## **Entities without data**

· Construction Management Graduate Certificate

## The University of Southern Mississippi

## **Detailed Assessment Report**

#### 2016-2017 Architectural Engineering Technology BS

As of: 10/15/2017 04:00 PM EDT (Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)

## Mission / Purpose

The Architectural Engineering Technology (ACT) program at the University of Southern Mississippi provides students with a robust and cooperative education that emphasizes critical thinking, technical problem-solving, and computer applications in addition to a background in architectural design. The ACT program is committed to producing graduates who possess the necessary skills, attitude, and work ethic to enter the A/E/C industry fully capable of performing appropriate tasks at the office and in the field.

The University of Southern Mississippi is a community of engaged citizens, operating as a public, student-centered, doctoral-granting research university serving Mississippi, the nation, and the world. The University is dedicated to scholarship and learning, integrating students at all levels in the creation and application of knowledge through excellence in teaching, research, creative activities, outreach, and service. The University nurtures student success by providing distinctive and competitive educational programs embedded in a welcoming environment, preparing a diverse student population to embark on meaningful life endeavors.

The mission of the ACT program directly relates to the mission of the University. The ACT program aims to provide well-rounded professionals of the built environment, engaging and empowering graduates to transform lives and communities. The ACT program provides technology and management education to students who desire career pathways in architecture, engineering, or construction firms. To achieve its mission, the ACT program creates a nurturing learning environment that fosters the development of critical thinking skills, develops knowledge and technology expertise, and supports innovation.

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

#### SLO 1: SLO 1: Written and Oral Communication

SLO 1: Apply written and oral communication in both technical and non-technical environments (ETAC-ABET Baccalaureate degree programs: Student Outcome G)

#### Related Measures

#### M 1: Written Report and Oral Presentations

M1 (direct): The ACT 401 Architectural Studio IV (Capstone) course requires students to create, utilize, and present design, construction and operations documents. Students submitted a report that included a written description of the design problem, site description, research component, and the design solution. The oral component was assessed four times during the semester during the programming, conceptual design, design development, and final oral presentation phase. All presentations were made to a panel of jury members.

Source of Evidence: Capstone course assignments measuring mastery

### Target:

Target: 80% of students will achieve an overall score of 70 or greater.

## Finding (2016-2017) - Target: Met

Findings: Spring 2017 - 100% (12/12) achieved an overall score of 70 or greater.

## M 2: Student Intern Feedback from Supervisor - Ability to Communicate

M2 (indirect): The AEC 496 Internship course will gather data from supervisor evaluations of student intern's performance. Question #1 of the Student Intern Evaluation addresses the intern's professionalism, including the quality of written and oral communication.

Source of Evidence: Employer survey, incl. perceptions of the program

Target: Employers are "satisfied" or "very satisfied" with 80% of student interns' performance.

## Finding (2016-2017) - Target: Met

Findings: Fall 2016 - 100% (1/1) of employers are "satisfied" or "very satisfied." Summer 2017 - 100% (13/13) of employers are "satisfied" or "very satisfied."

## SLO 2: SLO 2: Economic Analysis and Cost Estimates

SLO 2: Perform economic analyses and cost estimates related to design, construction, and maintenance of building systems (ETAC-ABET Program Criteria for AET: Outcome F)

## **Related Measures**

#### M 3: Create an Estimate

M1 (direct): The Estimating II (AEC 365) course is the second of two estimating courses required for the Architectural Engineering Technology degree. Students create several estimates in this course with each one increasing in scope and complexity. Assignment three requires students to assemble a cost estimate and report.

Source of Evidence: Project, either individual or group

## Target:

Target: 80% of students will achieve an overall score of 70 or greater.

## Finding (2016-2017) - Target: Not Met

Findings: Fall 2016 - 64% (7/11) achieved an overall score of 70 or greater.

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

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

## **Address Estimating Findings**

Established in Cycle: 2016-2017

The process of closing the loop for the ACT program has been newly established by the Director, Dr. Erich Connell, and the progr...

#### M 4: Student Intern Feedback from Supervisor - Estimating Understanding

M2 (indirect): The AEC 496 Internship course will gather data from supervisor evaluations of student intern's performance. Question #9 of the Student Intern Evaluation addresses the intern's developing ability to perform the work related to systems analysis, technology, and engineering concepts.

Source of Evidence: Employer survey, incl. perceptions of the program

Target: Employers are "satisfied" or "very satisfied" with 80% of student interns' performance.

## Finding (2016-2017) - Target: Met

Findings: Fall 2016 - 100% (1/1) of employers are "satisfied" or "very satisfied." Summer 2017 - 100% (13/13) of employers are "satisfied" or "very satisfied."

#### SLO 3: SLO 3: Software Utilization for A/F Design

SLO 3: Demonstrate the ability to utilize software that is appropriate to produce A/E design and construction documents (ETAC-ABET Program Criteria for AET: Outcome B & E)

#### Related Measures

#### M 5: Construction Document Development

M1 (direct): The ACT 336 (Construction Documents) course entails the creation of a minimum set of digital documents for the Built Environment.

Source of Evidence: Project, either individual or group

Target: 80% of students will achieve an overall score of 70 or greater.

Finding (2016-2017) - Target: <u>Met</u>
Findings: Spring 2017 - 91% (10/11) achieved an overall score of 70 or greater.

#### M 6: Student Intern Feedback from Supervisor - Technology Skills

M2 (indirect): The AEC 496 Internship course will gather data from supervisor evaluations of student intern's performance. Question #2 of the Student Intern Evaluation addresses the intern's ability to produce an acceptable quantity of work utilizing appropriate technology.

Source of Evidence: Employer survey, incl. perceptions of the program

Target: Employers are "satisfied" or "very satisfied" with 80% of student interns' performance.

## Finding (2016-2017) - Target: Met

Findings: Fall 2016 - 100% (1/1) of employers are "satisfied" or "very satisfied." Summer 2017 - 100% (13/13) of employers are "satisfied" or "very satisfied."

### SLO 4: SLO 4: Employ Architectural Design Concepts

SLO 4: Employ concepts of architectural design in a studio environment (ETAC-ABET Program Criteria for AET: Outcome A)

#### **Related Measures**

## M 7: Create and Present Design Solution

M1 (direct): The ACT 400 Architectural Studio III course requires students to create, utilize, and present design and construction documents at the district, site, and structure scales. The final project entails the design and documentation of a building situated in downtown Hattiesburg, MS.

Source of Evidence: Project, either individual or group

Target: 80% of students will achieve an overall score of 70 or greater.

## Finding (2016-2017) - Target: Met

Findings: Spring 2017 - 84% (11/13) achieved an overall score of 70 or greater.

## M 8: Student Intern Feedback from Supervisor - Design Knowledge

M2 (indirect): The AEC 496 Internship course will gather data from supervisor evaluations of student intern's performance. Question #10 of the Student Intern Evaluation addresses the intern's overall performance, including a broad knowledge of architectural design.

Source of Evidence: Employer survey, incl. perceptions of the program

## Target:

Target: Employers are "satisfied" or "very satisfied" with 80% of student interns' performance.

## Finding (2016-2017) - Target: Met

Findings: Fall 2016 - 100% (1/1) of employers are "satisfied" or "very satisfied." Summer 2017 - 100% (13/13) of employers are "satisfied" or "very satisfied."

## Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

## O/O 5: PO 1: Increase Enrollment

PO 1: Increase on-campus enrollment for the ACT program.

## **Related Measures**

## M 9: Institutional Research Data

M1 (direct): Fall 2016 and fall 2017 enrollment data was collected from the USM Office of Institutional Research.

Source of Evidence: External report

## Target:

Target: The target of this program objective is to increase enrollment from fall to fall semesters in the ACT program.

## Finding (2016-2017) - Target: Met

Findings: ACT fall 2016 enrollment = 59 ACT fall 2017 enrollment = 76

#### O/O 6: PO 2: Employer Satisfaction with Intern

PO 1: Employers are "satisfied" or "very satisfied" with student intern's overall performance.

## **Related Measures**

## M 10: Overall Student Intern's Performance

M1 (indirect): The AEC 496 Internship course will gather data from supervisor evaluations of student intern's performance. Question #11 of the Student Intern Evaluation addresses the overall performance of the student during the time of his or her internship.

Source of Evidence: Employer survey, incl. perceptions of the program

#### Target:

Target: Employers are "satisfied" or "very satisfied" with 80% of student interns' performance.

## Finding (2016-2017) - Target: Met

Findings: Fall 2016: 100% (1/1) of employers are "satisfied" or "very satisfied." Summer 2017: 100% (13/13) of employers are "satisfied" or "very

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

#### Address Estimating Findings

The process of closing the loop for the ACT program has been newly established by the Director, Dr. Erich Connell, and the program Coordinator, Jessica Hardy. Dr. Connell has been the Director of the School of Construction for 2 years, and Mrs. Hardy began her role as Coordinator during the fall 2017 semester. It is important that all courses are assessed using the Course Evaluation process outlined below; however, special attention will be dedicated to the Estimating II course. A plan for remediation is part of the Course Evaluation process identified below; the remediation process for this course will be identified at the end of the fall 2017 semester because this course is currently being offered. Course Evaluation The Course Evaluation process identified below will begin this semester for the ACT program. In this proposed Course Evaluation process, courses are evaluated at the end of each fall and spring semester. The steps in the process of course evaluation and closing the loop are identified below: Courses are taught according to a cohort model; courses are only delivered during the fall OR spring. At the end of the fall or spring semester, a Course Assessment form is completed by the instructor of record for each course delivered. The Course Assessment form contains the following information: course name and identifiers, ABET criterion, assessment methodology, acceptable target and findings, recommendations / reflections, action plan, status of previous action plan. A faculty meeting is held at the end of each semester to review the results for each course. The measurements are reviewed at this meeting to determine if course changes or actions for remediation are needed. This meeting also serves the purpose of ensuring that previous action plans have been implemented and achieved based on the "status of previous action plan" from the previous year's Course Assessment form. The Director and Program Coordinator will hold a special meeting if proper adjustments have not been made to a course or assessment

Established in Cycle: 2016-2017 Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Create an Estimate | Outcome/Objective: SLO 2: Economic Analysis and Cost Estimates

Implementation Description: Remediation for this unmet finding will be addressed at the fall 2017 Course Evaluation faculty meeting. The course instructor will produce the Course Evaluation form and address a specific process for remediation.

instructor will produce the Course Evaluation form and address a specific process for remediation.

**Projected Completion Date: 12/2017** 

Responsible Person/Group: Course Instructor, Jessica Hardy (Program Coordinator), Erich Connell (Director)

Additional Resources: No needed resources are known at this time to remedy this issue; potentially software resources may be needed

## **Analysis Questions and Analysis Answers**

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

Recent efforts to improve the School of Construction have focused on the learning process, and the ACT findings from this cycle indicate positive momentum in the courses required for ACT students (ACT 336, ACT 400, ACT 401). The findings also indicate that employer satisfaction is high, which means our reputation is consistent and supported by upperclassmen ACT students. All students achieved a 70 or better in the capstone course, so the findings related to written communication and oral presentation skills are also encouraging. Enhancing written and oral communications skills is a priority of the University and the School of Construction, and the ACT students meet or exceed the School's standards. Another positive, notable finding is related to an increased design awareness in the architectural studio. The ACT program aims to employ an educational model where knowledge is created by the transforming of experience, or experiential learning. This learning style is ideal for the studio environment because it nurtures exploration and critical thinking; inquiry and investigation are viewed as activities central to students' understanding. Dramatic changes were made to the curriculum two years ago, and those changes have been improved upon each subsequent semester. This is due in part to ACT faculty retention for one full cycle. In addition, all ACT faculty met at the end of the spring 2016 semester to discuss Architectural Studio sequencing and course content. Decisions related to course fees, names, and content were established at this meeting and will take affect during the fall 2018 semester. Increased alignment and agreement among faculty members has positively affected our students' ability to solve design problems in the studio environment.

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

Two-thirds of the courses required for Architectural Engineering Technology and Construction Engineering Technology programs are shared. This is an apt use of limited resources and further solidifies the ACT program's viability within the School. Findings indicate that ACT students do not perform as well in the shared courses (with the AEC prefix). A quantifiable reasoning for this issue is unknown at this time, but a contributing factor could be an increased class size for shared classes. Further investigation and continued attention to this issue is paramount.

