CERIS : Civil Engineering Research and Innovation for Sustainability

GEONETC – International MSc Educational Programme in Environmental Management and Modelling

Summary

This project is funded by the Erasmus+ programme of the EU to open and establish a MSc course on environmental management and modelling in four universities in Iran and in the Kurdistan region. During the running time of the project a detailed programme of the course is being written, and its implementation in an e-learning platform is tested. The project is a partnership programme with two Iranian universities and four European universities and coordinated by Lund University-Sweden.

The main goal of the project is to address the increasing demand for flexibility in academic degree programmes, and to respond to the need for more demand-driven, problem-based, and active training in the Middle East region. As part of a partnership cooperation, a number of distance learning courses/modules will be developed jointly by the partner institutions in Europe and the Middle East. The aim of the network is also to promote the use of spatial information and earth observation for environmental management and modelling through capacity building and institutional development, where all partners contribute from their own positions of strength. The project will support the modernisation, accessibility and internationalisation of higher education in the Partner Countries. On a practical level, it would allow Partner Countries institutions to benefit from their EU partners' long experience with geo-information technologies, particularly their e-learning experience.

This collaboration partnership will improve the quality, as well as accessibility, of higher education and enhance its relevance to the labour market and society in the region. The project will improve the level of competencies

and skills of HEIs by developing courses using modern e-Learning tools, as well as student-teacher-admin communication and reporting tools, focusing on environmental modelling and climate change/food security issues within the region. The demand for graduates with these skills is high, as documented by the countries themselves, as well as by the EU and the project partners.

The modules are concerned with full MSc curriculum developments of the application of Geographical Information Systems and related technologies in Climate Change, Food Security, Hydrology Modelling and Environmental Engineering. A full set of adapted e-learning courses/modules on the mentioned topics, take make use of new pedagogical approaches, new technical tools, and with the specified focus will be available to the partner institutions.
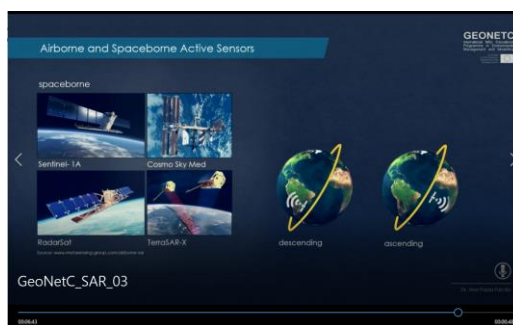

Figure 1. E-learning course material: snapshot of a video lesson on Synthetic Aperture Radar (SAR) principles and techniques – Introd. to Remote Sensing module.

Project Reference

561967-EPP-1-2015-1-SE-EPPKA2-CBHE-JP (2015-3767/001-001)

Leading Institution

LU – Lund University (Sweden)

Partners

VILNIUS TECH – Vilnius Gediminas Technical University (Lithuania), ITC-Faculty of Geo-Information Science and Earth Observation, Univ. of Twente (The Netherlands), Salahaddin University (Iraq), University of Duhok (Iraq), Malayer University (Iran), Torbat e-Heydarieh University (Iran)

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Funding

EU Erasmus+

Period

2015-2019

Total

997 261.00€

CERIS

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Project Website

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TÉCNICO LISBOA