ABET

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September 01, 2015

Timothy Trainor
Dean of the Academic Board
U.S. Military Academy
646 Swift Road
ATTN: MADN
West Point, NY 10996

Dear Brig. Gen. Trainor :

The Engineering Accreditation Commission (EAC) of ABET recently held its 2015 Summer Meeting to act on the program evaluations conducted during 2014-2015. 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 United States Military Academy 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 2014-2015 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).

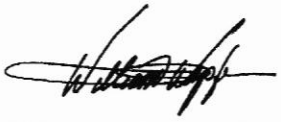
It is the obligation of the officer responsible for ABET accredited programs at your institution to notify ABET of any significant changes in program title, personnel, curriculum, or other factors which could affect the accreditation status of a program during the period of accreditation stated in Section II.H. of the 2014-2015 Accreditation Policy and Procedure Manual (available at www.abet.org).

ABET requires that each accredited program publicly state the program's educational objectives and student outcomes as well as publicly post annual student enrollment and graduation data as stated in Section II.A.6. of the Accreditation Policy and Procedure Manual (available at www.abet.org).

ABET will examine all newly accredited programs' websites within the next two weeks to ensure compliance.

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 2014-2015 Accreditation Policy and Procedure Manual (available at www.abet.org).

Sincerely,



William J. Wepfer, Chair

Engineering Accreditation Commission

Enclosure: Summary of Accreditation Action
Final Statement

cc: Robert L. Caslen, Superintendent

Barry L. Shoop, Professor of Electrical Engineering and Deputy Head of the Department of Electrical Engineering and Computer Science at the United States Military Academy at West Point

Richard D. Lilley, Visit Team Chair

ABET

Engineering Accreditation Commission

Summary of Accreditation Actions
for the
2014-2015 Accreditation Cycle

United States Military Academy
West Point, NY

Chemical Engineering (BS)

Accredit to September 30, 2021. A request to ABET by January 31, 2020 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, 2020. The reaccreditation evaluation will be a comprehensive general review.

This is a newly accredited program. Please note that this accreditation action extends retroactively from October 01, 2012.

Civil Engineering (BS)

Electrical Engineering (BS)

Engineering Management (BS)

Environmental Engineering (BS)

Mechanical Engineering (BS)

Nuclear Engineering (BS)

Systems Engineering (BS)

Accredit to September 30, 2021. A request to ABET by January 31, 2020 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, 2020. The reaccreditation evaluation will be a comprehensive general review.

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Engineering Accreditation Commission

Final Statement of Accreditation
to

United States Military Academy

West Point, NY

2014-15 Accreditation Cycle

ABET
ENGINEERING ACCREDITATION COMMISSION

UNITED STATES MILITARY ACADEMY
West Point, NY

FINAL STATEMENT
Visit Dates: September 28-30, 2014
Accreditation Cycle Criteria: 2013-2014

Introduction & Discussion of Statement Construct

The Engineering Accreditation Commission (EAC) of ABET has evaluated the chemical engineering, civil engineering, electrical engineering, engineering management, environmental engineering, mechanical engineering, nuclear engineering, and systems engineering programs of the United States Military Academy.

This statement is the final summary of the EAC evaluation, at the institutional and engineering-program levels. This statement consists of two parts: the first addresses the institution and its overall engineering educational unit, and the second addresses the individual engineering programs. It is constructed in a format that allows the reader to discern both the original visit findings and subsequent progress made during due process.

A program's accreditation action is based upon the findings summarized in this statement. Actions depend on the program's range of compliance or non-compliance with the criteria. This range can be construed from the following terminology:

- 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 review.

- 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 that does not relate directly to the current accreditation action but is offered to assist the institution in its continuing efforts to improve its programs.

West Point was initially built as a Revolutionary War fortification in 1778. Thomas Jefferson later authorized the United States Military Academy at this location in 1802, thereby establishing the first engineering college in the United States. The first graduates from this institution helped build the infrastructure of the new nation; they and subsequent graduates have a long history of duty and service to the country, which is present today. The United States Military Academy (USMA) is one of five federally supported service academies. The USMA offers eight different engineering programs, which are all being evaluated during this visit. The engineering programs employ 116 full-time faculty members and have a current enrollment of 820 engineering students and produced 353 graduates during the 2013-14 academic year. The students are diverse, with representation from all 50 states, United States territories, and international locations.

The following units were reviewed and found to adequately support the engineering programs: mathematics, physics, chemistry, physical geography, library, registrar, and admissions.

Institutional Strengths

1. The Center for Faculty Excellence is a recognized strength of the United States Military Academy. The Master Teacher Program, which is offered through this center, enhances the intellectual development of the students through a structured faculty development program. This program includes readings, discussion, and self-reflection that help instructors grow and perfect their teaching skill. The students benefit from an enhanced learning experience.

2. The Academic Individual Advanced Development (AIAD) program provides students with a unique opportunity to work with world-class scientists and engineers on challenging research projects. This program provides the student with a stimulating experience that allows them to expand their scientific knowledge and helps them identify and shape their future career paths.

Chemical Engineering
Program

Program Criteria for Chemical, Biochemical, Biomolecular, and Similarly Named Programs

Introduction

The chemical engineering program was established in 2002, and had its first graduates in 2005. This is the program's initial accreditation visit. The program is administratively housed in the Department of Chemistry and Life Sciences and all courses are offered locally at West Point. The department has 36 faculty members, 12 of whom provide instruction for the chemical engineering program. Of these, five are full-time instructors with masters degrees and four are assistant, associate, or full professors with doctoral degrees in chemical engineering. The program currently enrolls 52 students and produced 13 graduates in the 2013-14 academic year.

Program Strengths

1. The chemical engineering faculty members work effectively together to provide a strong academic program. This is seen by the rigorous curriculum that has been developed, by the extensive support that is provided to students, and by the effective continuous improvement process that is in place. The result is a rigorous academic environment in which students enthusiastically participate. A measure of its effectiveness is seen by program results on the Fundamentals of Engineering exam, where 100 percent of the students have taken the exam over the past five years, achieving a 92 percent pass rate, which exceeds the national average.

2. The students in the program are highly engaged in their learning and in their profession. The combination of small class size and emphasis on individual learning has created a learning environment with a high level of student engagement. This is seen by participation in the American Institute of Chemical Engineering student chapter activities and in undergraduate research and summer internships.