#### **Annual Report Section Responses**

#### Program Summary.

## Summarize highlights of the past year for this particular academic program. Provide context to an outside reviewer.

The Architectural Engineering Technology (ACT) program is undergoing a shift in its identity which started two years ago. The program has been in place for over 50 years, but the last two years have ushered in the most purposeful and positive transformations. The changes are most well evidenced in the new leadership and curriculum. In 2015, Academic Council approved a curricular alignment between the Construction Engineering Technology program and the ACT program; now, two-thirds of the architectural coursework is shared with the construction program. The School of Construction and supporting industry members ascertain that the construction program values and topics strengthen the architectural program and vice versa. For example, the ACT students are now required to take courses on estimating, scheduling, and construction law. These courses are typically only required for construction students, but a knowledge of these topics is invaluable for a designer of the built environment. The 2016-2017 academic year has been a time for new ideas and initiatives. These items have been summarized below: August 19th: Welcome Back Industry Event - This event provided our architecture and construction students the first opportunity of the semester to connect with the industry. 30 members of the industry, faculty, and students attended this event in Biloxi, MS. August 30th: Southern Miss Student Constructors Organization (SMSCO) Semester Kickoff Meeting - SMSCO is the most active organization in the School of Construction for both architectural and construction students. 54 students and faculty members attended this initial meeting, which was the largest in the history of the organization. September 2nd: Downtown Studio Ribbon Cutting - Faculty members within the ACT program worked with the Executive Director of the Historic Hattiesburg Downtown Association to open the first downtown community studio for Senior ACT students. Seniors in the ACT program will complete Studio 3 and 4 in the downtown community studio space. The value and mission of the downtown community studio is to engage students with their local community. During the fall 2017 semester, ARCH Studio III students will design a boutique hotel in downtown Hattiesburg. Each student will produce design documents, a cost estimate, and programming research. This project is unique due to the local constituents investing in this project; there is a foreseeable possibilit for implementation of student work. Students will first study the unique identity and character of downtown Hattiesburg. Then, students will engage the HHDA, surrounding community members, local business owners, the historic conservation commission, and potential users. The project will conclude with a final exhibition of student work during the first week of December. September 6th: SMSCO Guest Lecturer (EUTAW) - EUTAW is a construction and engineering company located near Hattiesburg, MS. September 22ndSMSCO Guest Lecturer (Copeland and Johns Design-Build) - C&J is a design-build firm located in Jackson, MS. The concept behind a design-build company closely aligns with the values in aligning the construction and architectural programs here in the School of Construction. October 4th: SMSCO Guest Lecturer (MS Roadbuilders Association) October 18th: Yates Day - Yates is an international general contracting company that seeks to hire both architectural and construction students. October 19th: SMSCO Sporting Clay Shoot - The annual clay shoot funds student competitions and a student worker for the organization. This is another opportunity for our students to connect to the industry. October 21st: Visit to ULL MArch Program - Junior and senior-level students from the University of Southern Mississippi School of Construction visited the University of Louisiana in Lafayette to learn more about the Master of Architecture Program. Prospective students toured Fletcher Hall and the campus before joining professionals, faculty, students, and alumni at the Annual Alumni Crawfish Boil. October 27th: SMSCO Guest Lecture by Hensel Phelps Lecture & Interviews for graduating students October 27th: SCOOl of Construction Halloween Party - This event builds a sense of community within the architectural and construction programs. The event was held in the downtown community studio. October 29th: Industry, Faculty, and Student Homecoming Tailgate November 1st: SMSCO Guest Lecture (Mike Rozier Development and Construction) November 15-16th: Pathways 2 Possibilities - More than six thousand 8th graders from private and public schools in the six lower counties of Mississippi attended the Mississippi Coast Convention Center in Biloxi for the Pathways 2 Possibilities (P2P) expo on November 15-16, 2016. P2P provided a variety of pathways for students to gain hands on experience in various vocational areas, such as Aerospace, Architecture and Construction, Arts, Engineering and Polymer Science, Information Technology, Public Safety, and many more. At this event, ACT faculty and current students participated in an inventive way to bridge the gap between fun and professional practice by use of the video game Minecraft. January 21st:

SMSCO Semester Kickoff Meeting February 9th: Upe Flueckiger Guest Lecture and Book Signing, "How Much House? Thoreau, Le Corbusier & The Sustainable Cabin" - The School of Construction hosted a presentation and discussion on ideas about sustainability, education, the "sustainable cabin" and Sustainable Cabili - The School of Construction Hosted a presentation and alsossori of needs about sustainability, codeation, and interest and other ways to be more resourceful, environmentally, socially and intellectually. February 22nd: Construction Specifications Institute Product Show in Jackson March 2nd: SMSCO Guest Lecturer (Woodward Design-Build) March 24: University of Louisiana at Lafayette MArch Program Tour March 25-27: Studio 2 Precedent Excursion in New Orleans, LA - This trip marked the beginning of the second project the spring 2017 semester, a tiny, environmentally conscious home on Lake Thoreau. This home was slated to be occupied by a Visiting Researcher from the Biological Sciences program at USM. The excursion in New Orleans began with quiet sketching and sensing at the Crosby Arboretum. Once in New Orleans, we were guided through a clever, dense urban renewal project by the Office of Jonathan Tate. Then, we took part in an inspired lecture by Mr. Matherne, an eclectic Thoreau enthusiast from NO. March 30th: Greg Starzyk Guest Lecture - Professor Starzyk presented on Design-Build Practice, Law, and Education. March 31st: ACT and construction student visited Woodward Design-Build in New Orleans, LA. April 11th: Craft of Construction Day - The School of Construction hosted the first annual event where 186 community college and high school students and advisors across the state(s) were invited to spend a day in the life of a School of Construction student. The schedule featured industry-led demonstrations, facility tours, and a big cookout with our faculty and current students. The after-lunch session included a presentation and discussion about students transferring from community college to USM. Due to the changes in the curriculum, this discussion was necessary for prospective students and community college faculty. April 27th: Southern ProhibitionUSM / MS Associated Builders and Contractors Dinner - The School of Construction & the Associated Builders and Contractors of Mississippi hosted a dinner the night before the Student constructors Golf Tournament to garner interest in supporting our School. April 28th: SMSCO Golf Tournament - SMSCO hosted the 22nd Annual Golf Tournament at Canebrake Country Club. All proceeds benefited the Student Constructors group and the ABC competition team. May 11: USM / MSABC Student, Faculty, Canieurane Country Ciub. An proceeds benefited the Student Constructors group and the ABC competition team. May 11: USM / MSABC Student, Faculty, Industry Crawfish Boil August 19th Cheers and Beers Industry Event August 30th SMSCO Meeting – Semester kickoff September 2nd Downtown Studio Ribbon Cutting & Party September 6th SMSCO Meeting – EUTAW Lecture September 22nd SMSCO Meeting – Copeland and Johns Design-Build Lecture October 4th SMSCO Meeting – MS Roadbuilders Association Lecture October 18th Yates Day October 19th SMSCO Sporting Clay Shoot October 21st Visit to ULL MArch Program October 27th SMSCO Meeting – Hensel Phelps Lecture & Interviews October 27th School of Construction Halloween Party October 29th Homecoming Tailgate November 1st SMSCO Meeting – Mike Rozier Lecture November 15-16th Pathways 2 Possibilities; middle-school recruiting event in Biloxi, MS

#### **Connected Documents**

2016 Clay Shoot Flyer 2016 SMSCO Golf Tourney Flyer 2017 March ULL Visit 2017 Woodward Field Trip Flyer
Craft of Construction Day Info Packet CSI Product Show Flyer
Flyer for Craft of Construction Day (Fillable)
SMSCO Fall 2016 Schedule of Events SMSCO Spring 2017 Schedule of Events Starzyk Guest Lecture

#### Continuous Improvement Initiatives.

Any department-level or program-level action plans for improvement that are not necessarily tied to a specific student learning outcome or program objective should be described in this field.

Continuous improvement is highly prioritized by the School of Construction's new leadership. Opportunities for continuous improvement include: Students have the opportunity to provide course evaluations each semester. Annual faculty reviews consider these student responses for teaching effectiveness. The Senior Exit Survey is given each semester and utilized to measure student satisfaction and effectiveness of our teaching strategies. Responses are The Sehlor EXIT Survey is given each semester and utilized to measure student satisfaction and enectiveness of our teaching strategies. Responses are quantified on whether or not the student feels as though he or she acquired an acceptable education prior to graduation. The Industry Advisory Council has been reinvigorated over the past year. A primary mission for the Industry Advisory Council is to provide feedback on curriculum and related issues. One meeting was held during the fall 2016 semester, and one meeting was held during the spring 2017 semester. The meetings on October 28, 2016 and April 27, 2017, entailed the following discussions: The industry advisory council membership has been revised to include both AET and CET programs. An interim executive committee was appointed by the Director and will be voted on in the fall 2017 meeting. All courses within the CET and AET programs will be reviewed on a three-year cycle, with no less than 4-courses reviewed at the end of each semester for quality improvement and assessment. Restructuring of lab content using National Center for Construction Education and Research (NCCER) modules that align with the learning objectives of each of the four lab courses TEC 122 NCCER Matriculation Lab equipment resourcing

### Closing the Loop.

## Summarize the results of previous action plan implementation. Provide evidence of improvement based on analysis of the results.

Immarze the results of previous action plan implementation. Provide evidence of improvement based on analysis of the results.

The process of closing the loop for the ACT program has been newly established by the Director, Dr. Erich Connell, and the program Coordinator, Jessica Hardy. Dr. Connell has been the Director of the School of Construction for 2 years, and Mrs. Hardy began her role as Coordinator during the fall 2017 semester. Course Evaluation The Course Evaluation process identified below will begin this semester for the ACT program. In this proposed Course Evaluation process, courses are evaluated at the end of each fall and spring semester. The steps in the process of course evaluation and closing the loop are identified below: Courses are taught according to a cohort model; courses are only delivered during the fall or spring. At the end of the fall or spring semester, a Course Assessment form is completed by the instructor of record for each course delivered. The Course Assessment form contains the following information: course name and identifiers, accreditation criterion, assessment methodology, acceptable target and findings, recommendations / reflections, action plan, and status of previous action plan (if applicable). A faculty meeting is held at the end of each semester to review the results for each course. The measurements are reviewed at this meeting also each course. The measurements are reviewed at this meeting to determine if course changes or actions for remediation are needed. This meeting also serves the purpose of ensuring that previous action plans have been implemented and achieved based on the "status of previous action plan" from the previous year's Course Assessment form. The Director and Program Coordinator will hold a special meeting if proper adjustments have not been made to a course or assessment tool based on the instructor's self-assessment. Adjustments are made before the course is delivered again. School Evaluation School Evaluation occurs annually each May as a three-day faculty retreat where action plans are identified to make improvements at the School level. Industry Member Evaluation Evaluation of the ACT program occurs at the Industry Advisory Council meetings during the fall and spring semesters. All courses within ACT program will be reviewed on a three-year cycle, with no less than 4-courses reviewed at the end of each semester for quality improvement and assessment.

## Technology Use Part 1.

State/explain the role of technology in the discipline and outcomes related to technology.

The Architectural Engineering Technology program's reputation rests upon the exceptional quality of its students' knowledge of architectural technology. ACT students excel in the application of appropriate state-of-the-art electronic-based technology to manage the architectural and construction process. The ACT program aims to provide a techno-centric architectural education that prepares students to lead in the utilization of technology in the industry. A graduate of the ACT program is skilled in the application and integration of architectural and construction technologies in the building design process. Working in multidisciplinary and collaborative design teams, our students have the skills to communicate with and coordinate the work of other building design professionals through the medium of Building Information Modelling (BIM). Our top students are sought after in the field of architecture due to their unique technical skills, complementary construction courses, and cooperative design-build education.

## Technology Use Part 2.

Develop a narrative to support Technology Use Part 1 by providing program assessment results (if applicable), examples of technology being used to enhance student learning, examples of technology being used to meet program objectives/outcomes, and examples of providing access to and training in the use of technology.

All ACT courses utilize technology to some degree, e.g. Microsoft Word, PowerPoint, Canvas, etc. The list below identifies those courses that heavily utilize technology and the respective technologies as part of the course competencies: (AEC 132) Architectural Graphics - AutoCAD (AEC 234) Architectural CADD - Revit (AEC 254) Estimating I - Microsoft Excel, On-Screen Takeoff (AEC 258) Construction Planning and Scheduling - Microsoft Project (AEC 450) Building Information Management - Navisworks (ACT 363) Architectural Studio I - AutoCAD (ACT 364) Architectural Studio II - Revit (ACT 400) Architectural Studio III - Revit, SketchUp (ACT 401) Architectural Studio IV - Revit (ACT 336) Construction Documents - AutoCAD All classrooms utilized by the School of Construction in the Chain Technology Center (TEC) feature distance learning equipment, e.g. camera, tv, microphone, etc. TEC 116, 122, 231, and 252 feature computer display stations with projectors or tvs for multi-media presentations, software demonstrations, and Internet search and display. Chain Technology Center, Room 122 - This room is an NCCER Matriculation Lab that features testing equipment required in several ACT courses. The equipment in this laboratory that heavily utilizes a knowledge and use of technology includes: Concrete mixer Drying oven Small hand tools/accessories Mechanical, Électrical, and Plumbing testing equipment Surveying equipment Supplementary curriculum materials/equipment Chain

Technology Center, Room 233 - This room is an open computer lab controlled by the School of Construction with software for all programs in the School. The School of Construction Technical Specialist, Carlos Sterling, currently maintains the Autodesk Suite (AutoCAD and Revit) and all other software and hardware support. Access to tutoring in AutoCAD and Revit has been implemented during the spring 2017 semester. TEC 233 lab monitors are now required to provide all School of Construction students access to tutoring during their working hours. Chain Technology Center, Room 252 - This room is a closed teaching computer laboratory used by both the Construction Engineering Technology and Architectural Engineering Technology programs; software mirrors that of the open lab.

## **Detailed Assessment Report**

## 2016-2017 Construction Engineering Technology BS\*

As of: 10/15/2017 04:00 PM EDT (Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)

#### Mission / Purpose

The University of Southern Mississippi Construction Engineering Technology (CET) program is committed to producing graduates who possess the necessary skills to enter the A/E/C industry fully capable of performing entry-level tasks at the office and in the field. The graduates' critical thinking, discipline and work ethics will be such that a short period of training and work experience will allow them to move into managerial positions.

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

#### SLO 1: Create a construction project safety plan.

Graduates will have the ability to create a construction project safety plan upon graduation.

#### Relevant Associations:

ETAC-ABET BS Criterion h; ACCE Student Learning Outcome #3

#### Related Measures

#### M 1: (Direct): BCT 380 Final Project

The Spring 2017 BCT 380 (Construction Safety) course requires students to create a project specific safety plan based on construction documents provided by the course instructor.

