

**Agricultural Engineering Studies
meeting the FEANI and EurAgEng criteria**

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The Institute of Agriculture of the University of Malta is a relative new member in this network. Due to the recent inclusion, we were absent for the 1st USAEE workshop held in Madrid. Nonetheless, a concise description of changes and modifications that took place at the University of Malta will be present.

To come in line with the Bologna Declaration, the University of Malta had to adopt a common framework of readable and comparable degrees; introduce two main cycles (undergraduate and postgraduate); adopt and introduction the ECTS-compatible credit systems, and eliminate obstacles that hinder free mobility of students, academics and administrators. In order to establish internal harmonisation, all stakeholders were consulted. The proposed recommendations were approved by Senate and new regulations governing all undergraduate awards were introduced. Since most courses were organised on a local credit system, which was somewhat compatible with the principles of ECTS, Senate decided that for academic year (2003/2004) all courses, except Medicine & Surgery and Dental Surgery, will adopt the new ECTS system.

By October 2003, all undergraduate courses on offer were modified and restructured to comply with the study-unit/credit system, and brought in line with the new harmonised regulations. These new regulations provided for the creation of common University policies in a number of areas, such as the number of credits required for awards, assessments and re-assessments, progression from one year to the next, as well as the introduction of the European Credit Transfer System. All undergraduate students are now covered by the same set of rules irrespective of which course they follow. The adaptation of the ECTS (European Credit Transfer and Accumulation System) put University in line with the increasing application of ECTS as the credit accumulation system within the emerging European Higher Education Area. The use of ECTS facilitates the mobility of Maltese students who want to spent time studying abroad and also of European students wishing to spend time in Malta.

The new regulations define that the program of study of the various degrees be made up a syllabus approved by Senate and composed of various study units to which a specified number of credits assigned. Each Study unit can be assessed separately, and those taught and assessed within a single semester shall normally be assigned no less than 4 credits (except for study-units designated as optional which may be assigned 2 credits) and not more than 30 credits. The credit value assigned to each study-unit indicates the total learning time which an average student is expected to

spend in achieving the learning outcomes associated with the unit. One credit nominally represents 25 hours of learning, of which 5 to 7 hours are direct contact.

An academic year consists of two semesters, each incorporating 14 weeks of teaching. Students following a full-time program are expected to complete 60 ECTS, i.e. 30 ECTS per semester. In view of this the Institute of Agriculture opted for a general rule to introduce study units having 6 ECTS weighting. Thus as a rule of thumb, students are expected to attend to 5 study units every semester. To implement this decision, new study units had to be developed. In so doing, some subject areas were amalgamated while others condensed. Prior to the study unit system, the student assessment was based on tests, exams and end of year final exams.

As presented in the Dresden workshop, the Institute of Agriculture, at present, does not offer an Agriculture Engineering course. Nonetheless, this network has provided the basic platform that encourages the evaluation of the potentiality in developing an Agricultural Engineering degree in conjunction with other Faculties. The University of Malta has the following courses accredited by FEANI:

- B.Elec.Eng (Hons), B.Mech.Eng (Hons), and B.Sc. (Eng) since 1967,
- B.E. & A. in the Area of Civil Engineering since 1992
- B.Sc. (Hons) IT in Computer Systems Engineering since 2004

The Faculty of Engineering already has two “HYBRID” degrees:

B.Ed. (Technology) Degree in conjunction with the Faculty of Education.

Students in the B.Ed.(Technology) degree programme take the first two years of the B.Eng.(Hons.) course in the Faculty of Engineering, followed by two further years of study in the Faculty of Education.

B.Sc. (I.T.) Degree in conjunction with the Department of Computer Information Systems, and the Department of Computer Science and Artificial Intelligence.

Students following this program will have to follow core units in the first two years covering Informatics, Computer Science, and Computer Systems Engineering with some complementary compulsory units in Mathematics, Statistics, Operations Research, and Management. In the third and fourth years student are expected to concentrate on the specific stream chosen.

Following examples stated above, the concept of developing and offering an Agricultural Engineering degree in Malta in lines with the most recent guidelines recommended by FEANI could be possible. However, in view of our size we would still need to identify areas that are of high relevance within the Mediterranean basin and offer this degree to all students of the region.