Third Newsletter



Geodesy and Geoinformatics for Sustainable Development in Jordan

Geo4D is a Capacity Building in Higher Education project, funded by European Union's Erasmus+ Programme

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In 2019

The purpose of a newsletter is to provide detailed information about Geo4D activities, meetings and training workshops that implemented in 2019. In addition to the latest news about the progress of project, and planed activities in 2020.

PBL and e-learning workshop

As part of Geo4D working package "WP 6.1", a workshop for Jordan partners on e-learning and PBL (Problem-Based Learning) pedagogy was held in Ponferrada, from 1st to 6th of April, 2019.

This project considers that using PBL and active learning techniques is crucial in an up-to date learning environment, since they provides the ability for students to be immersed into pseudo-real world scenarios, thus encouraging them to take more responsibility for their own learning and apply their knowledge at successively higher levels, which are some of the aims of higher education (lifelong learning). The training workshop resulted in developing six PBL courses outlines, AT LEAST one geodesy course for testing PBL in fall semester 2019 or spring semester 2020. Minimum number of face-to-face hours of the PBL activity: 20.

Inside This Issue

- PBL and e-learning workshop in Leon,
 Spain.
- Staff training course on Geomatics for engineering applications, Polimi, Italy.
- Lectures in Geoinformatics for Postgraduate Students in Yarmouk University
- Training course on modern geodetic concepts at BAU.
- 2nd PMB meeting in Dead Sea, Jordan
- 2nd National Erasmus+ Office in Jordan monitoring visit to the Hashemite University.







This two-week intensive training course focused on Engineering Applications of Geomatics on your newsletter. The course was held between 2nd and 13th of September 2019 at Lecco Campus - Politecnico Milano, Italy.

Topics covered in this training include:

- Techniques for point-based and areal-based deformation for engineering and geoscience applications (W1).
- Validation techniques for Land Cover Classification (W1)
- Techniques and methods for 3D surveying and modelling of the built environment (W2)
- Introduction to Building Information Modelling and integration with GIS (W2)
- New instrument technology (W1/W2)

Lectures in Geoinformatics for Postgraduate Students in Yarmouk University

 A group of distinguished professors from the University of Leon in Spain and the Polytechnic-Milan University presented several lectures in the field of geoinformatics for graduate students in the departments of Earth Sciences, Environment, and Geography at Yarmouk University.





The workshop program, lasted form 14th to 15th of October 2019. A group of lectures were held on the first day on advanced topics in remote sensing science and its applications like the use of hyperspectral images in mineral exploration. On the second day, there was more elaboration on the techniques of obtaining remote sensing data by laser radiation (LiDAR) and the mechanism of extracting data of great scientific value in scientific research such as digital elevation system (DEM).



Training course on modern geodetic concepts at BAU

This training course has been organized at Al-Balqa Applied University (BAl October 11-15, 2019. Both Jordanian students and staff members particip the training activities. The training course was divided into two parts. The of the training was given to geomatics master students of BAU and include following lectures:

- Gravity, geoid and height systems
- Geodetic reference systems
- Swedish geodetic infrastructure
- 3-dimensional coordinate transformations

The 2nd part of the training course was a seminar for both students and staff members. The seminar, entitled "Geomatics - present status and future trends", consisted of a number of invited reviews

- Remote sensing: state of the art, trends and future work
- Review on GIS and Citizen Science
- Review on the state-of-the-art Photogrammetry
- From geometry to modern geodesy
- GNSS research and future trends
- GIS in Smart Cities
- Imaging spectrometry and Geoinformation for Geological resources and hazards mapping







2nd PMB meeting in Dead Sea, Jordan

The 2019 annual PMB meeting was held in Grand East Hotel Dead Sea on October 19-20, 2019. All PMB members and some key project members attended the meeting. The meeting main objectives were:

- 1) Reviewing completed and ongoing project activities.
- 2) Planning future project activities for 2020 have been planned with important dates and places decided.
- 3) Discussing progress report on master programme accreditation for the three Jordanian Universities.
- 4) Reviewing financial management issues.



2nd National Erasmus+ Office in Jordan monitoring visit to the Hashemite University.

National Erasmus+ Office in Jordan performed his second monitoring visit for Geo4d project at the Hashemite University on 18th of October, 2019. An overview of the project achievement and progress was presented by Dr. Huaan Fan the Project Coordinator of Geo4d to Professor Ahmad Abu Haija, the director of National Erasmus+ Office in Jordan and his colleague. Then each local coordinator present the status and the progress of the project at each Jordanian partner university.

At the end of the presentation, Geo4D team from Jordan and EU answers and clarify the different questions and issues raised.



Accreditation of the Master Program in Applied Geoinformatics

On August 1st, 2019, the Accreditation and Quality Assurance Commission for Higher Education Institution (HEAC), granted accreditation for the new Mater program. This is the first master among three master programs to be accredited by HEAC, where the other two master programs are in the pipeline, and expected to be accredited at the beginning of 2020.

Upon this accreditation, the Deanship of Graduate studies at Yarmouk University opened the call for admission in the program. A total of 13 applications were processed, 8students were admitted and enrolled in two courses (Geospatial Data acquisition and Geodatabase Management).



Project New Website

A new elegant and well developed website was lunched on 2020. The new website is user and mobile friendly and enable access to all project activities, developed curriculums, project outcomes, and a lot of teaching and educational contents. The new website is available at the following link, your feedback is highly appreciated:

https://www.geo4d.info/





Activities in 2020

- 1) Quality assurance workshop, 1-8 March 2020, Amman-Jordan
- 2) 3rd PBM Meeting, 22-27 June 2020, Stockholm, Sweden.
- 3) Development of 12 new teaching materials, September, 2020.
- 4) Final project conference, 14 October 2020, Irbid, Jordan.