Source of Evidence: Project, either individual or group

#### Target:

Using a rubric to evaluate each component of the submitted safety plan, a student's performance will be assessed as either unacceptable (below 60 points), poor (60-70 points or higher), acceptable (70 points or higher), or good (80 points or higher). The achievement target will have been met if 80 percent or more assessed students achieve an acceptable or good score.

## Finding (2016-2017) - Target: Met

Hattiesburg on-campus: 82.6% (N=23) 19/23 on-campus students received a 70 or higher on the project. Online: 89.5% (N=86) 77/86 online students received a 70 or higher on the project.

#### M 2: (Direct): BCT 400 Safety Project

The Spring 2017 BCT 400 (Senior Project) course is the capstone course for the Construction Engineering Technology degree. One of the projects required for the spring 2017 course is for students to submit a site- specific safety plan for a construction project.

Source of Evidence: Project, either individual or group

## Target:

The achievement target will have been met if 80 percent or more assessed students achieve a 70% or better on the project.

## Finding (2016-2017) - Target: Partially Met

Partially Met--Not Met for Hattiesburg On-campus students Hattiesburg On-campus: 60% (N=5) of students received a 70% or higher score on the project. Online: 82% (N=17) of students received a 70% or higher score on the project.

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

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

## **BCT 400 Safety Plan**

Established in Cycle: 2016-2017

Discuss an action plan with the Director of the School and the unit Coordinator(s) that involves content of prerequisite courses...

## SLO 2: Create construction project cost estimates.

Students will be able to create construction project cost estimates upon graduation.

#### Relevant Associations:

ETAC-ABET Associate Criterion b; ACCE Student Learning Outcome #4

## **Related Measures**

## M 3: (Direct): AEC 365 Cost Estimate and Report

The Fall 2016 AEC 365 (Estimating 2) course is the second of two estimating courses required for the Construction Engineering Technology degree. Students create several estimates in this course with each one increasing in scope and complexity. Assignment three requires students to assemble a cost estimate and report

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

#### Target:

The achievement target will have been met if 80 percent or more assessed students achieve a 70% or better on the assignment.

### Finding (2016-2017) - Target: Not Met

Not Met for both Hattiesburg On-Campus and Online Students Hattiesburg On-campus: (N=23) 57 % of students received a 70 or higher on the assignment. Online: (N=60) 55% of students received a 70 or higher on the assignment.

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

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

#### **AEC 365 Cost Estimate Action Plan**

Established in Cycle: 2016-2017

Change the course assignments from three to one (cost estimate and report), concentrating on the quality of one assignment deliv...

## M 4: (Direct) BCT 400 Cost Estimate Project

The Spring 2017 BCT 400 (Senior Project) course is the capstone course for the Construction Engineering Technology degree. One of the projects required for the course is for students to submit a comprehensive cost estimate for a construction project.

Source of Evidence: Project, either individual or group

The achievement target will have been met if 80 percent or more assessed students achieve a 70% or better on the project.

#### Finding (2016-2017) - Target: Partially Met

Partially Met\_Not Met for Online Students Hattiesburg On-campus: (N=5) 80% of students received a 70 or higher on the project. Online: (N=17) 53% of students received a 70 or higher on the project.

#### SLO 3: Understand methods of project delivery.

Students will be able to understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.

#### **Relevant Associations:**

ETAC-ABET Associate Criterion a; ACCE Student Learning Outcome #12

#### **Related Measures**

#### M 5: (Direct): AEC 380 AIA-201 Test

The Fall 2016 AEC 380 (Specifications & Contract Documents) course includes content about the Construction Project Life Cycle and the roles and responsibilities of all entities and parties involved in the project. Week 6 covers Conditions of the Contract which includes a thorough review of the AIA-A201 document defining duties and responsibilities of all parties of the contract. Students complete a test assessing their understanding of the content in AIA-A201 (Conditions of the Contract) document.

Source of Evidence: Writing exam to assure certain proficiency level

#### Target:

There are a total of 63 questions on the test. Each question is worth 1 point. Using the following grading scale, a student's performance will be assessed as either an F (0-37 points), D (38-43 points), C (44-50 points), B (51-56 points), A (57-63). The achievement target will have been met if 80 percent or more assessed students achieve a C or better.

### Finding (2016-2017) - Target: Met

Met for Online and Hattiesburg On-Campus Students Hattiesburg On-campus: 80.0 % (N=15) of students (12/15) received a 70 or higher on the test. Online section: 91.8% (N=49) of students (45/49) received a 70 or higher on the test.

#### M 6: (Direct): BCT 174 Delivery Methods

The Fall 2016 BCT 174 (Construction Organization) course is an introductory course for the construction industry. In this course, students learn about different constituencies involved in the construction projects. In addition, they learn about different project delivery methods. In the course students are required to complete an assignment in which they compare 3 major types of project delivery and draw the organizational chart of each. Students also describe the relationship between major constituencies.

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

#### Target

Using a Pass/Fail grading criteria, students either have all information correct or they fail the assignment. The achievement target will have been met if 80 percent or more assessed students achieve a "Pass."

#### Finding (2016-2017) - Target: Met

Met for Online and On-Campus Students Hattiesburg On-campus: (N=35) 97.1.0 % of students (34/35) received a "Pass" on the Project Delivery assignment. Online: (N=92) 91.3% of students (84/92) received a "Pass" on the Project Delivery assignment.

### SLO 4: Utilize electronic-based technology.

Students will be able to utilize electronic-based technology to manage the AEC (Architecture/Engineering/Construction) process.

#### Relevant Associations:

ETAC-ABET Associate Criterion c; ACCE Student Learning Outcome #10

#### **Related Measures**

#### M 7: (Direct): AEC 132 Final Project

The AEC 132 (Architectural Graphics) course is where students use AutoCAD to develop a partial set of working drawings (plans). The Final Project for the course is evaluated using a rubric developed to assess the components of the submission.

Source of Evidence: Project, either individual or group

#### Target:

The achievement target will have been met if 80 percent or more assessed students achieve a 70% or better on the project.

## Finding (2016-2017) - Target: Not Met

SUMMER 2016: Online: 63% (N=32) – achieved a 70% or better on the Final Project. 9 students should have dropped the course due to non-submission throughout the semester. Only 3 students who were active until the end of the semester scored lower than 70%. FALL 2016 Hattiesburg on-campus: 52% (N=25) achieved a 70% or better on the Final Project. 8 students should have dropped the course due to non-submission throughout the semester. Only 3 students who were active until the end of the semester scored lower than 70%. Online: 71% (N=56) achieved a 70% or better on the Final Project. 13 students should have dropped the course due to non-submission throughout the semester. Only 2 students who were active until the end of the semester.

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

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

#### **AEC 132 Final Project**

Established in Cycle: 2016-2017

The findings indicate that students need more support in the beginning of the semester because AEC 132 is deemed a "historically...

### M 8: (Direct): AEC 254 Estimating Assignment

The Fall 2016 AEC 254 (Estimating 1) course requires students to submit an assignment using OnScreen Takeoff software to estimate the quantity of concrete, CMU, and brick based on a set of drawings of a Coastal Wildlife Recovery Center. The assignment is scored based on 150 points total. A student earns the 150 points if they are successful in developing the estimate using the software and submit the assignment by the deadline.

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

#### Target:

A student's performance will be assessed as either unacceptable (below 90 points), poor (90-104 points), acceptable (105-119 points), or good (120-134 points) or excellent (135-150 points). The achievement target will have been met if 80 percent or more assessed students achieve an acceptable or better score.

## Finding (2016-2017) - Target: Met

Met for On-campus and Online Students Hattiesburg On-campus: 100% (N=24) 24/24 of the on-campus Construction Engineering Technology students earned 150 points. 100% achieved excellent. Online: 82.4% (N=57) achieved acceptable or higher score on the assignment. 9/57 of the online Construction engineering Technology students received 'below 90' points. 15.75% achieved unacceptable. 1/57 of the online Construction engineering Technology students received '120-134' points. 1.7% achieved good. 47/57 of the online Construction engineering Technology students received '135-150' points. 82.4% achieved excellent.

#### SLO 5: Increase Hattiesburg on-campus enrollment.

Increase Hattiesburg on-campus enrollment for Construction Engineering Technology.

#### M 9: IR Enrollment Data

The Construction Engineering Technology program desires to increase the Hattiesburg campus student enrollment. The data for university official enrollment for Hattiesburg on-campus Construction Engineering Technology majors will be acquired in the Fall semester from the Office of Institutional Research

Source of Evidence: Existing data

#### Target:

The target will be met if the enrollment for the Hattiesburg on-campus Construction Engineering Technology majors increases by ten percent from Fall 2016 to Fall 2017.

#### Finding (2016-2017) - Target: Not Met

Official Data from the University of Southern Mississippi Office of Institutional Research acquired on September 14, 2017: Fall 2016- Oncampus Construction Engineering Technology majors enrollment was 133 students Fall 2017-On-Campus Construction Engineering Technology majors enrollment was 128 students This is a decline of 5 students.

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

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

### **Actively Recruit On-Campus Students**

Established in Cycle: 2016-2017

The faculty and staff of the School of Construction will attend and host at minimum three (3) recruiting events that target incr...

#### SLO 6: Employers are satisfied with intern's performance.

Construction Engineering Technology students are required to complete an internship consisting of 400 contact hours as part of their degree requirements.

#### **Related Measures**

## M 10: (Indirect) Employer Survey

Construction Engineering Technology students are required to complete an internship as part of their degree requirements. At the end of the internship, their supervisor completes an evaluation of the intern's performance as related to his/her assigned tasks during the internship. The Supervisor's Evaluation form consists of 10 questions which have 1-5 point rating options for response. The ratings include: 1=extremely dissatisfied; 2=slightly dissatisfied; 3=satisfied; 4=considerably satisfied; 5=extremely satisfied.

Source of Evidence: Employer survey, incl. perceptions of the program

#### Target:

The achievement target will have been met if 80 percent or more assessed students achieve a three (3= satisfied) or higher rating based on the average of the responses to the 10 questions on the evaluation form.

#### Finding (2016-2017) - Target: Met

Hattiesburg On-Campus: 100% (N= 17) 17/17 of the on-campus Construction Engineering Technology students received a 3=satisfied or higher average rating. Online: 100% (N=14) 14/14 of the online Construction Engineering Technology students received a 3=satisfied or higher average rating.

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

#### **Actively Recruit On-Campus Students**

The faculty and staff of the School of Construction will attend and host at minimum three (3) recruiting events that target increasing enrollment oncampus Construction Engineering Technology majors.

Established in Cycle: 2016-2017 Implementation Status: In-Progress

Priority: High

#### Relationships (Measure | Outcome/Objective):

Measure: IR Enrollment Data | Outcome/Objective: Increase Hattiesburg on-campus enrollment.

Implementation Description: The School of Construction hosted a spring 2017 "Craft of Construction' day where high school and community college students visited our Hattiesburg campus. We plan to host this event again next spring. We will also look for opportunities to attend community college and high school career days.

**Projected Completion Date: 08/2018** 

Responsible Person/Group: Coordinator of Construction Engineering Technology, Student Advancement Administrator and faculty in the program.

Additional Resources: Funding and personnel to plan and manage this all-day event.

Budget Amount Requested: \$6,000.00 (recurring)

## **AEC 132 Final Project**

The findings indicate that students need more support in the beginning of the semester because AEC 132 is deemed a "historically difficult course" by the university based on the four academic years of data compiled by the Institutional Research for courses in which 33% of students received a grade of D,F, or W. The instructor of the course will provide more tutorials (available in Canvas) and outside of class assistance to students to better prepare students who are challenged in completing the project.

Established in Cycle: 2016-2017 Implementation Status: In-Progress

Priority: High

## Relationships (Measure | Outcome/Objective):

Measure: (Direct): AEC 132 Final Project | Outcome/Objective: Utilize electronic-based technology.

Projected Completion Date: 08/2018

Responsible Person/Group: Coordinator of program, instructor of record

#### AEC 365 Cost Estimate Action Plan

Change the course assignments from three to one (cost estimate and report), concentrating on the quality of one assignment deliverable.

Established in Cycle: 2016-2017 Implementation Status: Planned

Priority: High

## Relationships (Measure | Outcome/Objective):

Measure: (Direct): AEC 365 Cost Estimate and Report | Outcome/Objective: Create construction project cost estimates.

Projected Completion Date: 08/2018

Responsible Person/Group: Coordinators of CET and AET programs and instructor of record

## **BCT 400 Cost Estimate Plan**

Discuss an action plan with the Director of the School and the unit Coordinator(s) that involves content of prerequisite courses: The Senior Capstone course, BCT 400, is intended for students to show evidence of competencies, not to attain the competencies during the course.

Established in Cycle: 2016-2017 Implementation Status: Planned

Priority: High

**Projected Completion Date: 08/2018** 

Responsible Person/Group: AET and CET director, coordinators, and instructor of record

#### BCT 400 Safety Plan

Discuss an action plan with the Director of the School and the unit Coordinator(s) that involves content of prerequisite courses: The Senior Capstone course. BCT 400. is intended for students to show evidence of competencies, not to attain the competencies during the course.

Established in Cycle: 2016-2017 Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: (Direct): BCT 400 Safety Project | Outcome/Objective: Create a construction project safety plan.

**Projected Completion Date: 08/2018** 

## **Analysis Questions and Analysis Answers**

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

Construction Engineering Technology students met or surpassed the learning outcomes target in several areas of the degree. Both online and on-campus students are able to create a site-specific safety plan for a project, understand methods of project delivery, and use software to develop a quality takeoff in estimating a project. All internship employers are satisfied with our student intern's performance during the required 400 contact hour internship our students typically participate in during the summer of their junior year of studies.

