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Applied Science Accreditation Commission  
Computing Accreditation Commission  
Engineering Accreditation Commission  
Engineering Technology Accreditation Commission

August 20, 2014

Cecilia Paredes  
Provost  
ESPOL  
Km 30.5 Via Perimetral  
Rectorate Main Building  
Campus Prosperina  
Guayaquil, Guayas EC090112  
Ecuador

Dear Dr. Paredes :

The Engineering Accreditation Commission (EAC) of ABET recently held its 2014 Summer Meeting to act on the program evaluations conducted during 2013-2014. 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 Escuela Superior Politecnica Del Litoral 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 2013-2014 Accreditation Policy and Procedure Manual (available at [www.abet.org](http://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](http://www.abet.org)).

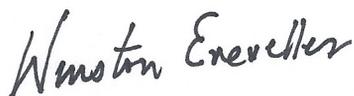
It is the obligation of the officer responsible for ABET accredited programs at your institution to notify ABET of any significant changes in program title, personnel, curriculum, or other factors which could affect the accreditation status of a program during the period of accreditation stated in Section II.H. of the 2013-2014 Accreditation Policy and Procedure Manual (available at [www.abet.org](http://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](http://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 Accredite actions. Also, such appeals may be based only on the conditions stated in Section II.L. of the 2013-2014 Accreditation Policy and Procedure Manual (available at [www.abet.org](http://www.abet.org)).

Sincerely,

A handwritten signature in black ink that reads "Winston Erevelles". The signature is written in a cursive, slightly slanted style.

Winston F. Erevelles, Chair  
Engineering Accreditation Commission

Enclosure: Summary of Accreditation Action  
Final Statement

cc: Sergio Flores, Rector  
Jorge Duque  
Marisol Villacres, ABET Dept. Director  
Dianne Chong, Visit Team Chair

**ABET**

Engineering Accreditation Commission

Summary of Accreditation Actions  
for the  
2013-2014 Accreditation Cycle**Escuela Superior Politecnica Del Litoral  
Guayaquil,****Mechanical Engineering (B. Eng.)**

Accredit to September 30, 2020. A request to ABET by January 31, 2019 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, 2019. 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.



Engineering Accreditation Commission

Final Statement of Accreditation  
to

Escuela Superior Politecnica Del Litoral  
Guayaquil, Ecuador

2013-2014 Accreditation Cycle

Assuring Quality • Stimulating Innovation

**ABET  
ENGINEERING ACCREDITATION COMMISSION**

**ESCUELA SUPERIOR POLITECNICA DEL LITORAL**  
Guayaquil, Ecuador

**FINAL STATEMENT**  
Visit Dates: November 2-4, 2013  
Accreditation Cycle Criteria: 2013-2014

Introduction & Discussion of Statement Construct

The Engineering Accreditation Commission (EAC) of ABET has evaluated the mechanical engineering program of Escuela Superior Politécnica del Litoral for initial accreditation.

This statement is the final summary of the EAC evaluation, at the institutional and engineering-program levels. It includes information received during due process. This statement consists of two parts: the first addresses the institution and its overall engineering educational unit, and the second addresses the individual engineering program. 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.

The Escuela Superior Politécnica del Litoral (ESPOL) is a public university located in Guayaquil, Guayas Province in Ecuador. ESPOL has five university faculties or schools, 15 research centers, and several associated centers.

ESPOL was established in 1958, by executive decree to meet the increasing demands for scientific and technological postsecondary education for the Litoral Region. There are currently over 8,977 students in 31 undergraduate programs and 780 students in 26 graduate programs. There are more than 500 faculty members. The majority of students are from the Guayas area with 68 percent from Guayaquil, 15 percent from other coastal provinces, and 15 percent from other Guayas cantons. The remaining two percent are from the eastern part of Ecuador, the mountain areas, and insular areas. Over its 55-year history, ESPOL has produced 20,818 graduates.

Among the faculties that comprise ESPOL are: Economy and Business; Engineering in Earth Sciences; Electrical and Computer Engineering; Maritime Life Sciences, Ocean and Resources; Mechanical and Production Sciences Engineering; Basic Sciences; Liberal Science.

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

**Mechanical Engineering  
Program**

Program Criteria for Mechanical and Similarly Named Engineering Programs

Introduction

The mechanical engineering program was established in 1959 and is administered by the Department of Mechanical Engineering. The program has an enrollment of 610 students. The faculty consists of 42 members, of whom 26 are full-time and 16 are part-time. Five faculty members have earned Ph.D. degrees, and all faculty members hold Master's degrees. There are also three non-tenure-track faculty members and lecturers. The program produced 27 graduates during the 2012-13 academic year and 1,404 students have graduated since its inception.

Program Strengths

1. The program has a dedicated faculty that is held in high esteem by its students. The students are excited, motivated, and satisfied with their program and facilities. The faculty members believe that they have good leadership and that the program and university are moving in the right direction.
2. The program has a number of laboratories with excellent space and support staff, and the laboratories are well maintained. This creates a professional environment for the students and creates an opportunity for students to gain "hands-on" experience and engage in activities such as "design-build" projects.
3. The emerging emphasis of the university and program on leadership and entrepreneurship is commendable as it contributes to the economic development of the country.

Program Concerns

1. Criterion 4. Continuous Improvement Criterion 4 requires that the program regularly use appropriate, documented processes for assessing and evaluating the extent to which the student outcomes are being attained. The results of these evaluations must be systematically utilized as input for the continuous improvement of the program. While there is regular use of a

standard process to assess and evaluate outcomes, and while the results of these evaluations have been used as input to improve the program, there are limited instances of inconsistent and inadequate documentation and presentation of information. Further, in a few cases related to some components of some student outcomes, the program did not have a plan to use evaluation results for continuous improvement. The potential exists for the program to fall out of compliance with this criterion in the future.

- Due-process response: The program did not provide a response to this shortcoming.

- The concern remains unresolved.

2. Criterion 5. Curriculum Criterion 5 requires that students be prepared for engineering practice through a curriculum culminating in a major design experience based on the knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple realistic constraints. The program has an adequate major design experience that builds upon earlier course work and incorporates appropriate engineering standards and realistic constraints. However, many of the design problems deal with industrial engineering topics. While mechanical engineering elements are a part of this experience, if the mechanical engineering content or the overall amount of effort devoted to the design experience is diminished, the program may fall out of compliance with this criterion in the future.

- Due-process response: The program did not provide a response to this shortcoming.

- The concern remains unresolved.

#### Program Observations

1. The program emphasizes leadership and entrepreneurship that will contribute to the development of the country in many areas, particularly economic development. The importance and relevance of this institutional mission may suggest the addition of leadership and/or entrepreneurship as an educational objective of the program in the future.
2. The program has a set of constituencies for consultation about program educational objectives but does not take advantage of forming an advisory board that could include industry, government and others. Industry representatives who were interviewed during the site visit

## **FINAL STATEMENT**

## **ESCUELA SUPERIOR POLITECNICA DEL LITORAL**

indicated a willingness, and even desire to serve in that capacity. A board so constructed could be of great benefit to the program.

3. The students and company representatives indicated the importance of a second language. The program would benefit from taking advantage of the opportunities that exist for additional technical courses to be taught in English.