August 08, 2013

Chris W. McGowan
Dean, College of Science, Technology and Agriculture
Southeast Missouri State University
One University Plaza
Mail Stop 6000
Cape Girardeau, MO 63701

Dear Dr. McGowan:

The Engineering Technology Accreditation Commission (ETAC) of ABET recently held its 2013 Summer Meeting to act on the program evaluations conducted during 2012-2013. Each evaluation was summarized in a report to the Commission and was considered by the full Commission before a vote was taken on the accreditation action. The results of the evaluation for Southeast Missouri State University are included in the enclosed Summary of Accreditation Actions. The Final Statement to your institution that discusses the findings on which each action was based is also enclosed.

The policy of ABET is to grant accreditation for a limited number of years, not to exceed six, in all cases. The period of accreditation is not an indication of program quality. Any restriction of the period of accreditation is based upon conditions indicating that compliance with the applicable accreditation criteria must be strengthened. Continuation of accreditation beyond the time specified requires a reevaluation of the program at the request of the institution as noted in the accreditation action. ABET policy prohibits public disclosure of the period for which a program is accredited. For further guidance concerning the public release of accreditation information, please refer to Section II.A. of the 2012-2013 Accreditation Policy and Procedure Manual (available at www.abet.org).

A list of accredited programs is published annually by ABET. Information about ABET accredited programs at your institution will be listed in the forthcoming ABET Accreditation Yearbook and on the ABET web site (www.abet.org).

It is the obligation of the officer responsible for ABET accredited programs at your institution to notify ABET of any significant changes in program title, personnel, curriculum, or other factors which could affect the accreditation status of a program during the period of accreditation stated in Section II.H. of the 2012-2013 Accreditation Policy and Procedure Manual (available at www.abet.org).

Assuring Quality - Stimulating Innovation
Please note that appeals are allowed only in the case of Not to Accredit actions. Also, such appeals may be based only on the conditions stated in Section II.L. of the 2012-2013 Accreditation Policy and Procedure Manual (available at www.abet.org).

Sincerely,

Amitabha Bandyopadhyay, Chair
Engineering Technology Accreditation Commission

Enclosure: Summary of Accreditation Action
Final Statement

cc: Kenneth W. Dobbins, President
Douglas Koch, Associate Professor and Interim Chairperson
Charles G. Drake, Visit Team Chair
ABET
Engineering Technology Accreditation Commission

Summary of Accreditation Actions
for the
2012-2013 Accreditation Cycle

Southeast Missouri State University
Cape Girardeau, MO

Engineering Technology (BS)

Accredit to September 30, 2019. A request to ABET by January 31, 2018 will be required to initiate a reaccreditation evaluation visit. In preparation for the visit, a Self-Study Report must be submitted to ABET by July 01, 2018. The reaccreditation evaluation will be a comprehensive general review.
Final Statement of Accreditation
to

Southeast Missouri State University
Cape Girardeau, MO

2012-13 Accreditation Cycle
ABET

ENGINEERING TECHNOLOGY ACCREDITATION COMMISSION

FINAL GENERAL REVIEW STATEMENT

on

SOUTHEAST MISSOURI STATE UNIVERSITY

Cape Girardeau, Missouri

Dates of Visit:

November 4-6, 2012
The statement that follows consists of two parts: the first addresses the overall institution and its engineering technology operation, and the second addresses the individual engineering technology programs. Accreditation actions taken by ETAC of ABET will be based upon the findings summarized in this statement and will depend on the range of compliance or non-compliance with ABET criteria, policies, and procedures. The range can be construed from the following definitions for findings:

**Deficiency:** A Deficiency indicates that a criterion, policy, or procedure is not satisfied. Therefore, the program is not in compliance with the criterion, policy, or procedure.

**Weakness:** A Weakness indicates that a program lacks the strength of compliance with a criterion, policy, or procedure to ensure that the quality of the program will not be compromised. Therefore, remedial action is required to strengthen compliance with the criterion, policy, or procedure prior to the next evaluation.

**Concern:** A Concern indicates that a program currently satisfies a criterion, policy, or procedure; however, the potential exists for the situation to change such that the criterion, policy, or procedure may not be satisfied.

**Observation:** An Observation is a comment or suggestion which does not relate directly to the accreditation action but is offered to assist the institution in its continuing efforts to improve its programs.
INSTITUTIONAL FACTORS AFFECTING
THE ENGINEERING TECHNOLOGY UNIT

Introduction

The Engineering Technology Accreditation Commission (ETAC) of ABET has evaluated the baccalaureate degree program in Engineering Technology of Southeast Missouri State University. The visit findings were evaluated using the 2012-13 ABET Criteria for Accrediting Engineering Technology Programs and the 2012-13 ABET Accreditation Policy and Procedure Manual.

