



ENGINEERING STUDIES ARE NOT THE STUDIES FOR THE CHOSEN FEW

Prof. Magdalena Wyrwicka, Dean of the Faculty of Management Engineering, Poznań University of Technology, talks with Marcin Haber

PM Technological studies and engineer's profession has long been seen as masculine. Has it changed today?

I believe that today's engineer thinks systemic, takes into account environmental factors and local opportunities. The masculine image of engineer is primarily related professions, such as designer, constructor, or others that involve creating something completely new. In these jobs men dominate, indeed. However, there are many new engineering professions that deal with technology or in-depth research and analysis; that focus on "how is it done?" and not only on how something should look like in terms of concept or design. In my opinion, women are successful in these jobs. From the perspective of my university, women prevail among chemists, architects and in management majors.

PM So you are suggesting that women are very good at things where you need to take a more general look rather than focus on specifics?

I think so. Women have analytical skills. They pay attention to details and perhaps it is precisely why they sometimes find it difficult to put together something as a whole, but once you show them that whole, they will be able to point at important details, go down to the operational level so as to put the icing on the cake.

PM The Poznań University of Technology, including your Faculty of Engineering Management, participates of the campaign "Girls as Engineers!" (Polish: "Dziewczyny na politechniki!"). How do you assess it and how does it actually translate into the number of future female students?

Since the launch of the initiative, the number of women who enroll for engineering studies has actually increased. Surveys, which were conducted on a year-to-year comparative basis, show that more and more women are interested in studying at the Poznań University of Technology (since 2009, there has been an increase of 38.5%). In my

opinion, this campaign is primarily intended to show that engineering studies are not the studies for the chosen few. When I was going to study at mechanical engineering, I also had doubts whether, as a high-school girl graduate, I will manage. Subjects such as strength of materials and gears scared me a little, but I think that if you are curious and persuaded that if one person came up with something, then the other is able to understand and further improve it, then all tasks and projects are feasible. The essence of the "Girls as Engineers!" campaign is for young women not to fall into some thinking schemes, but to ask themselves a question if I am curious to know how a bus is built, or how a metal cast is made?, or else how to programme a robot? Or perhaps it does not interest me at all... I think that this kind of reflection is extremely important and it should be made in advance to make sure you will not say: "It was not a good choice" when it is already a done deal.

PM Which fields of study have seen the largest increase in female students?

First of all, laboratory fields, such as the already mentioned chemistry, but also those associated with organisation and management. In these fields, women constitute up to 50% of all students. Architecture is also popular, mainly due to the fact that women are interested in design and applied arts. Many women are now interested in logistics, safety engineering; they want to work in occupational health and safety services, warn against a variety of threats, care for the quality of the workplace environment. I believe that there is room for women in the world of technology. A complementary perspective is needed here. Even the fields that were once regarded as very masculine, like mechanical engineering, transportation, electrical engineering, telecommunications, automation and robotics, are becoming increasingly popular with women. This is probably because of the changes occurring in these professions due to technological progress. With the use of modern technologies, machines and tools, they are



no longer synonymous with hard physical work. Women often see it as a challenge to graduate in such a "masculine" field of study.

PM In order to attract candidates amid population decline, universities must provide some added value to stand out from each other. What is that the Poznań University of Technology offers to candidates?

Our main advantage is a very low unemployment rate among graduates. Most of the students of the Poznań University of Technology already has a job by graduation date. This is currently the biggest incentive for people wondering about the choice of university. We also strive not to specialise in very narrow fields so that graduates have a large selection of jobs in which he or she will be able to work. After a short adaptation to the conditions of a specific institution, graduates of the Poznań University of Technology are able to take on a variety of tasks, as they have quite a broad spectrum of vocational training, including in terms of the so-called soft skills. □