



The renewable energy and smart grid excellence center

Renewable energy and energy efficiency technologies are the key for creating a clean energy future for not only the nation, but the world. World Energy Consumption relies heavily on coal, oil, and natural gas. Fossil fuels are non-renewable, that is, they rely on finite resources that will eventually dwindle, becoming too expensive or too environmentally damaging to retrieve. In contrast, renewable energy resources, such as wind and solar energy, are constantly replenished and will never run out.

Due to the rising need for professionals and academics with a background and understanding in the Renewable Energy field, Holon Institute of Technology ("HIT") developed a new program at the Faculty of Electrical Engineering. The Renewable Energy program gives the students technical and practical aspects of energy use (technology and methodology of the study) and energy efficiency.

Following the receipt of an award for research, funded by the Chief Science Officer of Israel, a research group and the renewable energy and smart grid excellence center were founded in HIT in June 2011 with the purpose of encouraging research and creation in the field of energy. At the heart of the center, the renewable energy and smart grid laboratory was established. The laboratory is equipped with state-of-the-art equipment and experiments, including photovoltaic energy, water energy, wind energy, fuel cells and smart meters and smart grid equipment.

The renewable energy and smart grid excellence center objectives are on one hand to teach and enrich students with the most recent technologies in this field and on the other hand, to create scientific collaborations that will lead to receiving prestigious grants, as well as to publishing joint essays. Collaboration with the industry enables the establishment of joint ventures which will promote both research and the institute in this field.

Under the guidance and supervision of Dr. Hen Friman and Ifaa Banner, HIT has set up an innovative course "Green Ambassadors", this course integrates work run by the Dean of the Students, the Social Involvement Unit and the "Israeli Hope" in the academia. This course puts together the learning of students in the classroom and social doing- passing on the material they have learnt to elementary pupils in an enjoyable way to boost awareness and accessibility to knowledge and information regarding environmentalism. The ultimate goal was that the young pupils would become "green ambassadors"—children with environmental awareness.

https://drive.google.com/file/d/14dN5yvwZf161_Ttrqq0rrOw8b9fYQHr/view?usp=sharing

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