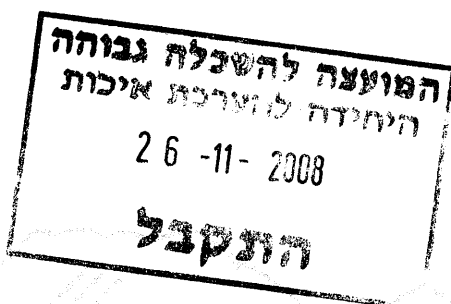




נשיא

כ"ב חשון, תשס"ט  
20 נובמבר, 2008  
סימוכין: dm08526

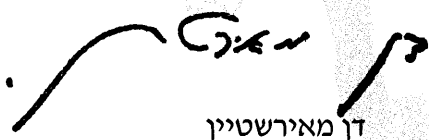


לכבוד:  
גב' מיכל קבצניק  
מתאמת יחידת הערכת איכות  
מליג  
ת.ד. 4037  
ירושלים 91040

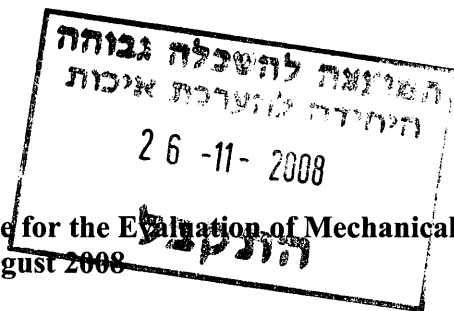
שלום רב,

מצ"ב התגובה של המחלקה להנדסת מכונות-מכטרוניקה לדו"ח הועדה לאיכות ההוראה.

בברכה,

  
דן מאירשטיין

**Response to the report of the Committee for the Evaluation of Mechanical Engineering Study Programs, dated August 2008**



It was our pleasure to host the Committee for the Evaluation of Mechanical Engineering Study Programs during its visit of the Ariel University Center in March 2008. We are delighted with the comments regarding the quality of the final projects of the students.

We largely agree with the committee's criticism and are on our way to implement its recommendations. The following is our response to specific comments in the Summary section of the committee's report:

1. We agree that the department needs more senior academic staff members to share the leadership of the department and to provide continuity in case Professor Shiller steps down from serving as the Department Chair. Since the committee's visit, one of our faculty members, Dr. Dror Rubinstein, an experienced researcher in vehicle dynamics, has been promoted to Associate Professor and is effectively serving as the Department Vice Chair. We are searching for a new faculty member in the field of Robotics and Mechatronics and are ready to offer a position to a qualified candidate.
2. The committee recommends that we involve "qualified industry engineers as external academic staff to teach elective courses." We agree that the injection of industrial experience into our study program will greatly enhance our educational environment. To this end, we have hired recently an experienced mechanical engineer, Tamir Ilan, to guide the students during their final project. We are open to recruit more experienced engineers from the industry to teach elective courses as soon as class size will enable to add electives to our current offerings.
3. The committee recommends that the department prepares a strategic plan to guide its future development. The new Rector, Professor Michael Zinigrad, is planning to request strategic plans from all departments in the school, we shall naturally do so.
4. We note the committee's recommendation to offer "a first year course that [will] expose students to engineering and mechatronics." We agree that the students need to be introduced to the various disciplines in Mechanical Engineering early in the program to motivate them in pursuing a career as mechanical engineers and to guide them in selecting the elective courses. We have recently introduced a new "Engineering Design" course that is now offered in the third year. We plan to move the course to the first year and modify its content to make it broader and suitable for incoming students.
5. The need to enhance the students' creative and self learning skills is well understood. We have emphasized creativity in the final project course, and challenge students with open ended projects in the mechanical system course, where students design and analyze a mechanical system to meet given functional specifications. Also the engineering design course, where students use design synthesis methods for a project of their choice, the numerical analysis course where students are asked to choose the appropriate method for error analysis of a numerical solution to given differential equations and the vehicle dynamics course where students perform engineering

analysis of a given vehicle systems that includes a dynamic simulation include open ended problems. We will continue to encourage faculty to incorporate open ended problems in their courses.

6. We are puzzled with one comment in the committee's report that questions the scope and depth of content of some traditional engineering courses. We do not see what could have prompted this statement. Even though the program is focusing primarily on Mechatronics, we do not neglect the traditional science courses as they are critical for a balanced education of our students as Mechanical Engineers. The scope and content of these courses were defined to meet the standards we are familiar with from leading schools in this country and abroad, and we intend to maintain these high standards as much as we can.

We have taken the committee's recommendations seriously and have started implementing some recommendations even before receiving the committee's report. We are convinced that following the committee's advice will help improve our study program and are looking forward to cooperating with the committee and with the Council of Higher Education.