

AUB launches Applied Energy program in engineering

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The American University of Beirut's Faculty of Engineering and Architecture launched a new program in applied energy, thus leading the way with the study of energy efficiency and environmentally sustainable engineering designs.

The new graduate program was developed with a grant from the Tempus framework in collaboration with Lund University in Sweden; the Swedish Royal Institute of Technology, Kungliga Tekniska Hogskolan; and the Aegean University in Greece; in addition to experts from Malmo University in Sweden and from the SP Swedish National Testing and Research Institute.

The Tempus grant has also allowed the faculty to establish a Renewable Energy Systems Lab and HVAC Lab, as well as cooperation between AUB and top EU universities.

Faculty of Engineering and Architecture Dean Ibrahim Hajj noted that the Tempus program will help AUB in its mission of 'teaching, research, and service to Lebanon and the region.'

Dean Hajj noted that the field of energy studies 'is not just a technical field, but has social, human, and political dimensions.'

Mechanical Engineering Chair Nesreen Ghaddar explained that the two-year master's program will lead to a Master of Mechanical Engineering, with a major in Applied Energy. Graduates from this program will be able to design and manage efficient energy systems for buildings with high-quality indoor environments; integrate renewable energy technologies with conventional energy systems to improve sustainability of energy supply systems; understand the economic, the policy, and regulatory frameworks within which decisions on sustainable energy utilization practices are made; and assess and evaluate the impact of new technical developments in energy systems on society, the environment, and the economy.

Ghaddar noted that the faculty chose to focus on energy in buildings because '50% of all energy consumption in Lebanon is in buildings, and 70 percent of all peak loads is consumed by air-conditioning systems.'

Moreover, she noted that the program is designed in such a way as to offer students a lot of opportunities for graduate and research assistantships, grants, and financial aid. Students also have the chance to spend a month working on their research with partner universities in Europe.

Acting Provost Waddah Nasr said:

'it would be naïve to go against technology, but the negative side of that is that there a price to pay when introducing new technologies.'

However, he added: 'The problems produced by the application of technology can best be solved by other technologies... That's why the study of efficient energy design is essential.'

Elizabeth Kjellsson from Lund University congratulated AUB on its achievement, thanking Ghaddar 'for her endless supply of enthusiasm and positive spirit.'

The launch of the new program was held under the patronage of Education Minister Bahiyya Hariri, who was represented at the event by Ahmed Sinjiqdar, who heads the colloquium department at the ministry.

It was also attended by Trustee Mounib al-Masri, who, along with his wife, Angela, have financed a \$5-million endowment at AUB to support engineering research. In its first five years, the endowment will provide research funding to a few projects each year. By 2012, it would have matured and AUB would be able to establish the Mounib and Angela Masri Institute for Energy and Natural Resources.

(AME Info)