



IREEDER
Introducing Recent Electrical Engineering
Developments into undergraduate curriculum

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IN THIS ISSUE



What is IREEDER

World has recently witnessed an increasing technological development in different fields especially in Renewable Energy (RE), Internet of Things (IoT) and Cyber Security (CS), where the demand on skilled manpower in these fields has significantly increased.

In Jordan, specifically, these three technologies are being under high attention. Indeed, Jordan, as a non-oil-producing nation, has placed a strong emphasis on RE, particularly solar and wind energy. By 2025, RE is projected to account for 20% of Jordan's electrical energy. In the field of IoT, Jordan's IoT applications are expanding to include a wide range of commercial, agriculture, and medical applications. Furthermore, CS has recently gained considerable attention both globally and in Jordan, emphasizing the importance of enhancing CS and data protection. As a result, professional engineers in RE, IoT, and CS are in high demand in Jordan's labor market. IREEDER project, cofunded by the Erasmus-Plus program of the European Union, aims at developing the undergraduate curricula of the electrical

engineering by introducing the recent technologies.

The IREEDER's overarching goal is to ensure that Jordanian universities are in a position to provide quality education that is compatible with European standards, as well as to meet the socioeconomic needs of the emerging knowledge-based society, by strengthening undergraduate teaching and improving learning outcomes in order to provide Jordanian graduates with professional leadership skills that are comparable to those of European graduates. Specifically, the project aims to develop bachelor degree subjects with appropriate laboratories in RE, IoT, and CS taught by Jordanian universities and brought in line with EU requirements, as well as engage faculty in the development of online lectures and laboratory training and share experience with EU universities, while extending services and training in collaboration with the local community.

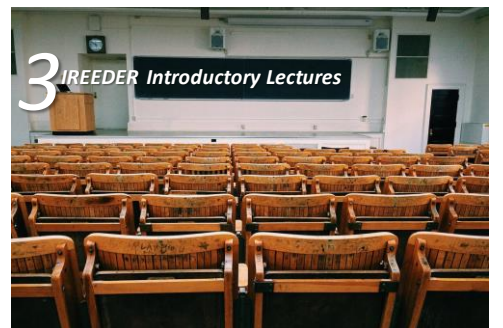
In order to increase public awareness and use of IREEDER outcomes, as well as to ensure high visibility of project outcomes among target groups and stakeholders, the IREEDER teams recently completed a variety of activities, including a live radio interview about IREEDER, the development of a promotional video and online introductory lectures held at various Jordanian universities.



1 IREEDER Radio Interview



2 IREEDER Promotional Video



3 IREEDER Introductory Lectures

IREEDER Radio Interview

A live radio interview was held at Saout aljanoub radio station about IREEDER. In the interview, Dr. Moath alsafasfeh, the chair of the computer department at AHU, was introducing IREEDER and explaining the main objectives of IREEDER. He mentioned that IREEDER will be a suitable opportunity in Jordan for developing new courses in IoT, CS, and RE and evolving the academic staff to do their research in these new trends using the established laboratories by IREEDER. In addition, Dr. Haitham Alashary, the vice-dean of engineering college, AHU, IREEDER will play as the main starting point of training students and do their senior graduated projects on new topics in electrical engineering, IoT, RE, and CS. Moreover, Eng. Mohammad Alshamari, the director of the Jordanian Engineering Association – Ma'an Branch-, such Erasmus project will enhance graduated engineers which would enrich their opportunities to get jobs and work with the new developments in trends in electrical engineering fields.



IREEDER Promotional Video

IREEDER team at AHU prepared a promotional video about IREEDER project. In the videos, all the objectives of IREEDER, partners, target groups, stakeholders, and outcomes are explained.



Dr. Moath Alsafasfeh mentioned the main objectives such as Develop, integrate, accredit and evaluate subjects with appropriate

laboratories' components in the fields of RE, IoT and CS taught by universities in Jordan and brought into line with the EU requirements.

