assessments for ABET Baccalaureate Degree Program Specific Criteria 'f'.

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 Baccalaureate Degree Program Specific Criteria 'f'.

Findings (2010-2011) - Target: Met

87% (380 of 435) of student work samples (projects, exams, quizzes, papers) were scored 70 (out of 100) or better on all assessments supporting ABET Baccalaureate Degree Program Specific Criteria 'f'. FA10: F-F = 84% (118 of 140); ONL = 73% (19 of 26); SP11: F-F = 89% (177 of 198); ONL = 93% (66 of 71);

M 52:M26.2 -- ABET-BSf -- Exit/Alumni Survey Results

Exit and Alumni Survey results for ABET Baccalaureate Degree Program Specific Criteria 'f'.

Source of Evidence: Academic indirect indicator of learning - other

Target:

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

Findings (2010-2011) - Target: Not Reported This Cycle

The Assessment Plan for ABET programs in the School of Construction was modified in the summer of 2011. Alumni and graduate exit surveys are being revised for concordance with the new plan and will be distributed beginning fall 2011.

Action Plan Detail for This Cycle (by Established cycle, then alpha)

did not conduct peer evals

Inadequate not conducting peer evaluations; in consideration of other courses taught by this adjunct, Investigate instructor's teaching performance and adherence to the course objectives;

Established in Cycle: 2009-2010

Implementation Status: In-Progress

Priority: High

Responsible Person/Group: Crosby

group/peer evaluations

Marginal performance; in consideration of other courses taught by this instructor, Investigate instructor's teaching performance; Inadequate not to conduct peer evaluations of group performance; in consideration of other courses taught by this instructor, Investigate instructor's teaching performance;

Established in Cycle: 2009-2010

Implementation Status: Planned

Priority: High

Responsible Person/Group: Crosby

not conducting external evals

fall ACT 400--Marginal external evaluations; spring ACT 400--Inadequate external evaluations--instructor did not implement external evaluations; in consideration of other courses taught by this instructor, Investigate instructor's teaching performance;

Established in Cycle: 2009-2010

Implementation Status: Planned

Priority: High

Responsible Person/Group: Crosby

review teaching performance

ACT 336 and ACT 465 -- Performance below target; Investigate instructor's teaching performance; ACT 338 -- This is a drop from 88% the prior offering; Inadequate; in consideration of other courses taught by this instructor, Investigate instructor's teaching performance;

Established in Cycle: 2009-2010

Implementation Status: Planned

Priority: High

Responsible Person/Group: Crosby/Kitchens

teaching performance review

ACT 336 and ACT 363--Inadequate scores; in consideration of other courses taught by this instructor, Investigate instructor's teaching performance;

Established in Cycle: 2009-2010

Implementation Status: Planned

Priority: High

Responsible Person/Group: Crosby

teaching performance review

Instructor inappropriately moved the oral presentation to Senior Project II in violation of the QEP guidelines; Instructor will either be removed from this course or the Senior Project II will be converted to the capstone course; Instructor will either be removed from this course or the Senior Project II will be converted to the capstone course;

Established in Cycle: 2009-2010

Implementation Status: Planned

Priority: High

Responsible Person/Group: Crosby

teaching performance review

Provide more examples of expected outcomes; require instructor to take QEP training (QEP committee has not allowed this instructor to take the training for the last two years); in consideration of other courses taught by this adjunct, Investigate instructor's teaching performance and adherence to the course objectives;

Established in Cycle: 2009-2010

Implementation Status: Planned

Priority: High

Responsible Person/Group: Crosby

writing and speaking centers

No action required but plan to introduce students to USM's Writing and Speaking Centers to sustain performance and target improvement for all students. Also plan to incorporate more peer evaluation early in the presentation and research paper development.

Established in Cycle: 2009-2010

Implementation Status: Planned

Priority: High

Responsible Person/Group: Sfharp

ACT 262 Architectural Design I

In this case, 11 of 18 ACT students (61%) are performing at or above 70, which is less than the target level of 80% of total students.

Established in Cycle: 2010-2011
Implementation Status: Planned
Priority: High

Relationships (Measure | Outcome/Objective):

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

Implementation Description: Action plan is to improve student-teacher communication about the requirements of the assessment.

Responsible Person/Group: Miranda Grieder

ACT 465 Architectural Design IV

In this case, 3 of 5 ACT students (60%) are performing at or above 70, which is less than the target level of 80% of total students.

Established in Cycle: 2010-2011
Implementation Status: Planned
Priority: High

Relationships (Measure | Outcome/Objective):

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: M12.2 -- ABET-ADa -- Exit/Alumni Survey Results | **Outcome/Objective:** OBJ12 -- ABET Associate Criteria a

Measure: M15.1 -- ABET-ADd -- Assessment Aggregates | **Outcome/Objective:** OBJ15 -- ABET Associate Criteria d

Measure: M25.1 -- ABET-BSe -- Assessment Aggregates | **Outcome/Objective:** OBJ25 -- ABET BS Criteria e

Implementation Description: Sample size too small to warrant an action plan at this time--continue to monitor.

