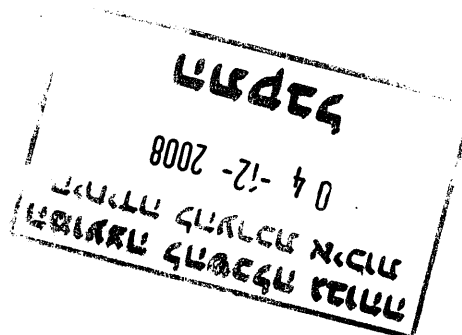


כ"ט בחשון, תשס"ט  
27 בנובמבר, 2008



לכבוד  
גב' מיכל נוימן  
מנהלת היחידה להערכת איכות  
המועצה להשכלה גבוהה.

שלום רב,

מצ"ב תגובת בית הספר להנדסה מכנית על דו"ח המל"ג.

תגובת בית הספר מקובלת עלי.

בברכה,  
  
פרופ' דני לויטן  
רקטור

העתק: פרופ' אהוד הימן, דקאן הפקולטה להנדסה  
פרופ' לב שמר, ראש ביה"ס להנדסה מכנית

גב' אני קלר פילו, מרכזת הוועדה מטעם המל"ג



תל אביב אוניברסיטת תל-אביב

TEL AVIV UNIVERSITY  
FLEISCHMAN FACULTY OF ENGINEERING  
SCHOOL OF MECHANICAL ENGINEERING  
PROF. LEV SHEMER, HEAD

הפקולטה להנדסה ע"ש איבי ואלדר פליישמן  
בית הספר להנדסה מכאנית  
פרופ' לב שמר, ר' ביה"ס

November 12, 2008

**Reply of the School of Mechanical Engineering  
to the Committee for the Evaluation of Mechanical Engineering Study Programs  
Appointed by the Council for Higher Education**

We appreciate the effort invested by the Evaluation Committee members in carrying out an in-depth analysis of our School's program. The great attention of the Committee members was evident to the Senior and Junior faculty, as well as the representatives of the administrative and technical staff who participated in the meetings during the Committee visit to the School on 9 – 10 March, 2008. Clearly, the Committee members arrived at these meetings after having carefully studied our self-evaluation report. The familiarity of the Committee with all aspects of the activity of the ME School allowed them to pose penetrating questions while interviewing representatives of our academic, administrative and technical staff.

The Report refers to the research activity in the School, which the Committee members praise as being of "very high quality", the senior academic staff being described as "outstanding in the area of engineering sciences." The Report, however, stresses that while the "traditional areas", such as Fluid and Solid Mechanics are strongly represented in the School, some areas pertinent to Mechanical Engineering that are of more interdisciplinary nature, such as robotics, control, engineering design, MEMS, etc., require strengthening. The Report suggests that in view of the substantial wave of retirement of the senior faculty in the past as well as in the coming years, new hiring should immediately be made in order to re-energize the program. Following this suggestion, the Dean of the Faculty of Engineering, and the Head of the School of Mechanical Engineering met with the Rector of the University and obtained his permission to advertise a vacancy in the School in those areas. We are proud of our leadership in areas that constitute the backbone of mechanical engineering and we will continue to support these fundamental mechanical engineering areas. We will also introduce innovative interdisciplinary areas and bring new knowledge and expertise to our undergraduate students. Our graduates are an active part of the engineering community and contribute to national need of maintaining Israel's edge in the world of engineering. In order to maintain the excellence of the past and present and broaden the spectrum of research areas in the school, new hiring and replacements of retiring faculty has been identified as a critical and immediate goal for our School. This is important in both the basic fields of Fluid and Solid Mechanics as well as in innovative new areas in Mechanical Engineering. Towards this goal, we have already started the search for a candidate with proven abilities in one of the under-represented research fields in the School. In view of the faculty retirements in the next 4-6 years, we will gear our hiring policy to broaden the spectrum of research areas in the school while maintaining excellence in more traditional areas. This will undoubtedly lead to more diverse undergraduate and graduate study programs.

The main emphasis of the Report is put on the study programs towards the various degrees. One of the major recommendations of the Report refers to enhancing the flexibility of the School's

undergraduate program. In response to the Committee's recommendations, a comprehensive revision of the elective tracks is currently under way by the B.Sc. Curriculum Committee of the School. We hope to be able to offer the newly-structured program starting from the next academic year. The Committee is also developing a new interdisciplinary track which will contain important elements of the electrical engineering curriculum and include courses from the School of Electrical Engineering (EE) and the Department of Biomedical Engineering. We are confident that this track will be prestigious and attractive to the students of the ME School and will enable us to raise the admission standards. The new track will directly address the Committee's recommendation concerning the removal of barriers between the Faculty units. In addition to the new interdisciplinary track with the EE School, we are also considering a new undergraduate laboratory course in robotics using facilities readily available in the Department of Industrial Engineering.

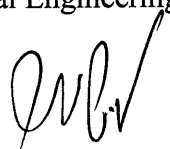
The Report addresses the situation of the undergraduate laboratories in general, and the lack of modern equipment in these laboratories, in particular. In this respect we would like to point out that since the visit of the evaluation Committee to our School, a major renovation of the equipment in the Laboratory of Materials was carried out. In the coming years, we plan to carry out a major revision of all undergraduate laboratory courses that the School offers. The process of equipment upgrading and modernization initiated in 2008 will continue in the next years.

As mentioned, a number of new courses in areas that were underrepresented is being planned and will be offered starting from the next academic year. Furthermore, in order to expose our students to the mechanical engineering profession early in their studies, we have already introduced, starting from the current academic year, a new mandatory freshman-course called "Introduction to Mechanical Engineering". The new ME students are introduced to the Profession by our Faculty as well as senior engineers from the industry with a wide range of expertise.

Aiming to obtain better feedback from the students, especially in their initial years of their studies, two senior faculty members have been appointed to be "mentors" for the 1<sup>st</sup> and 2<sup>nd</sup> year students starting in the current academic year. The two mentors will serve as a link between the general faculty and the students and will provide constructive feedback to both. They also advise individual students and aim to increase the student retention.

As part of the new outlined efforts to examine our overall curriculum, the graduate study program is also undergoing serious revision by the Graduate Studies Committee of the ME School. Courses will be retained, revised or removed from the offered list of courses, especially if they have not been consistently offered in the recent years. This will be implemented during the current academic year.

In summary, the School of Mechanical Engineering that has only recently been established as a result of a merger of two separate Departments is now in the process of profound self evaluation of its research and educational programs. This process has been accelerated in part due to the Committee's visit, i.e. as a result of preparation of the self-evaluation report, and in particular after receiving the evaluation report containing input that only objective external world-class experts can provide. We are confident that both the ongoing and the planned modifications as outlined above will enhance the reputation of our School of Mechanical Engineering as a leading institution in the field of Mechanical Engineering in Israel.



Lev Shemer