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

Both online and on-campus students are not achieving the target outcomes in the AEC 365 (Estimating 2) and BCT 400 (Capstone- estimating portion of this course) courses. Coordinators of the AET and CET programs and course instructor of record of these two classes will review the possible reasons for this concern and develop solutions to implement. We made considerable changes in pre-requisites and course sequencing in the Fall 2015 and some students in earlier catalogs may have been subject to not having the 'new' per-requisites courses completed prior to enrolling in the AEC 365 course. Both online and on-campus AEC 132 (Architectural Graphics) students are not achieving the target outcomes. The instructor of record will be adding additional help session material and time to assist students in learning the material and software.

## **Annual Report Section Responses**

#### **Program Summary.**

#### Summarize highlights of the past year for this particular academic program. Provide context to an outside reviewer.

The Construction Engineering Technology (CET) degree program has around 370 majors (130 on-campus; 240 online) and only 7 faculty teaching courses in both Construction and Architectural Engineering Technology (around 70 majors) degree programs. 66% of the coursework is shared (both Construction and Architecture students must complete as part of the 120 credits required to receive the B.S.) for these two degrees. Construction Engineering Technology is accredited by ETAC-ABET (Engineering Technology Accrediting Commission-Accreditation Board of Engineering Technology) and ACCE (American Council for Construction Education). The CET program is offered both on the Hattiesburg campus and fully online. The CET program has a very active student organization, Student Constructors. This organization meets bi-monthly and there are typically around 50 students and 7 faculty attending. Alumni and industry leaders from all sectors of the construction industry are invited to speak at these meetings and provide our students with insight into what to expect and how to prepare for succeeding in the industry after graduation. Student Constructors members with a faculty advisor participate in national construction student competitions (Design-Build Institute of America and Associated Schools of Construction). Based on data received by the College of Science & Technology Degree Auditor, there were a total of 45 (Fall 2016= 9 ONL & 9 HBG; Spring 2017= 9 ONL & 16 HBG; Summer 2017= 2 ONL) Construction Engineering Technology students graduating in 2016-2017. After the Spring 2017 semester, we held a 4-day faculty retreat during which we conducted a thorough review of our CET program curriculum. The retreat resulted in identifying content duplication in a few courses, determining appropriate prerequisites for courses, revising ACCE Student Learning Outcomes associated with courses, and optimizing the schedule of course offerings with limited faculty and the goal of our students being able to graduate in four years. Because our degree program is offered both on the Hattiesburg campus and online, our four courses with labs have been a challenge and an issue with accreditation of the online program. We identified modules with the curriculum offered by the National Center for Construction Education & Research (NCCER) that meet the student learning outcomes required for the lab components. Seven faculty members completed the required NCCER training and exams and are now NCCER certified instructors and may teach the content and conduct the verification of performance tasks associated with the courses they teach. We have military students enrolled both online and oncampus who are challenged to complete the curriculum due to deployment. Military students (Army, Navy, Air Force) with certain (Military Occupational Specialties) MOS ratings may be given credit for certain NCCER modules that are required by our degree. The Construction Engineering Technology degree program has an engaged, supportive, and active Industry Advisory Council (IAC). There are currently over 50 Industry Advisory Council members comprised from all sectors of the industry with many members being alumni of the program. The IAC provides internship and job opportunities to students, feedback on curriculum, support during accreditation visits, and scholarships and other financial support for the program.

## Continuous Improvement Initiatives.

# Any department-level or program-level action plans for improvement that are not necessarily tied to a specific student learning outcome or program objective should be described in this field.

The Construction Engineering Technology degree coordinator plans to develop a comprehensive template for assessing outcomes for all major courses. This assessment cycle findings has shown that it is anticipated a root cause of not achieving target outcomes may be tied to pre-requisites. By the next assessment cycle there will be data to review to reflect areas needing improvement in pre-requisite courses.

#### Closing the Loop.

## Summarize the results of previous action plan implementation. Provide evidence of improvement based on analysis of the results.

Not able to address this for this cycle because there are no results from previous action plan that aligns with the major changes in our curriculum in Fall 2015 and revised Student Learning Outcomes and Program Objectives this cycle.

#### Technology Use Part 1.

## State/explain the role of technology in the discipline and outcomes related to technology.

Technology is an integral part of both our online and on-campus Construction Engineering Technology degree program. Our program now requires students to have a laptop, has a classroom with computer systems to accommodate 35 on-campus students, and also has a secure computer lab for students in our major to access with their USM student ID card. The lab has all the specialty software used in the major available for students to use in the event they have a need. Both online and on-campus students complete assignments in all courses offered by the major applying major-specific software to submitting assignments. Both faculty and students are required to be proficient using the university online Learning Management System (LMS) in order to deliver fully online course or course supplements for on-campus courses. Students enrolled in the Surveying (building layout) course use high-tech surveying equipment and instruments during class so they receive hands-on experience using the technology specific to that skill.

#### Technology Use Part 2.

Develop a narrative to support Technology Use Part 1 by providing program assessment results (if applicable), examples of technology being used to enhance student learning, examples of technology being used to meet program objectives/outcomes, and examples of providing access to and training in the use of technology.

The Construction Engineering Technology degree program has classroom and lab space that is equipped with computer systems with software installed used by the major. Our students are also able to acquire a student license for AutoCAD that they may install on their personal computer system. Having AutoCAD installed on their personal computer increases the time dedicated to learning the software and improving assignment quality. The lab has all the specialty software used in the major available for students to access in the event they have a need. Some of the specialized software students are expected to use upon graduation include: AutoCAD, Revit, Navisworks, Sketchup, WinEst, Onscreen Takeoff, and Microsoft Office. Exposure to software used in the industry will allow our graduating students to make the transition to the workplace, be productive, and able to contribute to employer goals by not requiring extensive, time-consuming training by their employers. Both online and on-campus students complete assignments in all courses offered by

the major applying major-specific software to submitting assignments. Both faculty and students are required to be proficient using the university online Learning Management System (LMS) in order to deliver fully online course supplements for on-campus courses. Both faculty and upper class student tutors provide hands-on assistance in the computer lab to students struggling with software used in major courses. Classroom lectures are captured using Canvas and posted for students to be able to review over again in the event that they did not fully understand during the class meeting that covered the content. Faculty also offered online help sessions for both on-campus and online students who may need additional instruction in a course.

### **Detailed Assessment Report**

## 2016-2017 Industrial Engineering Technology BS

As of: 10/15/2017 04:00 PM EDT (Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)

## Mission / Purpose

The mission of the Industrial Engineering Technology program is to produce graduates who can easily make the transition from the university to planning and supervisory positions in the workforce, particularly that of the industrial sector, including manufacturing and service industries. In light of this, courses are infused with industrial applications and students are required to study problems identified in local industries. In their senior project course, students frequently interface with local industry and, under the guidance of faculty, analyze and solve problems that have real-world applications.

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

#### SLO 1: SLO01 -- ETAC-ABET General Criteria a

IET 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. (ETAC-ABET General Criteria 'a')

#### SLO 2: SLO02 -- ETAC-ABET General Criteria b

IET 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. (ETAC-ABET General Criteria 'b')

#### SLO 3: SLO03 -- ETAC-ABET General Criteria c

IET 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. (ETAC-ABET General Criteria 'c')

## SLO 4: SLO04 -- ETAC-ABET General Criteria d

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

#### SLO 5: SLO05 -- ETAC-ABET General Criteria e

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

#### SLO 6: SLO06 -- ETAC-ABET General Criteria f

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

#### SLO 7: SLO07 -- ETAC-ABET General Criteria g

IET students will have 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. (ETAC-ABET General Criteria 'g')

## SLO 8: SLO08 -- ETAC-ABET General Criteria h

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

## SLO 9: SLO09 -- ETAC-ABET General Criteria i

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

## SLO 10: SLO10 -- ETAC-ABET General Criteria j

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

## SLO 11: SLO11 -- ETAC-ABET General Criteria k

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

## SLO 12: SLO12 -- ETAC-ABET Program Criteria a

IET graduates must demonstrate the ability to accomplish the integration of systems using appropriate analytical, computational, and application practices and procedures. (ETAC-ABET Program Specific Criteria 'a')

## SLO 13: SLO13 -- ETAC-ABET BS Criteria b

IET graduates must demonstrate the ability to apply knowledge of probability, statistics, engineering economic analysis and cost control, and other technical sciences and specialties necessary in the field of industrial engineering technology. (ETAC-ABET Baccalaureate Degree Program Specific Criteria 'b')

## Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

#### **O/O 14: SO14--RETENTION**

The Construction Engineering Technology program will use the "retention of all students enrolled by academic program" data available on the Institutional Research website to track the percentage of students retained or graduated 1 year later. Retention data will include both "retained in original academic program" and "degree already awarded in original program" data.

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

## **AEC 390 Engineering Economics**

Some of the IET and BCT students missed at least 1 or 2 quizzes and 1 assignments because either they didn't see the quiz posted or missed the deadline.

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

Priority: High

Implementation Description: A more rigorous reminder system should be introduced to increase the level of awareness of students.

Responsible Person/Group: MD. Sarder

#### **IET 406 Industrial Automation**

Action necessary for Project (2): Instructor make sure students understand the requirement, due date & desired content for the project

Established in Cycle: 2010-2011

Implementation Status: In-Progress

Priority: High

Responsible Person/Group: Md. Rahman

#### **IET Coursework Action Plans**

AEC 132 FF SP14 Sketchbook Small sample size, similar to BCT comments CAD Exercises Small sample size, ,monitor Quizzes Small sample size, monitor Final Exercise 14/22 ACT-BCT Students opted not to submit the final or submitted it grossly incomplete; Monitor, prepare students better for the reality of a culmulative final & time commitment; Final Exam 13/22 Students opted not to submit the final or submitted it grossly incomplete; Monitor, prepare students better for the reality of a culmulative final & time commitment IET 406 ONL SU13 1 Final Exam Few students missed critical analytical problems; will provide a supplementary note with additional analytical problems 4 HW Incomplete submission of assignments made lower grade; remind students prior to assignment submission 1 Project Will provide a sample project for students to understand the project requirements, data and quality of work IET 472 ONL SU13 1 Final Exam Small number of student did not complete final exam; remind students prior to exam due date IET 472 ONL SU13 1 Midterm Remind students studying for midterm exams and schedule 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Guide students how to collect data, requirements of a simulation model, and report writing via supplementary document. IET 409 ONL SP14 1 Midterm small sample in this case; just monitor 4 Project small sample in this case; just monitor IET 350 ONL SP14 1 Midterm Did not submit exam in due time; remind students midterm exam schedule and due date 2 Final Exam Few students missed critical analytical problems; Provide a supplementary note with additional analytical problems 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Will provide a sample project for students to understand the project requirements, data and quality of work IET 302 ONL FA13 1 Midterm Two students submitted incomplete exam; remind students studying for midterm exams 2 Final Exam Few students missed critical analytical problems; Provide a supplementary note with additional analytical problems 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Guide students the requirements of the project, data collection and analysis via a sample project IET 370 FF SU13 Mini 4. Homework\* \* This assignment was optional and two students opted out IET 370 FF SP14 Mini 4. Homework \*\* Two of the IET students missed the deadline due to their personal issues. Told them to communicate with me prior to deadline.

Established in Cycle: 2013-2014 Implementation Status: Planned

Priority: High

Responsible Person/Group: MD Sarder (Coordinator)

#### IET Coursework Action Plans

AEC 132 FF SP14 Sketchbook Small sample size, similar to BCT comments CAD Exercises Small sample size, .monitor Quizzes Small sample size, monitor Final Exercise 14/22 ACT-BCT Students opted not to submit the final or submitted it grossly incomplete; Monitor, prepare students better for the reality of a culmulative final & time commitment; Final Exam 13/22 Students opted not to submit the final or submitted it grossly incomplete; Monitor, prepare students better for the reality of a culmulative final & time commitment IET 406 ONL SU13 1 Final Exam Few students missed critical analytical problems; will provide a supplementary note with additional analytical problems 4 HW Incomplete submission of assignments made lower grade; remind students prior to assignment submission 1 Project Will provide a sample project for students to understand the project requirements, data and quality of work IET 472 ONL SU13 1 Final Exam Small number of student did not complete final exam; remind students prior to exam due date IET 472 ONL SU13 1 Midterm Remind students studying for midterm exams and schedule 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Guide students how to collect data, requirements of a simulation model, and report writing via supplementary document. IET 409 ONL SP14 1 Midterm small sample in this case; just monitor 4 Project small sample in this case; just monitor IET 350 ONL SP14 1 Midterm Did not submit exam in due time; remind students midterm exam schedule and due date 2 Final Exam Few students missed critical analytical problems; Provide a supplementary note with additional analytical problems 3 HW Small number of student did not complete all assignment, remind students prior to assignment submission date 4 Project Will provide a sample project for students to understand the project requirements, data and quality of work IET 302 ONL FA13 1 Midterm Two students submitted incomplete exam; remind students studying for midterm requirements, data and quality of work IET 302 ONE FATS I middent wo students submitted morniple exam, refining students missed critical analytical problems; Provide a supplementary note with additional analytical problems 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Guide students the requirements of the project, data collection and analysis via a sample project IET 370 FF SU13 Mini 4. Homework\* \* This assignment was optional and two students opted out IET 370 FF SP14 Mini 4. Homework \*\* Two of the IET students missed the deadline due to their personal issues. Told them to communicate with me prior to deadline.

