Education and Research in Biosystems or Agricultural and Biological Engineering in Europe; a Thematic Network (ERABEE-TN)





Project Number: 134306-LLP-1-2007-1-GR-ERASMUS-ENW

"Quality Assurance and Assessment Frameworks of Biosystems Engineering studies"

5th ERABEE Workshop, 29-30 April 2010 Prague, Czech Republic George Attard george.attard@um.edu.mt University of Malta, Institute of Agriculture, Malta

Abstract

Regulatory instruments at the national level to ensure high quality are crucial to achieve and maintain a regional hub of higher education in Malta. While The Malta Qualifications Council and the National Commission for Higher Education are established and operational, the legal framework to set up a quality assurance agency and a quality assurance and licensing framework is in place, but the legislations is still awaiting approval. The University of Malta has set up internal quality assurance structures. The Programme Validation Committee monitors, reviews and recommends programmes for approval by Senate. The formation of the INSTITUTE OF EARTH SYSTEMS will facilitate the means through which a Bio Systems Engineering course could be offered. Furthermore the recent establishment of a Maltese Chamber of Agrologists could in theory eventually take up the role to grant professional accreditation.

Introduction

The Maltese Government has also put fort a vision of transforming Malta by 2015 into a regional hub of excellence in further and higher education. Concurrently, this sector is fast expanding to meet the growing demands driven by the increasing requests for a knowledge-based workforce, together with the aspirations of more students to continue their studies following the completion of compulsory education. Presently, foreign educational institutions are enquiring with the intention of setting up centres or provide programmes in Malta. This scenario requires a modern regulatory environment that ensures growth and promotes high quality standards.

National quality assurance structures

The Malta Qualifications Council (MQC) was set up in October 2005 through Legal Notice 347/2005 to define a National Qualification Framework (NQF) compatible with the European Qualification Framework (EQF). In November 2006, the first draft of the NQF was launched for consultation. The Maltese NQF was developed in the

Education and Research in Biosystems or Agricultural and Biological Engineering in Europe; a Thematic Network (ERABEE-TN)





Project Number: 134306-LLP-1-2007-1-GR-ERASMUS-ENW

framework of lifelong learning, and focuses on learning outcomes defined in terms of knowledge, skills and competencies at all levels of qualifications, of entry and exit points at every level of qualifications as well as levels of qualifications by sector and by occupation. Similar to the European Qualification Framework, the Maltese NQF is the reference point between training providers, industry and learners.

The National Commission for Higher Education (NCHE) was set up in October 2006, in line with Government's strategic objectives of further developing higher and tertiary education and to define a clear vision, sustainable targets and objectives. For this purpose the legislative instruments were included in Act XIII 2006 which amended the Education Act of 1988. In 2008, the NCHE launched its recommendations entitled "A Quality Assurance Framework for Further and Higher Education in Malta". Since then the NCHE has continued to advocate and attend conferences and international training workshops organised by the European Network for Quality Assurance Agencies (ENQA) representing Malta as a founding member of the European Quality Assurance Register (EQAR). The NCHE has also developed a draft for the future establishment of a quality assurance agency and continues to support the Ministry of Education in its drafting of regulations. The aims and principles of the proposed framework are based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) (ENQA, 2005) as adopted by the Ministers responsible for higher education within the Bologna Process in Bergen in 2005.

The National Commission for Higher Education (NCHE) believes that the necessity of quality assurance, accreditation and licensing is not an option but a pre-requisite, and government has the responsibility for the assurance of quality and excellence of both public and private provision. The more autonomous institutions are from their regulators, the bigger the need for transparent and adequate internal quality assurance systems. The establishment of a quality assurance agency and a quality assurance and licensing framework in Malta require legal reforms which to date has not as yet been finalised. The proposed framework is made up of four elements: adequate internal quality assurance systems; external quality audits; accreditation and recognition decisions based on the results of external audits; and licensing systems linked to accreditation.

Quality assurance at the University of Malta

The University of Malta is an autonomous and self-governing body funded by public funds offering courses at undergraduate, graduate and postgraduate levels. Currently it is the only University which confers degrees, however a private sector has slowly but steadily emerged over the past years.

The fact that the University of Malta followed the British model for Higher Education, the already existing structure facilitated the implementation of the Bologna Process. Consequently what was required was mainly streamlining already existing courses to

Education and Research in Biosystems or Agricultural and Biological Engineering in Europe; a Thematic Network (ERABEE-TN)





Project Number: 134306-LLP-1-2007-1-GR-ERASMUS-ENW

the Bologna requirements. By 2005, the University of Malta had already carried out the implementation of the ECTS system across all undergraduate courses except in the case of Medicine and Dentistry. The University of Malta also implements the framework of describing ECTS in terms of learning outcomes. All of the first cycle courses now run with harmonised regulations. ECTS are also being implemented in Masters courses and regulations have been changed to allow recognition of joint Masters degrees. In fact, the University of Malta is currently involved in the provision and recognition of joint degrees through EU programmes such as ERASMUS Mundus. It has also launched Joint Masters programmes with the US.