Southeast Missouri State University is an accredited public university located on the eastern edge of Missouri. The university offers a broad array of undergraduate academic programs as well as many graduate programs. The university is accredited by the Commission on Higher Learning of the North Central Association. The Bachelor of Science in Engineering Technology program has been accredited since October 1, 2005. The last general review took place in fall 2006. There are two options in the program: Electrical and Control and Mechanical and Manufacturing Systems. The Bachelor of Science in Engineering Technology program has been submitted for reaccreditation.

Note: The following institutional observation for improvement applies to the program evaluated, whether or not the findings are specifically cited within the sections of this statement that separately addresses each program.
Institutional Observation

Policy: Accreditation Policy and Procedure Manual (APPM) II.A.6, Public Release of Accreditation Information by the Institution, states, “Institution catalogs and similar publications must clearly indicate the programs accredited by the commissions of ABET as separate and distinct from any other programs or kinds of accreditation. Each accredited program must be specifically identified as “accredited by the _________ Accreditation Commission of ABET, http://www.abet.org.”

The Technology Accreditation Commission (TAC) officially changed its name to the Engineering Technology Accreditation Commission (ETAC). All publications and communications that refer to “TAC” should be changed to “ETAC.” Each accredited engineering technology program must be specifically identified as “accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org.”
PROGRAM EVALUATION

ENGINEERING TECHNOLOGY

Baccalaureate of Science Degree

Introduction

With its two options, the engineering technology program prepares graduates for a variety of technical careers. The program’s educational objectives are:

- OB1. Develop within our graduates the ability to communicate effectively.
- OB2. Develop within our graduates the technical proficiency needed for the engineering technology practice, which will also serve as a foundation to engage in life-long learning.
- OB3. Develop graduates who can effectively use technology for problem solving, decision making, implementation, management, and optimization of systems and processes.
- OB4. Develop within our graduates the ability to work effectively in a team environment.
- OB5. Develop within our graduates an understanding of the need to maintain the highest ethical and professional standards and a commitment to protect the public interest, safety, and the environment.

This program was evaluated using the General Criteria portion of the 2012-13 ETAC Criteria document. Findings in meeting the provisions of ABET criteria and policies are described below.
Program Deficiency

Policy: ABET Accreditation Policy and Procedure Manual section II.E.4.b. states that, “the program name must be shown consistently on transcripts of its graduates, in the institution’s electronic and print publications, and on the ABET Request for Evaluation (RFE).” Transcripts for recent graduates list majors as “Engineering Tech: Elec & Cntrl” or “Engineering Tech: Mech & Manufact Syst.” These titles are not consistent with the title Engineering Technology as forwarded by the institution on its Request for Evaluation. The names on the transcripts imply accreditation against more specific criteria that the general criteria. The program name must be shown consistently on transcripts of its graduates in the institution’s electronic and print publications, and on the ABET RFE.

Due Process Response: The program indicated that documentation of options within the Engineering Technology Degree is now clearly stated at the top of each transcript of graduates. Evidence included newly printed transcripts for six recent graduates.

Status after Due Response: This Deficiency is resolved.

Program Weaknesses

1. Policy: ABET Accreditation Policy and Procedure Manual Section II.A.3 states that, “No implication should be made that accreditation by one of the ABET commissions applies to any programs other than the accredited ones.” Current marketing literature, including a four page fold-out brochure for the College of Science, Technology, and Agriculture, clearly designates that the Engineering Technology program is accredited by the placement of the ABET logo beside the program description. Additionally, two ABET logos appropriately appear beside two programs that are accredited by other ABET commissions. However, three ABET logos are
placed at the top of the brochure in a manner that suggests that other or all of the programs presented are accredited by ABET. This could mislead a reader into thinking that all programs in the college are accredited by ABET. To come into compliance, the institution must correct this ambiguity in its publications.

**Due Process Response:** The program indicated that the three ABET logos, which had been placed in a manner to suggest that all programs were ABET accredited, have been removed from College literature. A sample of the four page fold-out brochure, showing that the three ABET logos had been removed, was provided.

**Status after Due Process:** This Weakness is resolved.

2. **Policy:** ABET Accreditation Policy and Procedure Manual Section II.A.6 states that, “Each accredited program must be specifically identified as ‘accredited by the Engineering Technology Accreditation Commission of ABET, [http://www.abet.org](http://www.abet.org).’” Placement of ABET logos in current literature including a four page College of Science, Technology, and Agriculture brochure, tri-fold brochures for both the Mechanical & Manufacturing Option and the Electrical & Control Option, and current (2012-13) catalog, suggest that non-accredited programs may be ABET accredited. The result is that accreditation is not clearly communicated. To come into compliance, the institution must revise its publications to remove ambiguity.