Established in Cycle: 2013-2014 Implementation Status: Planned

Priority: High

Responsible Person/Group: MD Sarder (Coordinator)

## **IET Coursework Action Plans**

AEC 132 FF SP14 Sketchbook Small sample size, similar to BCT comments CAD Exercises Small sample size, ,monitor Quizzes Small sample size, monitor Final Exercise 14/22 ACT-BCT Students opted not to submit the final or submitted it grossly incomplete; Monitor, prepare students better for the reality of a culmulative final & time commitment; Final Exam 13/22 Students opted not to submit the final or submitted it grossly incomplete; Monitor, prepare students better for the reality of a culmulative final & time commitment IET 406 ONL SU13 1 Final Exam Few students missed critical analytical problems; will provide a supplementary note with additional analytical problems 4 HW Incomplete submission of assignments made lower grade; remind students prior to assignment submission 1 Project Will provide a sample project for students to understand the project requirements, data and quality of work IET 472 ONL SU13 1 Final Exam Small number of student did not complete final exam; remind students prior to exam due date IET 472 ONL SU13 1 Midterm Remind students studying for midterm exams and schedule 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Guide students how to collect data, requirements of a simulation model, and report writing via supplementary document. IET 409 ONL SP14 1 Midterm small sample in this case; just monitor 4 Project small sample in this case; just monitor IET 350 ONL SP14 1 Midterm Did not submit exam in due time; remind students midterm exam schedule and due date 2 Final Exam Few students missed critical analytical problems; Provide a supplementary note with additional analytical problems 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Will provide a sample project for students to understand the project assignment, refining students prior to assignment submission date 4 Project run provide a sample project for students to an indistant and project for students and quality of work IET 302 ONL FA13 1 Midterm Two students submitted incomplete exam; remind students studying for midterm exams 2 Final Exam Few students missed critical analytical problems; Provide a supplementary note with additional analytical problems 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Guide students the requirements of the project, data collection and analysis via a sample project IET 370 FF SU13 Mini 4. Homework\* \* This assignment was optional and two students opted out IET 370 FF SP14 Mini 4. Homework \*\* Two of the IET students missed the deadline due to their personal issues. Told them to communicate with me prior to deadline.

Established in Cycle: 2013-2014 Implementation Status: Planned

Priority: High

Responsible Person/Group: MD Sarder (Coordinator)

#### **IET Coursework Action Plans**

AEC 132 FF SP14 Sketchbook Small sample size, similar to BCT comments CAD Exercises Small sample size, monitor Quizzes Small sample size, monitor Final Exercise 14/22 ACT-BCT Students opted not to submit the final or submitted it grossly incomplete; Monitor, prepare students better for the reality of a culmulative final & time commitment; Final Exam 13/22 Students opted not to submit the final or submitted it grossly incomplete; Monitor, prepare students better for the reality of a culmulative final & time commitment IET 406 ONL SU13 1 Final Exam Few students missed critical analytical problems; will provide a supplementary note with additional analytical problems 4 HW Incomplete submission of assignments made lower grade; remind students prior to assignment submission 1 Project Will provide a sample project for students to understand the project requirements, data and quality of work IET 472 ONL SU13 1 Final Exam Small number of student did not complete final exam; remind students prior to exam due date IET 472 ONL SU13 1 Midterm Remind students studying for midterm exams and schedule 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Guide students how to collect data, requirements of a simulation model, and report writing via supplementary document. IET 409 ONL SP14 1 Midterm small sample in this case; just monitor 4 Project small sample in this case; just monitor IET 350 ONL SP14 1 Midterm Did not submit exam in due time; remind students midterm exam schedule and due date 2 Final Exam Few students missed critical analytical problems; Provide a supplementary note with additional analytical problems 3 HW Small number of students to understand the project

requirements, data and quality of work IET 302 ONL FA13.1 Midterm Two students submitted incomplete exam: remind students studying for midterm exams 2 Final Exam Few students missed critical analytical problems; Provide a supplementary note with additional analytical problems 3 HW Small number of student did not complete all assignment; remind students prior to assignment submission date 4 Project Guide students the requirements of the project, data collection and analysis via a sample project IET 370 FF SU13 Mini 4. Homework\* \* This assignment was optional and two students opted out IET 370 FF SP14 Mini 4. Homework \*\* Two of the IET students missed the deadline due to their personal issues. Told them to communicate with me prior to deadline.

Established in Cycle: 2013-2014 Implementation Status: Planned

Priority: High

Responsible Person/Group: MD Sarder (Coordinator)

#### IET OBJ14 Action Plan

Action plan regarding improving IET retention: Majority of the IET students are non-traditional and are responsible for their family expenses. We will create a structured program "Industry Partner Network (PIN)" for our students to provide internships and professional mentorships. Our goal is to put 25% of our students in PIN program by 2015 to improve their retention rate. As part of the USM's initiative to improve retention, IET program received \$6,700 to create a Partner Industry Network (PIN) of 100 local industries who will provide internships, jobs, data access to our capstone students, and professional mentorships. This PIN will be involved in our Industry Advisory Council and help us recruit new students.

Established in Cycle: 2013-2014 Implementation Status: Planned

Priority: High

Responsible Person/Group: Dr. M.D. Sarder

#### **Increase Exit Survey Sample**

Because student degree plan checks did not include completion of the department exit survey, the sample for this measure was small.

Established in Cycle: 2013-2014 Implementation Status: Planned

Priority: High

Implementation Description: Require degree check for exit survey

Responsible Person/Group: Keith Sylvester (Director); MD Sarder (Coordinator)

Please see IET Action Plan Report attached in document management

Established in Cycle: 2014-2015 Implementation Status: Planned

Priority: High

#### IET Action Plans

Please see IET Action Plan Report attached in document management

Established in Cycle: 2014-2015 Implementation Status: Planned

Priority: High

## **Detailed Assessment Report**

2016-2017 Interior Design BS

As of: 10/15/2017 04:00 PM EDT (Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)

## Mission / Purpose

The mission of the Interior Design Program at Southern Miss is to provide a competitive, accredited education that nurtures student success in a welcoming environment in order to produce ethically responsible design professionals who think critically and create design solutions that address occupant health, safety and welfare

#### Philosophy:

The Interior Design Program values an experiential learning philosophy in which students learn by doing. We believe students should carry a heavy responsibility in their education, and we integrate students in the creation of this knowledge through active participation. Students must read, write and be able to discuss while engaging in critical thinking and problem solving activities. To achieve this philosophy, we promote research-based learning that integrates prior knowledge applied with new knowledge and skill sets as introduced through a linear course sequence. We utilize active-based learning in the classroom through the use of technology, games, and reward systems. We cultivate a dynamic learning environment that promotes cooperation and cross-learning between cohorts. Our learning environments offer a welcoming and safe place to experiment and collaborate with multiple disciplines and incorporates real world projects that provide opportunities for interaction with professionals in the field and related industries.

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

#### SLO 1: Professional Design Knowledge

Graduates will have attained the depth and breadth of professional design knowledge required to participate in entry level positions in a variety of interior design related professions. Professional design knowledge includes: building codes, accessibility standards, material selection and estimation, and writing product specifications.

#### **Related Measures**

## M 1: Internship Mentor Evaluation

Student Interns are evaluated using a program-designed rubric by the professional employer/mentor to assess the student's 1) professional design knowledge, 2) computer knowledge, 3) design fundamentals, and 4) professional values in the areas of: a) client interaction, b) dependability, c) initiative, and d) attitude. Assessment by the mentor will be restricted to observations while the student is participating in a required structured professional internship with the firm. (ID 442, Interior Design Internship or AEC 496 Industrial Internship).

Source of Evidence: Field work, internship, or teaching evaluation

#### Connected Document

Sam<u>ple Mentor Evaluation - Blank</u>

75% of internship students will earn a total mean score of 3.5/5 or higher in each category on an evaluation completed by the professional mentor that assesses 1) professional design knowledge (Professional knowledge includes building codes, material selection, specifications, accessibility

#### Finding (2016-2017) - Target: Met

Fall 2016: Course Not Offered Spring 2017: Course Not Offered Summer 2017: N = 6 (100% 6/6) scored a 3.5/5 (70%) or higher on the mentor evaluations in the category of 1) Professional Design Knowledge. (Professional knowledge includes building codes, material selection,

specifications, accessibility standards and estimating.)

#### Connected Document

Mentor Survey Results - 2017

### M 2: Interior Design Exit Survey

Graduating seniors will complete an exit survey relevant to preparation for entry-level employment and/or graduate school.

Source of Evidence: Exit interviews with grads/program completers

#### **Connected Document**

Sample Exit Survey - Blank

#### Target:

75% or more of graduating seniors will agree or strongly agree that they feel prepared to obtain entry-level employment based on the skills and knowledge gained in their major.

#### Finding (2016-2017) - Target: Met

Fall 2016: Survey not administered Spring 2017: Survey not administered Summer 2017: N =7 100% (7/7) graduating seniors that completed the exit survey agree or strongly agree they are prepared to obtain entry-level employment based on the skills and knowledge gained from the interior design major. Note: The program had 8 graduates with one not responding to the exit survey.

## Finding (2016-2017) - Target: Met

Fall 2016: Survey not administered Spring 2017: Survey not administered Summer 2017: N =7 100% (7/7) graduating seniors that completed the exit survey agree or strongly agree they are prepared to obtain entry-level employment based on the skills and knowledge gained from the interior design major. Note: The program had 8 graduates with one not responding to the exit survey.

## M 7: Senior Portfolio Review

Graduating seniors will submit a design portfolio for faculty review illustrating competency in 1) professional design knowledge 2) computer competency 3) design fundamentals and 4) verbal and non-verbal communication

Source of Evidence: Portfolio, showing skill development or best work

#### **Connected Document**

Senior Portfolio Rubric

#### Target

80% of graduating seniors will score at least 17.5/25 or 70% using a faculty designed rubric demonstrating competence in 1) professional design knowledge (material selection, codes, specifications, accessibility, etc.)

## Finding (2016-2017) - Target: Not Met

Fall 2016: N = 9 78% (7/9) students scored at least a 17.5/25 or 70% using a faculty designed rubric demonstrating competence in 1) professional design knowledge (material selection, codes, specifications, accessibility, etc.) Spring 2017: Course not offered Summer 2017: Course not offered

#### **Connected Document**

Portfolio Findings - 2017

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

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

#### Portfolio Supplement

Established in Cycle: 2013-2014

Students enrolled in ID 438 Portfolio Presentation have not been including adequate examples of sketching and drafting skill set...

#### M 9: Cost Estimating

Students enrolled in ID 232, Interior Materials and Installation Methods will demonstrate competency in the estimation of interior finish materials by accurately preparing detailed client estimations for flooring and wall coverings.

Source of Evidence: Academic direct measure of learning - other

#### Target

80% of students will score a 70/100 on an estimating exam calculating flooring and wall covering requirements for a small interior project.

## Finding (2016-2017) - Target: Met

Fall 2016: Course not offered Spring 2017: N= 24 100% (24/24) of students enrolled in ID 232 Interior Materials scored a 70/100 on an estimating exam calculating flooring and wall covering requirements for a small interior project. Summer 2017: Course not offered

#### **SLO 2: Computer Competency**

Graduates will have demonstrated minimum proficiency in design related business software used in commercial and residential interior design. (ie: word processing, spreadsheets, slide shows, digital design/drafting, photo editing, etc.)

## **Related Measures**

## M 1: Internship Mentor Evaluation

Student Interns are evaluated using a program-designed rubric by the professional employer/mentor to assess the student's 1) professional design knowledge, 2) computer knowledge, 3) design fundamentals, and 4) professional values in the areas of: a) client interaction, b) dependability, c) initiative, and d) attitude. Assessment by the mentor will be restricted to observations while the student is participating in a required structured professional internship with the firm. (ID 442, Interior Design Internship or AEC 496 Industrial Internship).

Source of Evidence: Field work, internship, or teaching evaluation

## **Connected Document**

Sample Mentor Evaluation - Blank

#### Target:

75% of internship students will earn a total mean score of 3.5/5 or higher in each category on an evaluation completed by the professional mentor that assesses 2) Computer knowledge (to include 2D digital drafting programs, word processing, spread sheets, slide shows and 3D drawing and rendering programs.)

## Finding (2016-2017) - Target: Met

Fall 2016: Course Not Offered Spring 2017: Course Not Offered Summer 2017: N = 6 100% (6/6) scored a 3.5/5 (70%) on the mentor evaluations in the category of 2) Computer Knowledge (to include 2D digital drafting programs, word processing, spread sheets, slide shows and 3D drawing and rendering programs.)

## **Connected Document**

Mentor Survey Results - 2017

## M 3: Computer Application Proficiency

Students enrolled in ID 242, Portfolio Development, will demonstrate proficiency and understanding of various software media used by design professionals to communicate with clients.

Source of Evidence: Project, either individual or group

80% of students will score at least a 70/100 on each of the following components 1) portfolio component using photo editing/graphic software 2) the resume component using word processing software 3) the website component using publishing software.

#### Finding (2016-2017) - Target: Met

Fall 2016: Course not offered Spring 2017: N = 13 92% (12/13) students scored at least a 70/100 on 1) portfolio component using photo editing/graphic software; 92% (12/13) on 2) the resume component using word processing software; 92% (12/13) on 3) the website component using publishing software

#### M 4: Digital Drawing/Drafting Proficiency

Students enrolled in ID 210/ID 311, CAD for Interior Design and BIM for Interior Design will demonstrate minimum proficiency and understanding of digital drawing/design software used in the residential and commercial design professions.

