Not only engineering studies – also leadership, initiative and innovation

PROF. JEHUDA HADDAD, PRESIDENT OF SCE- SHAMOON COLLEGE OF ENGINEERING, BELIEVES IN BUILDING A CLOSE CONNECTION BETWEEN INDUSTRY AND ACADEMIA AND SPEAKS ABOUT THE UNIQUENESS OF COLLEGE GRADUATES WHO ARE SOUGHT AFTER IN THE MARKET IMMEDIATELY AFTER THEIR STUDIES

When the academic colleges were established two or three decades ago, the state’s goal was to make higher education accessible to the residents of the periphery. SCE, the Sami Shamoon Academic College of Engineering, which operates two campuses: Ashdod and Beersheba, has successfully completed this important goal, and even more than that, and today it is the only academic college in southern Israel and the largest in Israel, which takes in thousands of young people from the south and the entire country every year.

On both campuses there are about 5,500 undergraduate and graduate students, and the number is only growing. Every year, about 800 engineers graduate from the college, accounting for 15% of the engineers in the market in various engineering fields: construction engineering, industrial engineering and management, chemical engineering, software engineering, mechanical engineering and electrical and electronic engineering. The graduates are immediately sought after by the industry and according to a survey the college conducted this year, 93% of them are employed in their profession.
in choosing a field of study and professional occupation. They come with very good initial conditions in terms of grades and achievements in high school, finish very well in their high school studies but do not go to engineering studies. Even those who successfully finish their engineering studies find it difficult, unjustifiably in certain cases, to integrate into the industry. This requires intervention by the regulatory institutions and the government, because the circle can be expanded mainly among women. Haredim and minority members also have additional potential for engineering and hi-tech, but there, too, there are difficult challenges.

What is your vision for the future of the college?

"To continue to be a leader in responding to the shortage of professional manpower in both the Negev and Ashdod, and to continue to bring out students with leadership qualities and entrepreneurial initiatives who are quickly and happily accepted by industry. In my opinion, there is a psychological barrier that sometimes impairs women in choosing a field of study and professional occupation. They come with very good initial conditions in terms of grades and achievements in high school, finish very well in their high school studies but do not go to engineering studies. Even those who successfully finish their engineering studies find it difficult, unjustifiably in certain cases, to integrate into the industry. This requires intervention by the regulatory institutions and the government, because the circle can be expanded mainly among women. Haredim and minority members also have additional potential for engineering and hi-tech, but there, too, there are difficult challenges.

What is your mission as an academic institution?

"Our mission: to foster excellence among different populations and to bring about the prosperity of society through academic education. It is important for us to make higher education available to all population groups in Israel, including women and haredim, while improving the individual's connection to the profession he/she is studying and their connection to the industry. Our programs are attentive to the needs of the industry, and we try to train the students so that they have the knowledge and tools that will enable them to function in the best possible way. Apart from the fact that we are an academic institution that deals both with research and teaching, we believe that academia should be more intellectually flexible for the needs of the industry. We constantly examine the needs of the industry and study them in order to meet the needs that arise from the field. It makes us very different from other places of study."

How is the relationship between industry and academia reflected?

"It is expressed first of all in the curriculum. Part of the student training in the curriculum is project oriented. In nine courses in their course of study, the students receive real issues that they must find a solution for from the industry. Students are asked to solve the problem in a day or half a day through the academic tools they acquired. The industrial professionals themselves participate in this part of the course and thus we establish a connection between the academic fields and the industry. Our main daily challenge since the establishment of the college to this day is to instill unique training for both students and faculty - we want to be different from all other universities and to train our students in the best possible way. We are proud that today some of our graduates are faculty members of other universities, and some have returned as faculty members, and some have applied for senior positions in the industry."

What is the solution to the big shortage of engineers in Israel?

"There is no doubt that the shortage of professional manpower is a major challenge today in the field of engineering, and although the engineering profession is a highly sought after field of study by young people in Israel, only 20-25% of the students currently study engineering, and this is not enough. The challenge today is to try and expand the circle of learners in these fields. We should try to influence other populations to study engineering, for example women. Today, only 22-26% of engineering students are women, and this is less than half their percentage in terms of the population. There is still much more to strive for. We believe in women, half of our department heads are women and our CEO is a woman.

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