In 2006 the University of Malt developed the Diploma Supplement aimed to make the University of Malta awards more readable and easily comparable locally and abroad as it gives a precise description of the academic course followed and of the competencies acquired during the study period. It also aims to give a fair judgment of graduates' achievements and competencies, to facilitate access to opportunities for work or further studies and lifelong learning locally and abroad, and to foster graduates' employability across Europe. The University of Malta has issued the Diploma Supplement in full conformity with EU/CoE/UNESCO Diploma Supplement format. The first few Diploma Supplements were issued in the 2006 Graduation. In keeping with its strong commitment to the Bologna Process, in 2007 the University of Malta awarded the Diploma Supplement to over 200 graduates in the Bachelor of Engineering (Honours), Bachelor of Science (Honours) in Information Technology, Bachelor of European Studies, Bachelor of European Studies (Honours) and Bachelor of Psychology (Honours) courses. In November/December 2008, more than 50% of the students graduating from the University of Malta were issued the Diploma supplement.

The National Commission for Higher Education was set up in line with national quality assurances. In 2007 it carried out a review of all aspects related to Quality Assurance within the Maltese further and Higher Education system. The report concluded that there is a weak national structure for external QA. The University of Malta has taken steps to improve its quality assurance structures. The Programme Validation Committee has been established to monitor, review and recommend programmes for approval by Senate. The Programme Validation Committee (PVC) has been entrusted by Senate to ensure that programmes of study offered by the University are of the required academic standard, are supported by the necessary resources and are responsive to national and market needs. The Academic Programmes Quality and Resources Unit (APQRU) is the administrative arm of the PVC. APQRU is dedicated to the facilitation of quality assurance and improvement activities intended to promote a culture of commitment to excellence in the provision of academic services. Our mission is driven by the ultimate aim of supporting teaching and learning and of ensuring that the education provided to our students is of the highest standards. The APQRU forms part of the Rector's Office and, in conjunction with the office of the Registrar, assists faculties, institutes and centres in

Education and Research in Biosystems or Agricultural and Biological Engineering in Europe; a Thematic Network (ERABEE-TN)





Project Number: 134306-LLP-1-2007-1-GR-ERASMUS-ENW

designing their undergraduate and postgraduate programmes of study in line with the general regulations.

Recent Developments

Following extensive consultation with all Maltese stake holders, a strong impetus was felt to reorganise to better reflects the diversity of academic programs and research initiatives required in meeting the urgent local challenges surrounding food safety, resource use and environmental resources. In order to address the various challenges, Malta needs an institution that brings together experts from agriculture, ecology, environment, sociology and economics. The synergies created through this initiative will provide an interdisciplinary approach to achieve sustainability of our local agro-environment. During the fourth meeting of Senate of the University of Malta held on the 26th of April, 2010, Senate endorsed the proposal to amalgamate the Institute of Agriculture and the International Environment Institute and create a new institute by the name of INSTITUTE OF EARTH SYSTEMS.

The statue of this new institute defines "Earth Systems" as referring to a concept which goes a step beyond traditional disciplinary investigation, taking a wider perspective of the Earth's dynamic systems. Such notion acknowledges the interconnectedness of abiotic and biotic components, as well as the need for sound planning and integrated resources management. Critical to a 'systems' approach is the inclusion of people and their environment. Earth systems science thus recognizes the link and interaction between the geo-sciences, evolutionary processes and ecology, and the human dimension (broadly the social, economic, cultural and technological elements), through environmental management. Amongst other things, the aims shall also include the training of target groups (including environmental planners, environmental managers, agrologists, architects, engineers, economists, journalists and lawyers) on environmental issues pertaining, in particular, to their respective areas.

On the 12th May 2010, the first annual general meeting of the newly formed Malta Chamber of Agrologists was held and the first managing committee elected. The chamber defines "Agrologist" as meaning a person providing services related to the development, management, conservation and sustainability of agriculture and agricultural resources. The principle purpose of **MCAg** is to govern its members in accordance to the statute in order that the public interest may be served and protected especially where the safeguarding of life, health, property and the public welfare is concerned. Further more, the chamber aims to accredit its members with a list of competencies in the sector.