Source of Evidence: Project, either individual or group

#### Target:

80% of students enrolled in ID-210 CAD for Interior Design will score at least 70/100 on a project using computer aided design software. 80% of student enrolled in ID 311 BIM for Interior Design will score at least a 70/100 on a project using 3D modeling/BIM software.

#### Finding (2016-2017) - Target: Partially Met

Fall 2016: (ID 210) CAD for Interior Design N=22 64% (14/22) scored at least a 70/100 on a project using computer aided design software. Spring 2017: ID 210 not offered Summer 2017: ID 210 course not offered Fall 2016: ID 311 not offered Spring 2017 (ID 311) BIM for Interior Design N = 11 90% (10/11) of students enrolled in ID 311 scored 70% (280/400 points) on a project using 3D modeling/BIM software Summer 2017: ID 311 not offered

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

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

#### **ID 210 Computer Competency**

Established in Cycle: 2015-2016

Due to shortage in faculty, ID 210 CAD for Interior Design was not offered, therefore assessment information was not obtained....

#### **CAD Intervention**

Established in Cycle: 2016-2017

To improve the performance of our beginning students enrolled in the CAD class (ID 210/AEC 132), the instructor of record for ...

#### M 7: Senior Portfolio Review

Graduating seniors will submit a design portfolio for faculty review illustrating competency in 1) professional design knowledge 2) computer competency 3) design fundamentals and 4) verbal and non-verbal communication

Source of Evidence: Portfolio, showing skill development or best work

#### **Connected Document**

Senior Portfolio Rubric

#### Target

80% of graduating seniors will score at least 17.5/25 or 70% using a faculty designed rubric demonstrating competence in 2) computer competency (ie: digital drafting, rendering and photo editing software)

#### Finding (2016-2017) - Target: Met

Fall 2016: N = 9 89% (8/9) students scored at least a 17.5/25 or 70% using a faculty designed rubric demonstrating competence in 2) computer competency (ie: digital drafting, rendering, and photo editing software)

#### **Connected Document**

Portfolio Findings - 2017

## SLO 3: Design Fundamentals

Graduates will have a foundation in the fundamentals of art and design, theories of design, green design, history of interiors and human behavior.

## Related Measures

## M 1: Internship Mentor Evaluation

Student Interns are evaluated using a program-designed rubric by the professional employer/mentor to assess the student's 1) professional design knowledge, 2) computer knowledge, 3) design fundamentals, and 4) professional values in the areas of: a) client interaction, b) dependability, c) initiative, and d) attitude. Assessment by the mentor will be restricted to observations while the student is participating in a required structured professional internship with the firm. (ID 442, Interior Design Internship or AEC 496 Industrial Internship).

Source of Evidence: Field work, internship, or teaching evaluation

## **Connected Document**

Sample Mentor Evaluation - Blank

#### Target

75% of internship students will earn a total mean score of 3.5/5 or higher on an evaluation completed by the professional mentor that assesses the intern's knowledge of 3) Design fundamentals (including elements and principles of design, design theory, green/sustainable design and human behavior.)

#### Finding (2016-2017) - Target: Met

Fall 2016: Course not offered Spring 2017: Course not offered Summer 2017: N = 6 100% (6/6) scored a 3.5/5 (70%) or higher on the mentor evaluations in the category of 3) Design Fundamentals (including elements and principles of design, design theory, green/sustainable design and human behavior.)

## **Connected Document**

Mentor Survey Results - 2017

#### M 7: Senior Portfolio Review

Graduating seniors will submit a design portfolio for faculty review illustrating competency in 1) professional design knowledge 2) computer competency 3) design fundamentals and 4) verbal and non-verbal communication

Source of Evidence: Portfolio, showing skill development or best work

## **Connected Document**

Senior Portfolio Rubric

#### Target:

80% of graduating seniors will score at least 17.5/25 or 70% using a faculty designed rubric demonstrating competence in 3) design fundamentals (ie: elements and principles of design, design theory, green design and human behavior)

## Finding (2016-2017) - Target: Met

Fall 2016 N = 9 100% (9/9) scored at least a 17.5/25 or 70% using a faculty designed rubric demonstrating competence in 3) design fundamentals (ie: elements and principles of design, design theory, green design and human behavior) Spring 2017: Course not offered

## Connected Document

Portfolio Findings - 2017

#### M 8: Elements and Principles of Design

Students enrolled in ID 140, Interior Design I will demonstrate an understanding of how the elements and principles of design are utilized to create successful interiors in both residential and commercial spaces.

Source of Evidence: Project, either individual or group

#### Target:

80% of students enrolled in ID 140, Interior Design I will score a 140/200 (70%) on the Design Notebook project.

### Finding (2016-2017) - Target: Met

Fall 2016: N=29 90% (26/29) of students enrolled in ID 140 Interior Design I scored a minimum of 140/200 (70%) or higher on the Design Notebook Assignment Spring 2017: Course not offered Summer 2017: Course not offered

#### M 11: Historic Design

Students enrolled in ID 325, History of Interior Furnishings and Decorative Arts will demonstrate the ability to apply their knowledge of period design to a modern interior.

Source of Evidence: Project, either individual or group

#### Target:

80% of students will score a 70/100 on the Historic Research Project by accurately identifying their knowledge of a specific time period to a modern interior

#### Finding (2016-2017) - Target: Not Reported This Cycle

Fall 2016: Course not offered Spring 2017: Course not offered Summer 2017: Course not offered Course will be offered spring 2018

#### SLO 4: Professional Values

Graduates will develop the attitudes, traits, and values of professional responsibility, accountability, and effectiveness.

#### Related Measures

#### M 1: Internship Mentor Evaluation

Student Interns are evaluated using a program-designed rubric by the professional employer/mentor to assess the student's 1) professional design knowledge, 2) computer knowledge, 3) design fundamentals, and 4) professional values in the areas of: a) client interaction, b) dependability, c) initiative, and d) attitude. Assessment by the mentor will be restricted to observations while the student is participating in a required structured professional internship with the firm. (ID 442, Interior Design Internship).

Source of Evidence: Field work, internship, or teaching evaluation

#### **Connected Document**

Sample Mentor Evaluation - Blank

#### Target:

75% of internship students will earn a total mean score of 3.5/5 or higher in each category on an evaluation completed by the professional mentor that assesses 4) professional values in the areas of a) client interaction b) dependability c) initiative and d) attitude.

## Finding (2016-2017) - Target: Met

Fall 2016: Course not offered Spring 2017: Course not offered Summer 2017: N = 6 100% (6/6) scored a 3.5/5 (70%) or higher on the mentor evaluations in the category of 4) Professional Values in the area of a) Client Interaction. 100% (6/6) scored a 3.5/5 (70%) or higher on the mentor evaluations in the category of 4) Professional Values in the area of b) Dependability. 83% (5/6) scored a 3.5/5 (70%) or higher on the mentor evaluations in the category of 4) Professional Values in the area of c) Initiative. 100% (6/6) scored a 3.5/5 (70%) or higher on the mentor evaluations in the category of 4) Professional Values in the area of d) Attitude.

#### **Connected Document**

Mentor Survey Results - 2017

## M 5: Examination Ethics Questions

Students enrolled in ID 441, Professional Practices and Procedures, are introduced to professional ethics and will understand this concept.

Source of Evidence: Standardized test of subject matter knowledge

#### Target:

80% of students enrolled in ID 441 Professional Practices and Procedures will score a 70/100 or better on an exam/assignment designed to measure their understanding of the concept of professional ethics.

## Finding (2016-2017) - Target: Not Reported This Cycle

Fall 2016: Course not offered Spring 2017: Course not offered Summer 2017: Course not offered Course will be offered in spring 2018.

#### M 6: Professionalism Assignment

Students enrolled in ID 439/440, Contract Design I and II will exhibit the traits and values of a professional interior designer.

Source of Evidence: Performance (recital, exhibit, science project)

#### Target:

75% of students will earn a 70/100 on a semester long project documenting 1) Time Management: minimum score 14/20, 2) Reliability: minimum score 14/20, 3) Accountability: minimum score 14/20, 4) Self Motivation: minimum score 7/10 and 5) Professional Service: minimum score 21/30.

## Finding (2016-2017) - Target: Met

Fall 2016: N=11 ID 440 Contract Design II (Senior Cohort) 100% (11/11) of students enrolled in ID 440, Contract Design II earned a 70/100 or higher on the professionalism project. 100% (11/11) scored a 14/20 in time management; 100% (11/11) earned a 14/20 in reliability; 100% (11/11) earned a 14/20 in accountability; 100% (11/11) earned a 7/10 in self-motivation and 81% (9/11) earned a 21/30 in service. Spring 2017: N=9 ID 439 Contract Design I (Junior Cohort) 89% (8/9) of students enrolled in ID 439, Contract Design I earned a 70 or higher on the professionalism project. 89% (8/9) scored a 14/20 in time management; 89% (8/9) earned a 14/20 in reliability; 89% (8/9) earned a 14/20 in accountability; 89% (8/9) earned a 7/10 in self-motivation and 89% (8/9) earned a 21/30 in service.

#### **Connected Document**

Professionalism Findings - 2017

## SLO 5: Design Communication (Verbal and Nonverbal)

Students will have developed competence in design communication to include non-verbal techniques such as drafting, sketching, rendering and visual boards as well as verbal communication techniques such as individual and/or group oral presentations.

#### Relevant Associations:

2017 CIDA Standard 9

## Related Measures

## M 3: Computer Application Proficiency

Students enrolled in ID 242, Portfolio Development, will demonstrate proficiency and understanding of various software media used by design professionals to communicate with clients.

Source of Evidence: Project, either individual or group

## Target:

80% of students enrolled in ID 242 Portfolio Presentation will score at least a 70/100 on the verbal and nonverbal presentation component

#### Finding (2016-2017) - Target: Met

Fall 2016: Course not offered Spring 2017 N = 13 85% (11/13) students enrolled in ID 242 Portfolio Presentation scored at least a 70/100 on the verbal and nonverbal presentation component.

## M 4: Digital Drawing/Drafting Proficiency

Students enrolled in ID 210/ID 311, CAD for Interior Design and BIM for Interior Design will demonstrate minimum proficiency and understanding of digital drawing/design software used in the residential and commercial design professions.

Source of Evidence: Project, either individual or group

80% of students enrolled in ID-210 CAD for Interior Design will score at least 70/100 on a project using computer aided design software, 80% of student enrolled in ID 311 BIM for Interior Design will score at least a 70/100 on a project using 3D modeling/BIM software.

Finding (2016-2017) - Target: Partially Met
Fall 2016: (ID 210) CAD for Interior Design N=22 64% (14/22) scored at least a 70/100 on a project using computer aided design software.
Spring 2017: ID 210 not offered Summer 2017: ID 210 course not offered Fall 2015: ID 311 not offered Spring 2017 (ID 311) BIM for Interior Design N = 11 90% (10/11) of students enrolled in ID 311 scored 70% (280/400 points) on a project using 3D modeling/BIM software Summer 2017: ID 311 not offered

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

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

#### **ID 210 Computer Competency**

Established in Cycle: 2015-2016

Due to shortage in faculty, ID 210 CAD for Interior Design was not offered, therefore assessment information was not obtained....

#### **CAD Intervention**

Established in Cycle: 2016-2017

To improve the performance of our beginning students enrolled in the CAD class (ID 210/AEC 132), the instructor of record for ...

Graduating seniors will submit a design portfolio for faculty review illustrating competency in 1) professional design knowledge 2) computer competency 3) design fundamentals and 4) verbal and non-verbal communication

Source of Evidence: Portfolio, showing skill development or best work

#### Connected Document

Senior Portfolio Rubrio

80% of graduating seniors will score at least 17.5/25 or 70% using a faculty designed rubric demonstrating competence in 4) non-verbal communication (ie: drafting, sketching, rendering and visual presentation)

#### Finding (2016-2017) - Target: Not Met

Fall 2016: N = 9 67% (6/9) of students scored at least a 17.5/25 or 70% using a faculty designed rubric demonstrating competence in 4) nonverbal communication (ie: drafting, sketching, rendering and visual presentation) Spring 2017: Course not offered

#### **Connected Document**

Portfolio Findings - 2017

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

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

#### Portfolio Supplement

Established in Cycle: 2013-2014

Students enrolled in ID 438 Portfolio Presentation have not been including adequate examples of sketching and drafting skill set...

Students enrolled in ID 140, Interior Design I will demonstrate competency in presenting a team oral presentation.

Source of Evidence: Presentation, either individual or group

## Target:

80% of students will score 28/40 (70%) on a team oral presentation component of a research assignment on cultural design differences.

## Finding (2016-2017) - Target: Met

Fall 2016: N= 29 97% (28/29) of students enrolled in ID 140 Interior Design I scored at least a 28/40 (70%) on the team oral presentation component of the Cultural Research Assignment. Spring 2017: Course not offered Summer 2017: Course not offered

## M 12: 3D Sketching

Students enrolled in ID 238 Visual Communication in Interior Design will demonstrate competency in graphically communicating design ideas in a final semester project consisting of 3D sketches that describe their final design work.

Source of Evidence: Project, either individual or group

80% of students enrolled in ID 238 Visual Communication in Interior Design scored a minimum of 70/100 on a 3D sketching assignment.

## Finding (2016-2017) - Target: Met

Fall 2016: N = 18 94% (17/18) students enrolled in ID 238 Visual Communication in Interior Design scored a minimum of 70/100 on a 3D sketching assignment

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

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

## Sketching-Ideation

Established in Cycle: 2014-2015

All faculty should require students to produce 3D ideation work prior to beginning the computerized drawings. Students tend t...

## Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

## O/O 6: Recruitment and Retention

The Interior Design Program will successfully retain its majors.