Dr. Bassam Abu Karaki, talked about the advantages of implementing IREEDER for students and higher education and institutions in Jordan. This video was published on IREEDER Facebook page and made publicly available on IREEDER youtube channel (<https://www.youtube.com/watch?v=oc5LlbrdgMA>).



IREEDER Introductory Lectures

Isra University

As a part of introducing the IREEDER project to the academic staff as well the students, Isra University (IU) provided an introductory lecture about the project on March 15th, 2021 via Zoom. Both Dr. Mohammad Zakariya Siam (Associate Professor at Electrical Engineering Department and the project coordinator at IU) and Prof. Mohammad Suleiman Sarairh (Dean of Information Technology Faculty) delivered the lecture.



The main topics that have been covered during the lecture were: IREEDER objectives, IREEDER outcomes, target groups of IREEDER, team members of IREEDER,

IREEDER teaching materials (including IoT, CS, and RE), and the training courses for the three subjects (IoT, CS, and RE). Many students attended the lecture along with their professors. A total of about thirty students and professors attended the lecture, who gave a very good feedback about the IREEDER project, as they were eager to know more about the project and participate in the different coming stages of it.

Tafila Technical University

On Wednesday, March 17, 2021, at 6:30 pm UTC+2 Dr. Ahmad Aljaafreh and Dr. Murad Alaqtash presented a lecture named "IREEDER Introductory Lecture at TTU" online through Zoom platform. Most of the audience is from Tafila Technical University (TTU). Some of IREEDER partners attended the lecture. At the end of the lecture, there was a Q/A session where friends from other Jordanian partners shared in answering questions. Dr. Aljaafreh presented the main objectives, partners, outcomes, work packages, and the importance of the project for TTU in general and for both electrical engineering and communications and computer engineering departments. Dr. Murad presented the roles of this project and other Erasmus projects for our students.



Mutah University

On Thursday, March 25, 2021, members of the IREEDER team gave an introductory lecture at Mutah University (MU). The lecture was intended to raise awareness and interest in the IREEDER project among academic staff, administrative staff, and students in MU. The meeting was organized with the help of the Zoom and Teams apps. Dr. Khaled Al-Awassa and Dr. Saqr Al-Jaafra offered valuable

information about the scope of the IREEDER project in terms of priorities and planned outcomes, as well as the Jordanian and European members involved in the project. Following that, Dr. Ziyad Al Tarawneh, the project coordinator at MU, addressed participants' questions about the project and how to profit from the IREEDER project, as well as how to deepen coordination mechanisms with the European Union institutions involved in the project. This event lasted over an hour and had a total of 70 people in attendance. The introductory lecture was given in both Arabic and English languages. At the end of this event, the participants emphasized the significance of RE, IoT, and CS topics in providing students with the skills required by the labor market and thus contributing to the improvement of students' and graduates' professional and technical success.

- IREEDER Objectives and Target Groups
- IREEDER Team
- IREEDER benefits

Anas Alkalash a student at PU said that "It is a brilliant idea at this stage to work on such hot topics in a collaboration among the Jordanian Universities. We would love to sense the impact for the IREEDER on PU curricula based on IoT, RE and SC themes"



IREEDER Partners



Philadelphia University

Philadelphia University has arranged for an introductory lecture event on Thursday the 8th of April 2021 at 20 O'clock. The main activity was for introducing the IREEDER project for the academic staff, the managerial staff and Students not only in the faculty of Engineering and Technology but also among the whole Faculties in Philadelphia University.

Professor Munzer Ebaid was the moderator for this event, while the presenters from PU side were Prof. Omar R. Daoud and Dr. Mohammed bani Younis and from the IREEDER side were Dr. Saud Althunibat and Dr. Muath Alsafasfeh. This event last for almost 35 minutes and the total number of attendees was 69. The presentation structured as follows:

- What is IREEDER

