ENGINEERING ACCREDITATION COMMISSION

Summary of Accreditation Actions

2018–2019 Accreditation Cycle

AGH University of Science and Technology in Krakow
Krakow, Malopolskie, Poland

Mechatronic Engineering (B.Sc.)

Accredit to September 30, 2023. A request to ABET by January 31, 2022 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 1, 2022. The reaccreditation evaluation will be a comprehensive general review.

ABET

ENGINEERING ACCREDITATION COMMISSION

AGH UNIVERSITY OF SCIENCE AND TECHNOLOGY IN KRAKOW

KRAKOW, MALOPOLSKIE, POLAND

FINAL STATEMENT OF ACCREDITATION

2018-19 ACCREDITATION CYCLE

AGH UNIVERSITY OF SCIENCE AND TECHNOLOGY IN KRAKOW

Krakow, Malopolskie, Poland

ABET ENGINEERING ACCREDITATION COMMISSION

FINAL STATEMENT

Report Submitted: 1 July 2018
ACCREDITATION CYCLE CRITERIA: 2016-2017

INTRODUCTION & DISCUSSION OF STATEMENT CONSTRUCT

The Engineering Accreditation Commission (EAC) of ABET has evaluated the Mechatronic Engineering (B.Sc.) program at AGH University of Science and Technology in Krakow relative to shortcomings remaining after the 2017 EAC review..

The statement that follows consists of two parts: the first addresses the institution and its overall educational unit, and the second addresses the individual programs.

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.

INFORMATION RECEIVED AFTER THE REVIEW

- **30-Day Due-Process Response** Information was received in the 30-day due-process response period relative to the Mechatronic Engineering program.

INSTITUTIONAL SUMMARY

AGH University of Science and Technology in Krakow is a federally supported technical university overseen by the Polish Ministry of Science and Higher Education. Founded in 1919 as Akademia Górnicza (Academy of Mining), the institution is the second largest technical university in the country. With a student population of approximately 33,000, the university is composed of 16 faculties (colleges or schools) offering 58 programs (majors or degree programs). The Faculty of Mechanization of Mining and Metallurgy was founded in 1952, and the name was changed in 1992 to Faculty of Mechanical Engineering and Robotics (WIMIR). The faculty has four administrative departments; however, academic programs, including the two mechatronics engineering programs, are administered at the faculty level rather than through the departments. The Faculty of Mechanical Engineering and Robotics has 220 academic staff personnel (faculty members), 2,639 undergraduate students, 452 master's students and 95 Ph.D. students. The faculty produced 529 B.Sc. graduates and 284 M.Sc. graduates during the 2015-16 academic year.

Mechatronic Engineering

B.Sc. Program

There were no applicable EAC program criteria.

INTRODUCTION

The Mechatronic Engineering B.Sc. program grew from the Automatics and Robotics - Mechatronics in English program, which was established in 1995. In 2006, the Faculty of Mechanical Engineering and Robotics formally established degree programs in mechatronics. The name of the program was changed to Mechatronic Engineering in 2016. The undergraduate degree is a full-time program that is 3.5 years in length. The program enrolled 201 students during fall 2016. The program has 27 full-time faculty members and two technicians. The program produced 31 graduates during the 2015-16 academic year.

PROGRAM WEAKNESS

Criterion 4. Continuous Improvement

The previous review found that student attainment of student outcomes currently was measured by adequate completion of a course as evidenced by a course grade higher than 50 percent. Each course outcome was mapped to a student outcome and problems on examinations appeared to evaluate student attainment of course outcomes. No evidence was found of a process for separating the results for individual problems or collecting data to assess attainment of individual student outcomes. Furthermore, no evidence was found that the results of these evaluations were systematically used as input for the continuous improvement of the program. Thus, the program originally lacked compliance with this criterion. In its 30-day due-process response, the program provided materials that described a revision to the program's assessment process which required each instructor to individually assess course (module) outcomes and to report the results using a web-based application. The vice dean for education was to compile the results, map the course outcomes to the student outcomes, and report the extent to which each student outcome was attained. The faculty team for education quality was to analyze the data and make recommendations regarding program improvement. The analysis results were to be reported to the faculty board. The process had been approved by resolution of the faculty board and partially implemented; however, the program had not yet completed a full assessment cycle. The program's 30-day due-process response also provided evidence, including specific examples, that the program had systematically utilized results of its revised assessment process as input for improvement of the program. The program requested an opportunity to submit post-30-day due-process information, which was acceptable to the EAC. The submitted material included assessment data that addressed outcomes separately and distinctly, as well as evidence that the faculty team for education quality had reviewed the data and made preliminary recommendations for changes to the program in response to those data. Not all of the student outcomes had been assessed at that time and the program was found to lack strength of compliance with this criterion.

Progress Since Last Review

The interim report provided evidence that the faculty team for education quality has reviewed the

data and has made three cycles of recommendations for changes to the program in response to these data. The full assessment cycle is seven semesters, and at that time all of the student outcomes will have been assessed and the opportunity for a complete cycle of continuous improvement would be attained. This complete cycle will occur prior to the next general review. Systematic utilization of the assessment results are being used as input for the continuous improvement of the program. It is also evident that documented processes for evaluating the attainment of student outcomes are being implemented.

Status

The program weakness has been resolved.

30-Day Due-Process Response

The EAC acknowledges receipt of additional data demonstrating continued implementation of processes for evaluating attainment of student outcomes.

Status

The program weakness has been resolved.