#### **Related Measures**

### M 13: Retention efforts

The retention rates from the spring semester to the fall semester will be determined with the help of Institutional Research to determine the number of students returning to the ID program each fall semester. The retention rate is determined by identifying the number of active majors enrolled in ID courses during the spring semester as compared to the number returning to the ID major in the fall. Graduates are not included in this rate.

Source of Evidence: Administrative measure - other

## Target:

70% of students enrolled in the Interior Design Program during the spring semester will return for the fall semester.

#### Finding (2016-2017) - Target: Met

Spring 2017: N = 32 (number of active ID majors eligible to enroll in the fall) Fall 2017: N = 27 (number of returning students from the spring semester) 84% of eligible students from the spring semester continued their enrollment in the Interior Design Program during the fall 2017

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

#### Increase Enrollment

Established in Cycle: 2016-2017

The Interior Design Program plans to increase its freshman enrollment by 10% annually by participating in high school recruitmen...

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

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

#### Portfolio Supplement

Students enrolled in ID 438 Portfolio Presentation have not been including adequate examples of sketching and drafting skill sets in their senior portfolio. Beginning in fall 2014, students will be asked to submit a supplemental sample of these skills as a seperate document that does not get included in their professionally printed final portfolio.

Established in Cycle: 2013-2014 Implementation Status: In-Progress

Priority: High

## Relationships (Measure | Outcome/Objective):

Measure: Senior Portfolio Review | Outcome/Objective: Design Communication (Verbal and Nonverbal)

| Professional Design Knowledge Projected Completion Date: 12/2014

Responsible Person/Group: Instructor of record for ID 438

#### **Estimating**

The Interior Design Program will continue to offer opportunities to estimate flooring and wall finishes in ID 232 Interior Materials and Installation Methods. This class is offered every other year and will not be offered again until spring 2017. For the next offering, the instructor of record will provide additional homework and in-class assignments as well as opportunities for quest speakers to demonstrate their methods for the estimation of materials in order to better prepare the students for the estimation exam. We saw an increase from 76% to 79% from the last time this course was offered.

Established in Cycle: 2014-2015 Implementation Status: Finished

Priority: High

Implementation Description: Require more practice and hand-on experience with practicing professionals

Projected Completion Date: 05/2017

Responsible Person/Group: Instructor of record for ID 232 Interior Materials and Installation Methods

#### Sketching-Ideation

All faculty should require students to produce 3D ideation work prior to beginning the computerized drawings. Students tend to sketch 2D plans and elevations, but do not include volumetric studies in their design process. In addition, sketching will be more emphasized in ID 320 Design Presentation Media to help student overcome their fear of drawing quick 3D studies. By requiring more 3D ideation work in the studio classes, the seniors will have the examples needed to include in their portfolios

Established in Cycle: 2014-2015 Implementation Status: In-Progress

Priority: High

#### Relationships (Measure | Outcome/Objective):

Measure: 3D Sketching | Outcome/Objective: Design Communication (Verbal and Nonverbal)

Implementation Description: Require more 3D Ideation sketching in all ID studios

Projected Completion Date: 02/2016 Responsible Person/Group: All ID Faculty

## Computer Application - ID 242

Action: Locate qualified instructor to teach ID 242 Portfolio Presentation that is familiar with the Adobe Creative Suite.

Established in Cycle: 2015-2016 Implementation Status: Finished

Priority: High

Implementation Description: Hire experienced instructor that can teach Adobe Creative Suite (Illustrator, InDesign and Photoshop)

Projected Completion Date: 09/2016

Responsible Person/Group: ID Program Coordinator and SoC Director

Budget Amount Requested: \$3,000.00 (recurring)

Allow students to go to Speaking Center to pre-record their presentations and let them present the recording to their classmates with a short "live" introduction to set up the recorded presentation.

Established in Cycle: 2015-2016 Implementation Status: In-Progress

Priority: High

Responsible Person/Group: Instructor of record for ID 140

#### **ID 210 Computer Competency**

Due to shortage in faculty, ID 210 CAD for Interior Design was not offered, therefore assessment information was not obtained. Action: Identify and hire an adjunct to leach ID 210 CAD for Interior Design in fall 2016 and provide assessment target information to instructor for next cycle.

Established in Cycle: 2015-2016 Implementation Status: In-Progress

Priority: High

## Relationships (Measure | Outcome/Objective):

**Measure:** Digital Drawing/Drafting Proficiency | **Outcome/Objective:** Computer Competency | Design Communication (Verbal and Nonverbal)

Implementation Description: Locate Adjunct for ID 210

Projected Completion Date: 01/2017

Responsible Person/Group: ID Program Coordinator and SoC Director

#### Budget Amount Requested: \$3,000.00 (recurring)

#### Initiative

Faculty will discuss and provide examples of how to take more initiative during the internship during an internship orientation meeting in the spring 2017

Established in Cycle: 2015-2016 Implementation Status: Finished

Priority: High

Projected Completion Date: 07/2017

Responsible Person/Group: Internship Instructor of Record

#### Internship Orientation

Students will be required to attend an orientation session in the spring prior to enrolling in ID 442 Interior Design Internship. Expectations of professionalism in the workforce will be discussed so students understand what their mentors anticipate regarding client interaction, dependability, initiative and attitude.

**Established in Cycle:** 2015-2016 **Implementation Status:** Finished

Priority: High

Implementation Description: The Instructor of record for ID 442 will hold a 1.5 hour minimum orientation session with students planning to intern

during the next semester.

Projected Completion Date: 08/2017

Responsible Person/Group: ID 442 Interior Design Internship Instructor of Record

#### CAD Intervention

To improve the performance of our beginning students enrolled in the CAD class (ID 210/AEC 132), the instructor of record for this course should take a more hands-on approach and intentionally intervene earlier in the semester when students start to get behind on assignments and projects. Students will be advised to take the face-to-face section, and we will work to cap the section at 20 students in order to have adequate face-to-face contact with the instructor. (Students will also be advised to avoid taking the online section of AEC 132 during their first semester.)

Established in Cycle: 2016-2017 Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Digital Drawing/Drafting Proficiency | Outcome/Objective: Computer Competency

| Design Communication (Verbal and Nonverbal)

Projected Completion Date: 12/2017

Responsible Person/Group: Instructor of Record for ID 210 or AEC 132 (sub class)

Additional Resources: \$3,000 adjunct pay required

#### Increase Enrollment

The Interior Design Program plans to increase its freshman enrollment by 10% annually by participating in high school recruitment events.

Established in Cycle: 2016-2017 Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Retention efforts | Outcome/Objective: Recruitment and Retention

Projected Completion Date: 08/2020

Responsible Person/Group: Program Coordinator

## **Analysis Questions and Analysis Answers**

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

The Interior Design Program is pleased with our 2016-2017 annual assessment seeing significant improvements from the previous year in the areas of verbal and non-verbal communication, time management, and estimating. During the last cycle, the program was relying on inexperienced adjunct faculty and course substitutions at the foundation level resulting in several shortfalls; however, with the addition of a visiting instructor and the return of an experienced adjunct this academic year, the program has met most of its targets this year. Identified program strengths include: Teamwork structures and collaboration between interior design students, different cohorts and other disciplines (collaborated with graphic design) Use of computer technology to include Revit and Adobe Creative Suite (Illustrator, In Design and Photoshop) (Foundation courses: ID 311 and ID 242) Construction documentation of interior detailing and plans (ID 339) Design Fundamentals (elements and principles of design, design theory, human behavior) ID 178, ID 140, ART 111 and ART 112. Understanding human-centered design (ID 178) new course offered fall 2016 Effective communication (written, oral and visual presentations) Knowledge of a broad range of products and materials that support the design intent and support human well-being

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

Overall, the 2016-17 assessment shows significant improvements from the previous year. Weaknesses that were found this cycle include targets for Measure 7: Senior Portfolio Review in which two of the nine seniors submitted portfolios lacking evidence of sketching, hand drafting and sustainable projects. This lack of evidence in their exit portfolios does not indicate a program weaknesses as these areas were identified as program strengths during a recent accreditation visit. While students were asked to provide a supplement to include this documentation, the students did not comply with the request, yet evidence of this work was found in the student work display for the accreditation visitors in April 2017. Time management continues to be an area of concern, but was not identified as a program weakness this cycle. One way this target improved was by beginning the ID 439 Contract Design I project several weeks earlier than past semesters. By recording and posting the building codes lectures online for homework viewing, students were able to begin their commercial project earlier. Another method we have incorporated to help with time management is to team teach between studios. Rather than students being burdened with multiple design projects, we are using the same project when possible in both studio courses. To explain this, for instance, ID 242 Portfolio Development and ID 240 Interior Design II shared the final project in spring 2017 in which students were allowed to learn the Adobe Creative Suite software for their portfolio course by applying it to their final project in Interior Design II studio. This method works well, but only works if faculty agree to work together closely. This method would work well for other pairings such as ID 311 BIM for Interior Design and ID 240 Interior Design II (final project) as well as ID 342 Residential Design II and ID 440 Contract Design II (ASID competition project which has both a residential and commercial component). On last area of weakness that was identified this y

## **Annual Report Section Responses**

#### Program Summary

## Summarize highlights of the past year for this particular academic program. Provide context to an outside reviewer.

The 2016-2017 academic year brought many challenges yet we experienced many positive outcomes. It was an eventful year with the most rewarding experience being the 6-year reaccreditation award from the Council for Interior Design Accreditation (CIDA). The College of Science and Technology along with the School of Construction co-funded a visiting position, Dr. Zina Alaswad, for the Interior Design Program that helped the program achieve its successful accreditation outcome. Without this hire, the program would not have experienced such a positive outcome during its spring 2017 site visit. This visiting position enabled the program coordinator to also receive the needed release time to write the report, prepare the evidence and set up the extensive

student work display. The final decision of our program's reaccreditation was announced in August. The program met 122/123 indicators and was identified with 20 strengths that exceeded the requirements for accreditation. Both the senior and sophomore cohorts were brought in on a real-world design project working with Dr. Monty Graham on the design of the new Marine Research Facility. We are excited that this student and faculty designed project will be implemented in the spring of 2018, and that it brought in some funds for our program. We have learned that students and faculty will be working on another real-world project next academic year for the renovation of the Joseph Green Hall. This project will also bring in some funding for the program. These experiential learning opportunities were identified as a program strength by the CIDA and make our program stand out from its competition in that we operate like a real design studio. Vendors and manufacturer representatives have recognized our contributions to the profession and are regularly calling on our program to keep our resource library up to date and also provide educational lunch and learn opportunities for our students. We had twelve lunch and learn meetings this academic year. In October 2016, the program was able to update classroom 205 with new furnishings in preparation for its site visit. This space provides up-to-date resources for commercial furnishings, textiles and flooring. It serves as a workroom where all cohorts can collaborate. On a similar note, the program coordinator and recent alum, Haley Wood, helped acquire new donated furnishings for the "downtown studio" for the Architecture Engineering Technology program. A new course was offered for the first time, ID 178 Seminar in Interior Design, which focused on human factors in the built environment. This course was extremely popular and produced a lot of needed evidence for our accreditation visit and was added to the degree plan. Adjunct instructor, Nancy Bounds made this course engaging and interactive. The program established an articulation agreement with the Delgado Interior Design Program in New Orleans and will market to this program in hopes of gaining transfer students in the fall of 2018. The American Society of Interior Design (ASID) students did not participate in the annual career day event this year due to conflicts in timing with our accreditation visit and the new online competition requirements that interfered with two project due date. We plan to attend the event next year which will be held in Fayetteville, AR at the University of Arkansas, April, 2018. Our program's retention rate from spring 2017 to fall 2017 was 84%. In addition, 20% of our spring 2017 enrollment graduated and 85% of these graduates were placed in careers within 60 days of graduation. Students found jobs working as designers in architecture firms, interior design firms and furniture dealerships in locations such as Austin, TX, St. Louis, MO, Great Falls, VA, and Knoxville, TN as well as New Orleans, Jackson and Hattiesburg

#### Continuous Improvement Initiatives.

# Any department-level or program-level action plans for improvement that are not necessarily tied to a specific student learning outcome or program objective should be described in this field.

The Interior Design Program successfully met the following initiatives planned for the 2016-17 academic year: We targeted a retention rate of at least 80% and maintained an 84% retention rate from spring 2017- fall 2017. Retention rate was based on the number of active majors taking classes in the spring that returned for the fall semester to continue in the interior design program. Due to a drop in the sophomore and junior cohort, the program did not successfully achieve its goal of a 5% growth in enrollment. Recruitment will be a major area of emphasis next academic year now that the accreditation review is behind us. The program developed a formal articulation agreement with Delgado Community college as planned last academic year. We provided opportunities for the juniors to travel to Houston in the spring of 2017 giving the students the ability to network with professional designers and architects in other regions. The visit to HOK provided invaluable exposure to how global firms work in other parts of the world from dealing with cultural difference to concerns with employee safety in go-no-go zones. The program taught a new course, ID 178 Special Topics (Human Factors in the Built Environment) which was needed for the CIDA accreditation review. ID 303 Interior Systems was converted to online delivery so it could be taught by an adjunct. The program identified several new adjunct faculty to include Al Lawson, who taught the senior capstone course during spring 2017. The program did not complete an interdisciplinary team project this year within the School of Construction; however, the senior cohort collaborated with graphic design students on a boutique hotel branding project in the fall of 2016. In addition, the sophomore, junior and senior cohorts were able to collaborate with allied disciplines in higher-education design, office design and the hospitality design markets. The students completed a real-world design project and learned to interview, present and work within budget parameters on the Marine Research Facility project in Gulfport, MS. The program successfully completed its 2017 CIDA reaccreditation as planned last academic year. It received a 6-year reaccreditation. The Interior Design Program will target the following initiatives for the next academic year (2017-2018): Focus on an aggressive recruitment plan seeking a minimum 10% growth in enrollment in the lower two cohorts (freshman and sophomore) Maintain an 80% retention rate from spring to fall semester Participate in at least six high-school recruitment events to increase the freshman enrollment next academic year Educate area community college counselors about our program strengths to increase the number of transfer students next academic year Provide opportunities for students to be exposed to global views that consider social, cultural, economic, and ecological contexts in their design work Provide opportunities for students to travel and/or interact with professionals outside our region Incorporate regional and national competitions into the curriculum if they align with course objectives Provide experiential learning opportunities for students to interact with real clients and real budgets Explore and provide opportunities for interdisciplinary collaboration Explore opportunities for restructuring the interior design foundation courses so we can be more integrated in the School of Construction and eliminate duplication of similar coursework

#### Closing the Loop.

## Summarize the results of previous action plan implementation. Provide evidence of improvement based on analysis of the results.