**Due Process Response:** In addition to the modifications to the College brochure mentioned above, the program indicated that wording on ABET accreditation status in the College brochure and in the program options tri-fold brochures has been updated. Samples of each, which demonstrated that they are in compliance, were submitted. Additionally, the program indicated that the University Bulletin is being revised. A marked-up page was submitted. The program indicated that changes to the University Bulletin must go through a process with several reviews.
The program forwarded a memorandum from the institution’s registrar assuring that the draft Bulletin revisions will be implemented in the Fall publication of the institution’s Bulletin. The language in the Bulletin draft brings the institution into compliance

**Status after Due Process:** The finding is reduced to a Concern pending further evidence that the Bulletin has been published and brought into compliance by inclusion of the phrase “accredited by the Engineering Technology Commission of ABET, [http://www.abet.org](http://www.abet.org)” in reference to accreditation of the Engineering Technology program.

3. **Criteria:** Criterion 4. Continuous Improvement states that, “The program must regularly use appropriate, documented processes for assessing and evaluating the extent to which both the program educational objectives and the student outcomes are being attained.” Program educational objectives (PEOs) are being adequately assessed via alumni and employer surveys to verify that graduates are, in fact, meeting the PEOs, three-to-five years after graduation. But, it is not clear how the student outcome assessments on the tally sheets were obtained from samples of student assignments. The entire process appears to be subjective and lacks a clear process for student outcome assessment and evaluation. Also, there is a lack of clearly documenting each step of the process. The various rubrics were detailed lists of learning objectives, rather than scoring guidelines. Without clearly written scoring rubrics showing how points are to be assigned and without every step of the process clearly documented, the faculty are unable to perform a consistent and meaningful assessment and evaluation of student outcomes. In turn, the assessment becomes subjective and thus not useful for making improvements to the program. There was evidence they are using the evaluation results of student outcomes and PEOs to make improvements to the program. The program must regularly use appropriate, documented
processes for assessing and evaluating the extent to which the student outcomes are being attained.

**Due Process Response:** The program provided updated outcomes assessment rubrics. Each had a clear means of measurably scaling student work. Graded student work that demonstrated the use of the rubrics was provided.

**Status after Due Process:** This Weakness is resolved.

**Program Concerns**

1. **Criteria:** Criterion 2. Program Educational Objectives states that, “The program must have published program educational objectives that are consistent with the mission of the institution, the needs of the program’s various constituencies, and these criteria...” ABET defines program educational objectives (PEOs) as “broad statements that describe what graduates are expected to attain within a few years of graduation.” As written, with phrases such as “develop within our graduates ...” the PEOs describe actions of the program faculty, rather than achievements of the alumni. Thus, the statements imply that they are student outcomes. Without clearly written statements of achievements by the program’s graduates it is difficult to perform assessment of the program educational objectives as required by Criterion 4. With appropriate input from their constituents, the program should revise their published PEOs to reflect the expected attributes and achievements of program graduates that will be apparent within three to five years after graduation.

**Due Process Response:** The program provided a set of re-written program educational objectives which placed emphasis on achievements of graduates.
Status after Due Response: The finding remains a Concern until evidence is provided that the revised PEOs have received input from all constituents including students, advisory board, and faculty and until the revised PEOs are published.

2. **Criteria:** Criterion 8. Institutional Support states that, “...The resources available to the program must be sufficient to acquire, maintain, and operate infrastructures, facilities and equipment appropriate for the program, and to provide an environment in which student outcomes can be attained. There is only one full-time laboratory technician available to maintain equipment and set up laboratories. The technician does have several part-time or student assistant positions, but none of these are permanent, full-time positions. Without adequate maintenance, equipment is more likely to break down and may have to wait for repairs. Thus, some equipment may be unavailable when needed and have a negative impact on student learning. As more equipment is purchased, the potential exists that resources could be insufficient to maintain equipment appropriate for the program, and to provide an environment in which student outcomes can be attained. This could potentially place a burden on the faculty to help maintain the laboratories, instead of helping students. It is recommended that the program continue to provide adequate support to maintain equipment appropriate for the program, and to provide an environment in which student outcomes can be attained.

**Due Process Response:** The program commented that if felt that equipment budget and technical support were adequate for current lab use. This included funding and adequate technical support to keep current equipment in repair

**Status after Due Response:** This finding is resolved.