

Presentation of Master Programme in Sustainable Building

16 April 2011

IMOSB: International Masters on Sustainable Building

Four European universities, supported by iiSBE, the *International Initiative for a Sustainable Built Environment*, are developing an Erasmus-Mundus Master Program in Sustainable Building, together with several other universities and other non-commercial organisations.

The EU Erasmus-Mundus application is being coordinated by University of Minho (Portugal), Czech Technical University in Prague (Czech Republic), Zuyd Polytechnic University (The Netherlands) and Polytechnic University of Madrid (Spain) and a joint university degree of high quality will be awarded with this project.

The broad objective of the "International Masters Course on Sustainable Building" is to accelerate the worldwide movement towards a global sustainable built environment through the development of knowledge about sustainability issues, techniques, methods, tools and policies that actively facilitate and promote the sustainability of the built environment.

The partner universities of "International Masters on Sustainable Building – IMOSB" will apply for it to be a Joint European Master Programme on sustainable construction and rehabilitation, aiming at producing an international platform of competence.

The relationship of the partners with iiSBE enables the possibility of benefiting from the contact and collaboration of experts from over the world, taking into consideration their experience on world-regional sustainable building problems and practices. The partnership includes the leaders of several national delegations of iiSBE and some of the organizers of the series of SB conferences on Sustainable Building (1998-on-going).

The partners are also involved in relevant technical committees and enjoy a proven record of R&D&I external funding and top professional experience on aspects such as:

- Sustainable Building Overview,
- Social and Economic Issues,
- Principles of Environmental Building Performance,
- The Science of Sustainable Neighbourhoods,
- Materials, Products and Systems for Sustainable Building,
- Performance of Buildings,
- Sustainable Retrofit of Buildings,
- Methods and Tools,
- Neighbourhood Sustainability Performance,
- Integrated Design Processes,
- Integrated Neighbourhood Design,
- Integrated Research Project.

The "International MSc Course on Sustainable Building" is being led by European Universities and is therefore organised according the principles of the Bologna Declaration and the ECTS-credits system¹.

¹ The ECTS (European Credit Transfer and Accumulation System) is a standard for comparing the study attainment and performance of students of higher education across the European Union and other collaborating European countries. For successfully completed studies, ECTS credits are awarded. One academic year corresponds to 60 ECTS-credits that are equivalent to 1500-1800 hours of study in all countries irrespective of standard or qualification type and is used to facilitate transfer and progression throughout the Union.

The MSc Program combines the most recent advances in research and development with practical applications. The curriculum aims at providing expertise to students so that they can be productive in industrial, business and academic environments, having solid expert knowledge and skills in the fundamentals, methods, techniques, tools and policies related to Sustainable Building. The curriculum is composed by a total of 120 ECTS evenly divided in two years (60 ECTS each year). In the first year, the 1st semester is dedicated to Basics and Fundamentals and the 2nd to Methods, Techniques and Tools. The second year is dedicated to the Master Thesis or Dissertation. This phase of the curriculum (60 credits) is an individual Research Project undertaken over two study terms with the supervision of one or two Professors, or a Project Development in cooperation with the industry on specific application fields and co-supervised by a Senior Engineer/Architect and a Professor.

The IMOSB programme has a duration of two academic years (120 ECTS credits) and is held in the consortium institutions. It is expected that students will carry out one semester of the coursework (30 ECTS) in one location and the other semester (30 ECTS) in another location. It is recommended that the dissertation (60 ECTS) will be developed in one of the countries where the students carried out the coursework, but it is also possible to develop the dissertation in any other of the involved institutions. The mobility track is based on the preferences of the students taking into account adequate balance between different institutions. The curriculum is equivalent, no matter the student mobility track.

The study programme is composed of thirteen learning units, with eleven sequential units, one unit project-based and one dissertation.

All the learning units will be taught using the most modern communication technologies like video conferencing facilities and e-learning platforms. Professors from the involved institutions will deliver lectures on a rotating basis. Well known experts from Associated Partner institutions as well as iiSBE experts will also be invited to give live Lectures and e-Lectures.

The Dissertation aims at developing research and/or professional competences in the field of Integrated Neighbourhood Design, Integrated Design Processes, Materials, Products and Systems for Sustainable Building and Sustainable Rehabilitation.

The degree awarded will be a Joint Master Degree and, potentially, a double degree.

The admission requirements for students wishing to enrol in the Masters Course are a good quality degree in Civil Engineering, Architecture or equivalent qualifications. Typically, students are expected to have a higher education degree with four or five years, at the time the Master starts. Exceptionally, a higher education degree with three years will be accepted.

Students from non-English speaking countries are required to have one of the following certificates: TOEFL certificate paper based (minimum score 525), TOEFL certificate internet based (minimum score 72), IELTS certificate (academic version, minimum score 6.5) or other recognized language proficiency certificate.

Admission will be subject to the approval of the Masters Committee, and will be based upon the applicant's ability, motivation, recommendation letters and language skills.

The language of instruction and the language of examinations will be English. Courses (including course material), examinations and study counselling will be available in English only. Students are also encouraged to attend one national language and culture course (Portuguese, Czech, Dutch and Spanish).

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