

# **Double-Degree Masters Program in Mechatronics**

## **TEMPUS-JIM2L**

### **Section I. Objective of this document**

JIM2L is a TEMPUS Project (project Number 516686-TEMPUS-1-2011-1-DE-TEMPUS-JPCR)

JIM2L - Development of Joint International Master Degree and Lifelong Learning Framework in Mechatronics.

The program's objective is to establish double degree programs between Jordanian/Egyptian universities and European Universities

This document summarizes the proposed double degree program between

- Philadelphia University, Jordan -- PU
- Hochschule Bochum (Bochum University of Applied Science), Germany – BO

Note that there are a total of eight universities involved in the TEMPUS-JIM2L program. They are: Bochum University of Applied Sciences (Germany), London South Bank University (GB), Silesian University of Technology (Poland), Zagazig University (Egypt), Higher Technology Institute (Egypt), Heliopolis University (Egypt), German Jordanian University (Jordan), and Philadelphia University (Jordan)

This document will be expanded at a later stage to include double degrees between PU and other European partner universities.

### **Section II. Credit Systems**

- European University System is based on European Credit Transfer System (ECTS)
- Jordanian University System is based on US Credit Hours (USCH)
- One USCH = Two ECTS (as agreed upon during the JIM2L steering committee meetings)

### Section III. JIM2L program

- Double degree Masters program in Mechatronics Engineering
- Two (or two-and-half) years program
- Four (or five) semester program
- First two semesters at PU, third at BO, and final semester at PU
- First two semesters, student must complete all course work (30 USCS).
  - A completion of 60 ECTS (30 USCS) is a requirement by BO
  - This means a 15 USCS per semester. If the JO maximum is 12 USCS per semester, then the student can either take a summer course or expand to three semesters (instead of two)
- Third semester, student will do research at BO (i.e. thesis I)
  - Thesis work is 30 ECTS, which will be counted as 10 USCS (i.e. divide by 3, instead of 2)
- Fourth semester, student will do research at PU (i.e. thesis II)
- Total of **46** US Credit Hours
  - Divided as **24** compulsory, 6 electives, 6 thesis (PU), and 10 thesis (BO)

#### **Section IV. Table Comparisons between the JIM2L program and present PU program**

PU already had the approval of starting its masters program in Mechatronics. This is a regular single-degree program accredited by the Ministry of Higher Education.

This section summarizes the differences between the present PU program (single degree) and the proposed JIM2L program (double degree). Table 1 summarizes the general differences between the degrees.

**Table 1. Comparison of proposals in us credit hour system**

	<b>JIM2L Program Double Degree</b>	<b>PU Single-Degree Program</b>
Compulsory	24	18
Electives	6	6
Thesis	10 BO 6 PU	-- 9 PU
Total	46	33