The previous cycle's action plans were reviewed and the program completed three action plans, kept four actions plans in progress and developed two new action plans. One plan was placed on hold until a full-time instructor can be assigned to the capstone course. Summary of action plan implementation: 1) ID 140 Team Presentation: This action plan was implemented last cycle which allowed students enrolled in ID 140, Interior Design I the option of pre-recording their culture research team presentations at the Speaking Center allowing them to present a short introduction to the class and then show the class their video. This action resulted in an improvement from 76% meeting the team presentation requirement last cycle to 96% meeting the requirement this cycle. This action plan was successful and will be implemented again next cycle. 2) Portfolio Supplement: This action plan will remain active. Students will continue to be asked to provide a supplement to their senior portfolio documenting sketching, ideation drawings and hand drafting. These items continue to be omitted by the students because they are deemed as unnecessary to their exit portfolios by the seniors for finding a job. 3) ID 210 Computer Competency. During the previous cycle, ID 210 was not offered due to shortage of adjunct faculty. This action plan to locate qualified adjunct instructors will remain active. 4) CAD Intervention: This action plan was added this cycle to help improve students performance in ID 210. Closely connected to the previous action plan, ID 210 Computer Competency, the program will not only seek qualified adjunct faculty, but will also ask the instructor of record to be more hands-on and intentionally intrusive in the student's performance by intervening as soon as a student begins to fall behind on the weekly assignments. 5) Internship Orientation and Initiative: These two action plans were completed this cycle. The program saw improvement in the mentor scores for "initiative" from a 57% in the previous cycle to an 83% this cycle. The program has finished these two action plans, but will continue to provide an orientation session in the spring prior to their internship to address professionalism and expectations in regard to dependability and initiative. 6) Estimating: orientation session in the spring prior to their internship to address professionalism and expectations in regard to dependability and initiative. 6) Estimating: This action plan was successfully completed this cycle. 100% of students compared to 79% during the last reported cycle met the expectation for estimating flooring and wall coverings in ID 232 Interior Materials and Installation Methods. 7) Computer Application - ID 242: This action plan was successfully completed this cycle. During the previous cycle, the assigned adjunct in ID 242 did not teach the required software programs requested; however, with the hiring of a visiting instructor this cycle, the required software programs are now being taught. 8) NCIDQ/Comprehensive Exam: This action plan continues to remain on-hold until a permanent faculty member can be assigned to ID 490 Advanced Application of Design Theory. For the past two cycles, we have relied on adjunct instructors to teach this course. The program hopes to one day administer the IDFX (Interior Design Fundamentals Exam) as part of this course. 9) Increase Enrollment: The program has added a new action plan this cycle to address recruitment at the freshman level. While we are meeting expectation for retention, our enrollment needs to grow at the lower level. This plan seeks to increase enrollment by 10% annually. It will enrollment increases to a minimum of 80 students. will remain in effect until enrollment increases to a minimum of 80 students.

#### Technology Use Part 1.

## State/explain the role of technology in the discipline and outcomes related to technology.

The use of technology in the Interior Design Program begins during the first semester and increases exponentially as the student progresses into the degree plan. Students are required to own a laptop computer in our curriculum beginning in the third semester, and they use this laptop in all ID coursework. Students utilize AutoCAD, Revit, Sketchup, MS Word, Excel, Power Point, and Adobe Create Suite (Illustrator, InDesign and Photoshop). During the sophomore year, ID majors take several technical studio classes that focus on software. ID 210 AutoCAD for Interior Design produces a set of drawings for a small residence which includes a dimensioned plan, elevations and section drawings. ID 311, BIM for Interior Design produces a more comprehensive set of interior drawings. Students learn to create 3D models and photorealistic renderings of interiors using AutoDesk's Revit. ID 242, Portfolio Development introduces students to the Adobe Creative Suite in which students learn Illustrator, Photoshop and InDesign to produce a preliminary portfolio, resume and online portfolio. Following this courses, students continue to use these programs in their upper level studios. Other courses that address technology include ID 320 Design Presentation Media in which students are exposed to hybrid illustration methods that incorporate digital photography and hand sketching that is merged together using Photoshop. They are also compelte a project using Sketchup that is enhanced with Photoshop. Students graduating from our program are well equipped in the area of technology for an entry-level career in Interior Design. The program exposes them to the most-used software tools use in our profession. Technology needs on the horizon that we anticipate needing to prepare for is the use of virtual and augmented reality.

### **Connected Documents**

#### Technology Use Part 2.

Develop a narrative to support Technology Use Part 1 by providing program assessment results (if applicable), examples of technology being used to enhance student learning, examples of technology being used to meet program objectives/outcomes, and examples of providing access to and training in the use of technology.

The Interior Design Program surveys graduates computer software knowledge in an annual exit survey as well as measures the internship mentor's perceptions of an interning student's ability to effectively use computer technology programs (2D, 3D, Rendering, and Business software). The percentage of graduating students that ranked their computer knowledge as excellent to above average are as follows: 100% (7/7) could use computer assisted drafting software to prepare floor plans and other 2D drawings. 100% (7/7) could use computer related software for day to day business communications. (ie: word processing, spread sheets, slide shows.) 100% (7/7) could use computer rendering software to prepare 3D drawings and color renderings. (IE: Sketchup, Photoshop, Revit and similar programs.) The percentage of internship mentors that ranked student computer knowledge as excellent to above average are as follows: 100% (7/7) could use computer assisted drafting software to prepare floor plans and other 2D drawings. 78% (7/9) could use computer related software for day to day business communications. (ie: word processing, spread sheets, slide shows.) It was noted that students needed more exposure to Microsoft Excel 100% (5/5) could use computer rendering software to prepare 3D drawings and color renderings. (IE: Sketchup, Photoshop, Revit and similar programs.) Refer to the following link for an example of a graduating senior portfolio.

#### **Connected Documents**

Internship Mentor Survey - Technology Use Technology Exit Survey Results

#### **Detailed Assessment Report**

2016-2017 Logistics, Trade, and Transportation MS\*

As of: 10/15/2017 04:00 PM EDT (Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)

## Mission / Purpose

The Master of Science in Logistics, Trade, and Transportation (MS LTT) is designed to empower professionals to meet the growing demands of logistics transportation and supply chain related careers in the Gulf Coast Regions, Nationally and Internationally.

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

#### SLO 1: Planning and Strategies

Students will be able to demonstrate the ability to effectively develop plans and strategies.

#### **Related Measures**

#### M 1: Research Project in IET 670

In IET 670, students are assigned with a Research Project in which they develop a plan and implement strategies to solve real typical industry problems in their area.

Source of Evidence: Project, either individual or group

#### Target:

80% of the students' score will be 80% or better on the technical content of the IET 670 Group Project. (Scale: 100-90% = Advanced, 89-80% = Adequate, 79-70%=Minimally Acceptable, <70% Unacceptable)

## M 2: Case Analysis in IET 615

In IET 615, students will evaluate the effectiveness of various systems for planning and strategies in case study and/or final exams.

Source of Evidence: Writing exam to assure certain proficiency level

#### Target:

80% of the students' score will be 80% or better on modeling section of the final exam of the IET 615 courses.

## SLO 2: Operations, Management and Leadership

Students will demonstrate critical skills necessary in operations, management and leadership.

### **Related Measures**

#### M 3: Final Examination in IET 571

Final Examination In IET 571, students will use various operations and management tools and techniques in hypothetical exercises and/or in class projects.

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

#### Target:

80% of the students' score will be 80% or better on the specific analytical section of the final exam of IET 571 course.

#### M 4: Exit Survey

Students' owns recognition of their Management skills and Leadership abilities. An exit survey will be administered to graduating students). These surveys will ask questions regarding the person's own perception regarding his/her Management skills and Leadership abilities.

Source of Evidence: Exit interviews with grads/program completers

#### Target:

70% of the students' responses upon graduation will be 4 or better, where : 5= Very Satisfied 4=Satisfied 3=Somewhat Satisfied 2=Somewhat Dissatisfied 1=Dissatisfied.

### SLO 3: Systems Analysis and Modeling

Students will be capable to perform systems analysis and develop models for various systems.

## **Related Measures**

#### M 5: Assignments in IET 671

In IET 671, students will analyze a typical logistics system in their area and develop models for that system.

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

### Target:

80% of the students' score will be 80% or better on the analytical part of related case studies and/or assignments of the IET 671 course.

### M 6: Group Project in IET 571

In IET 571, students will effectively communicate systems analysis and modeling work through well written report and verbal presentation.

Source of Evidence: Project, either individual or group

#### Target:

80% of the students' score will be 80% or better on written and oral component of IET 571 group project. (Scale: 100-90% = Advanced, 89-80% = Adequate, 79-70%=Minimally Acceptable, <70% Unacceptable)

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

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

## Invite Peer to Group Presentation to Provide Constructive Comments

Established in Cycle: 2010-2011

The target was met. To continue improving the program a peer faculty will be invited to the group presentation to provide addi...

#### SLO 4: Transportation and Trade Policy

Students will be able to analyze transportation and trade policy and evaluate their impact on systems.

#### **Related Measures**

#### M 7: Midterm Examination in IET 570

In IET 570, students will examine various trade & transportation rules and policies in their domain.

Source of Evidence: Writing exam to assure certain proficiency level

#### Target:

80% of the students' score will be 80% or better on the policy section of midterm exam of IET 570 course. (Scale: 100-90% = Advanced, 89-80% = Adequate, 79-70%=Minimally Acceptable, <70% Unacceptable)

#### M 8: Case Study in IET 672

In IET 672, students will analyze the impact of various trade & transportation rules and policies on the national and global context.

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

#### Target:

80% of the students' score will be 80% or better on case study 4 related to transportation selection for cost optimization in IET 672 course. (Scale: 100-90% = Advanced, 89-80% = Adequate, 79-70%=Minimally Acceptable, 70% Unacceptable)

#### SLO 5: Integration of Core Competencies

Students will have the ability to integrate core competencies of the LTT program and become competent in solving real world problems in their domain.

#### **Related Measures**

#### M 9: Comprehensive Exam

In comprehensive exam, students will be able to integrate essential concepts (core competencies) to successfully perform discipline tasks.

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

#### Target

80% of the students' score will be 80% or better on the integrated question on core competency section of MS comprehensive exam that covers all LTT core courses. (Scale: 100-90% = Advanced, 89-80% = Adequate, 79-70%=Minimally Acceptable, 70% Unacceptable)

## M 10: Exit Survey

Exit Survey Students will develop confidence in performing real world tasks and demonstrate meaningful application of essential knowledge and skills. An exit survey will be administered to graduating students These surveys will ask questions regarding the person's own perception regarding his/her ability to solve real world problems and their current employment information.

Source of Evidence: Exit interviews with grads/program completers

#### Target:

8 out 10 students' responses upon graduation will be 4 or better, where : 5= Very Satisfied 4=Satisfied 3=Somewhat Satisfied 2=Somewhat Dissatisfied 1=Dissatisfied.

## Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

### O/O 6: Student Enrollment

Students enrollment in the program will be tracked.

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

#### Invite Peer to Group Presentation to Provide Constructive Comments

The target was met. To continue improving the program a peer faculty will be invited to the group presentation to provide additional constructive comments to the students on their oral presentation skills.

Established in Cycle: 2010-2011 Implementation Status: Planned

Priority: High

#### Relationships (Measure | Outcome/Objective):

Measure: Group Project in IET 571 | Outcome/Objective: Systems Analysis and Modeling

## Update two modules

I will update and/or add two new modules in IET 672

Established in Cycle: 2011-2012 Implementation Status: Planned

Priority: High

### Add Dynamic Programming Method to IET 615

Add to IET 615 Dynamic Programming as method to optimize resource allocation

Established in Cycle: 2013-2014 Implementation Status: Planned Priority: High

Projected Completion Date: 08/2015

#### **Enhance Selected Courses**

Selected courses will be enhanced with funds from a National Science Foundation grant to improve the learning experience in the MSLTT.

Established in Cycle: 2013-2014 Implementation Status: Planned

Priority: High

Implementation Description: Additional, learning experiences will be added to selected courses

Projected Completion Date: 08/2016 Responsible Person/Group: Dr. Sarder Extra help with Math Portion of IET 670 Some students lack basic MS Excel knowledge which can impact their ability to solve some math problems in this course.

Established in Cycle: 2014-2015 Implementation Status: Planned

Priority: High
Implementation Description: A lecture demo about how to use MS Excel will be provided to the class.

Responsible Person/Group: MD Sarder Additional Resources: None