

The establishment of Joint Ph.D. Programme in Mechanical Engineering with TUHH

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Overview

- Aim of establishing the programme
- Joint P.h.D programme idea
- History of Cooperation between UJ and TUHH
- Steps to establish the programme
- Challenges in establishing such programme

Aim of establishing the joint programme

- The purpose of the joint PhD program in Mechanical Engineering is to provide a world-class education to doctoral students based on the accumulated experience and advanced research facilities in Europe.
- The joint PhD program will provide opportunities for PhD students to have access to complementary facilities and resources of European Universities, get exposure to European culture in education and research, engage in international student mobility, and enhance the acquisition of research and transferable skills.

Joint P.h.D programme idea

- The idea behind this joint P.h.D programme in Mechanical Engineering came to existence a couple of years ago following a number of mutual visits by faculty members to Germany.
- The cooperation between the University of Jordan and the Hamburg University of Technology has been started since more than 5 years when both universities worked together in a Tempus EU project.
- Later, both universities got DAAD project to support the exchange of the master students in the field of Renewable Energy.
- During the meetings, many ideas were on the table and these efforts culminated when Prof. Kaltschmitt visited the University of Jordan and met with the faculty members at the school of Engineering.

Joint P.h.D idea

- As establishing such programme requires many mutual meetings to set the detailed programme plan and structure and signing the needed agreements
- A proposal for establishing the joint P.h.D programme was submitted to DAAD to secure the needed financial support
- President of TUHH visited UJ in Jan, 2018 and signed the joint P.h.D agreement.

History of Cooperation between UJ and TUHH

TUHH is an active partner with UJ through:

- Active Students Exchange agreement between UJ and School of Process and Chemical Engineering at TUHH
- DAAD funded Conference of Sustainable Electricity Generation for the MENA-Region October 4-5, 2016
- DAAD Funded Exchange Programme
- DAAD project to establish Joint Ph.D.
- DAAD project to establish virtual competence center (C-NEW)
- Previous Tempus Project (MAPEC)
- Two Current Erasmus+ Project (EGREEN and HEBA)

Conference of Sustainable Electricity Generation for the MENA-Region

- Aimed to provide a forum for thoughtful evaluations and discussions regarding up-to-date developments of Renewable Energy and Energy Efficiency.
- Presentations from 8 different nations were presented (Jordan, Palestine, United Arab Emirates, Egypt, Libya, Tunisia, Morocco and Germany)



Virtual competence center for Energy and Water nexus (C-NEW)

- C-NEW is a 2-year project that started on June, 2019 and is funded by DAAD.
- It is coordinated by Technische Universität (TUHH) with the partnership of University of Jordan (UJ).
- Website: <http://sites.ju.edu.jo/en/cnew/Home.aspx>

Project include many beneficial aims:

- Development and implementation of a virtual competence center for " Water and Energy Nexus" at UJ
- Knowledge transfer between UJ and TUHH
- Exchange of students between TUHH and UJ
- Train of Trainer workshop for researchers and academic staff



Master Program of Environmental engineering and Climate change

- The University of Jordan is the Grant holder (Applicant) for the project
- Duration: three years project (October15, 2011-October14, 2014)
- Project theme is Curriculum Development
- Project budget: 1,117.426 €
- Project Website: <http://mapec.ju.edu.jo/Home.aspx>



MAPEC Partners



The University of Jordan

Hochschule Ostwestfalen-Lippe
University of Applied Sciences

TUHH
Technische Universität Hamburg-Harburg



University of Innsbruck- Austria



I S P A B
Instituto Superior de Paços de Brandão



Paulo & Beatriz - Consultores
Associados, Lda - Portugal



Al-Baath University -Homs-
Syria



Teshreen University-Syria



Aleppo University-Syria

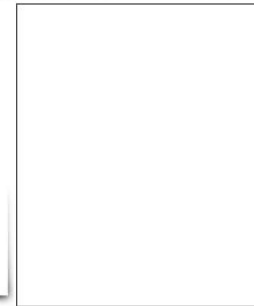


الجامعة الألمانية الأردنية
German Jordanian University

German Jordanian University -
Jordan



The Hashemite University-
Jordan



EGREEN

Development of Environmental engineering courses and injection of climate change concept for undergraduate curriculum: EU experience for Jordan and Syria (EGREEN)

