European Erasmus Mundus Master 520121-1-2011-1-CZ-ERA MUNDUS-EMMC

The railway station Lyon - Antoine de St. Exupery designed by Santiago Calatrava
Photo by Ing. arch. Patrik Kotas

SUSCOS

The focus of SUSCOS Sustainable Constructions under Natural Hazards and Catastrophic Events European master course is to provide attendees the engineering ability and know-how to design and construct steel and timber structures in a balanced approach between economic, environmental and social aspects, enhancing the sustainability and competitiveness of the steel and timber industry.

The courses are lectured in English by academics from all partner institutions and invited teachers from associated members. The first edition (2012-2014) of the course will start at University of Coimbra and continue at Czech Technical University in Prague.

url: steel.fsv.cvut.cz/suscos

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SUSTAINABLE CONSTRUCTIONS UNDER NATURAL HAZARDS AND CATASTROPHIC EVENTS (SUSCOS)

The course is organized in three modules covering buildings, bridges and energy-related infra-structures and equipments with a practice oriented approach. A strong emphasis is given to the reduction of carbon footprint, the energy efficiency of buildings considering a life-cycle approach and the integration in the structural systems of renewable energies and innovative technologies.

The degree awarded is a Master Degree, provided as a multiple diploma. The MSc has duration of three semesters and is held on a rotating basis among partners. Coursework is concentrated in two countries and dissertation work is divided between all partners. Students may spend every single term in other country. The programme is structured in 3 semesters for one and a half year of study. The courses are marked as compulsory (C) or elective (E).

LIST OF SUBJECTS:

1st semester

1C1	Design of sustainable constructions
1C2	Conceptual design of buildings
1C3	Conceptual design of bridge
1C4	Local culture and language
1E5	Advanced design of glass structures
1E6	Advanced design of timber structures
1E7	Rehabilitation and maintenance of structures

2nd semester

2C8	Advanced design of steel and composite structures
2C9	Design for seismic and climate changes
2C10	Design for fire and robustness
2C11	Business economics and entrepreneurship
2E12	Design for renewable energy systems
2E13	Advanced design of concrete structures
2E14	Design of aluminium and stainless steel structures

3rd semester

C15	Theses

PARTNER UNIVERSITIES:

University of Coimbra

University of Liège

„Politehnica" University of Timisoara

Luleå University of Technology

University of Naples „Federico II"

Czech Technical University in Prague

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