Responsible Person/Group: Miranda Grieder

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, 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 ACT program provides students with a broad-based education with an emphasis on critical thinking, technical problem-solving ability, and computer applications in addition to a background in architectural design. The ACT program is committed to producing graduates who possess the necessary skills, critical thinking, discipline and work ethics to enter the Architecture/Engineering/Construction (A/E/C) industry fully capable of performing entry-level tasks at the office and in the field. Complex engineering systems keep modern buildings functioning. An architectural engineering technician must understand the electrical, lighting, structural, and ventilation systems that are essential to a building's operation. So a degree in this field requires an orientation to the general principles of engineering and a practical mastery of each of these systems. Graduates serve as architectural support for construction documentation (plans and specifications), construction project managers, facilities managers, systems engineers, and sales representatives for construction products; around 10% of our graduates continue their education to obtain architectural licenses. The ACT initiative supports Southern Miss' emergence as the premier research university of the Gulf South through undergraduate and graduate research. As two current examples, ACT faculty (through Mississippi Development Authority (MDA) grant funding) are developing standard sets of home plans for use in the MDA HOME program initiative and are developing the standard specifications for the construction of these homes so they are energy efficient, ADA compliant and built to national standards. Students and faculty conducting both undergraduate and graduate research (in the related Architecture and Construction Visualization emphasis of the MS in Engineering Technology degree) are advancing the research vision of the University with state-of-the-art research in Building Information Modeling with grant funded research sponsored by the Army Corps of Engineers. The Program Educational Objective of the ACT program is: "Graduates possess the necessary skills, critical thinking, discipline and work ethics to enter the A/E/C industry fully capable of performing entry-level tasks consistent with the expectations of employers." This fully supports the Mission of the Institution by cultivating intellectual development and creativity through the generation and application of knowledge. Recent survey responses indicate our alumni in all program areas are more than satisfied with their degree in the areas of critical thinking, teamwork, communication skills, design process, ethics, modern techniques, professionalism, diversity, lifelong learning and preparation (TAC-ABET accreditation self-studies 2009). ACT is responsive to IHL priorities in a number of ways: educating a reentering workforce, operates in the black, has substantial industry support to supplement state resources, and has taken innovative approaches to curriculum delivery such as developing online.

Continuous Improvement Initiatives

This program underwent a 6th year TAC-ABET accreditation visit in fall 2010. From that visit, it was apparent that the program objectives in WeaveOnline did not provide

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 criteria. For the Architectural 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 Architectural Engineering Technology Associate degree programs (and our corresponding lower-division) must demonstrate that graduates are capable of: a. employing concepts of architectural theory and design in a design environment; b. utilizing modern instruments, methods and techniques to produce A/E documents and presentations; c. conducting standardized field and laboratory testing on construction materials; d. utilizing modern instruments and research techniques for site development and building layout; e. determining forces and stresses in elementary structural systems; f. estimating material quantities for technical projects; g. calculating basic loads and demands in mechanical and electrical systems; h. utilizing codes, contracts and specifications in design, construction and inspection activities; and i. employing productivity software to solve technical problems; Baccalaureate degree programs must demonstrate that graduates, in addition to the competencies above, are capable of: a. creating, utilizing and presenting design, construction, and operations documents; b. performing economic analyses and cost estimates related to design, construction, and maintenance of building systems in the architectural engineering technical specialties; c. selecting appropriate materials and practices for building construction; d. applying principles of construction law and ethics in architectural practice; e. applying basic technical design concepts to the solution of architectural problems involving architectural history, theory and design; codes, contracts and specifications; electrical and mechanical systems, environmental control systems, plumbing and fire protection; site development; structures, material behavior, foundations; construction administration, planning and scheduling; and f. performing standard analysis and design in at least one recognized technical specialty within architectural 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 each program by semester and by delivery type (online or face-to-face) could be summed. This provides the total number of student samples for each criteria meeting the performance target versus total number of students being assessed. The findings for each criteria were then entered in WeaveOnline as annual summation values as well as being reported by semester and by type of site or delivery method. This system allows the program faculty to see the impact of their courses as a whole and individually on each criteria. Beyond the reporting system for SACS and TAC-ABET, the faculty also now have a systematic approach to evaluate each of their course objectives using the defined performance target levels to look at weaknesses in each course.

Closing the Loop

At the program level, all performance targets were met. In the Architectural Engineering Technology (ACT) program, this is represented by 8,863 student work samples (out of 10,130) that were evaluated as better than or equal to 70 (out of 100). The percentage of samples better than or equal to 70 is 87% which exceeds our stated level of performance of 80%. These findings were derived from 15 of 23 courses in the curriculum; the findings from the remaining eight courses are still being pursued but were courses taught by an adjunct and an instructor that lost all data from hard-drive failure. (These two issues will lead to an improved reporting system). Since the data is driven from the ground up (that is, from the faculty), the value of this assessment approach is that all faculty are involved rather than a select few as previously. The faculty are able to review their course level findings with respect to either the TAC-ABET criteria or the course objectives (which are generally more important to them). Although we have met all performance targets at the annual program level, there are findings (also reported in WeaveOnline) where the semester based report for either face-to-face or online might not have met the performance target. It is a simple matter to drill back down to the course level and determine which assessment tools the students were having difficulty with. When the faculty submitted their findings, they were asked to provide an assessment of any finding that went below the 80% threshold and develop action plans as needed. In some cases, the issue was too few students in a section; these sections did not require an action plan but would be monitored. Sections with significant student numbers that had assessments below targets were added to the action plan section in WeaveOnline.