- The University of Jordan is the Grant holder (Applicant) for the project
- The project is a three years project, October 15, 2016 to October 14, 2019
- Project theme is Curriculum Development
- Project budget: 999 512,00 €
- Project Website: <http://sites.ju.edu.jo/en/egreen/Home.aspx>

EGREEN Partners are from Jordan, Syria, Germany, Austria, and Portugal



The University of Jordan



German Jordanian University



Al Albayt University



Al-Zaytoonah University of Jordan



Mutah University



Jordan University of Science and Technology



Al-Baath University



جامعة حماة



Tishreen University



University of Innsbruck



Development of Environmental engineering courses and injection of climate change concept for undergraduate curriculum: EU experience for Jordan and Syria (EGREEN)

Objectives

- Establish and accredit 7 Environmental and Climate Change Modules for B.Sc. programs following the Bologna requirements.
- Train professional in environmental and climatic change issues.
- Establish a cooperation and a joint collaboration with companies, public administrations and Universities.
- Promote and publicize new environmental and climate change technologies in the country and considerably increase the scale of these technologies application in public and private buildings.
- Introduce 2 e-learning courses & ECTS course for large number of undergraduate students.
- Improve the national, regional and global environment by injecting environmental & climate change module for B.Sc. students following Bologna Process.



HEBA: High level renewable and energy efficiency master courses

The University of Jordan is Partner in the project

The Applicant is Universitaet Innsbruck, Austria

Duration: 3 years project, (October 15, 2017 and ends in October 14, 2020)

Project theme is Curriculum Development

Project budget: 999,873 €

Website: <http://sites.ju.edu.jo/en/heba/Home.aspx>



HEBA: High level renewable and energy efficiency master courses

Aims at improving the capacities of 6 Universities in MENA (2 in Egypt, 2 in Jordan and 2 in Lebanon) developing a new lectures/courses on “Energy Efficiency and Renewable Energy EE+RE” and establishing local but interconnected laboratories/centers on EE+RE (EEREL)

Main outputs will be:

1. A detailed knowledge of beneficiary universities facilities, industrial needs and final users' awareness;
2. Min. 70 local professors and trainers trained on EE+RE by European colleagues and able to provide high level new modules at their universities;
3. Innovative regional laboratories in EE+RE established in all partner universities;
4. Sustainable perspectives explored and verified;
5. Project activities and results disseminated;

HEBA: High level renewable and energy efficiency master courses

Project Coordinator: Universitaet Innsbruck, Austria

Partners:

- Arab Academy for Science, Technology and Maritime Transport, Egypt
- Helwan University, Egypt
- University of Jordan, Jordan
- Jordan University of Science And Technology, Jordan
- Lebanese University, Lebanon
- American University of Beirut, Lebanon
- Universita Degli Studi Di Roma La Sapienza, Italy
- Technische Universitaet Hamburg-Harburg, Germany
- University of Cyprus, Cyprus

Steps to establish the programme

- Apply proposals to secure funding to establish the programme
- Need analysis was conducted to justify the need for such programme
- Letter of institutional commitment was signed in June, 2017
- Programme Agreement has been signed between UJ and TUHH in January 2018.
- Study plan was prepared
- Executive Basis for Ph.D. Program was prepared



Challenges in establishing such programme

- Some opposition from staff members in the department
- Long process in obtaining the needed approvals within UJ to apply for the accreditation
- Long process to obtain the ministry approval on establishing the programme.
- Secure funding for the mutual visits

Thank You