

**SUSCOS**  
**Sustainable Constructions**  
**under Natural Hazards and Catastrophic Events**

**Duration:** 18 months

**Course description:**

**OBJECTIVES**

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 structures in a balanced approach between economic, environmental and social aspects, enhancing the sustainability and competitiveness of the steel and timber industry.

**CONSORTIUM**

The Joint European Master Course in Sustainable constructions under natural hazards and catastrophic events (SUSCOS) involves leading academics and the following sixth partner organizations, with a wide-range leadership in steel construction:- Czech Technical University in Prague (CZ, coordinator),- University of Coimbra (PT),- Lulea University of Technology (SE),- University of Liège (BE),- "Politehnica" University of Timisoara (RO),- University of Naples "Federico II" (IT).As a global initiative, the project includes the strong commitment of 10 Associate Member Universities from around the world (Brazil, China, Germany, Iraq, Italy, Kyrgyz Republic, Russia, Serbia, Slovenia, and Ukraine), the world-largest steel producer (ArcelorMittal) and ECCS (European organization for the steelwork industry).

**CONTENTS AND ORGANIZATION**

The MSc. has duration of 18 months (90 ECTS) and is held on a rotating basis among partners. Coursework is concentrated in two countries and dissertation work is divided between all partners. All students spend the first course semester in one country and the second one during the second semester in a second country. The dissertation can be carried out at any of the 6 partner countries during the third semester.

The main focus of SUSCOS is to provide engineers the ability and know-how to design and construct steel structures in a balanced approach between economic, environmental and social aspects, enhancing the sustainability and competitiveness of the Steel Industry. The course is organized in 3 modules covering buildings, bridges and energy-related infra-structures and equipment's 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 courses are lectured in English by academics from all partner Institutions and invited teachers from associated members. The first edition of the course will be carried out in Czech Republic and Portugal. The degree awarded is a Master Degree, provided as a multiple diploma.

**Website:** <http://steel.fsv.cvut.cz/suscos>

**Partners:**

CZECH TECHNICAL UNIVERSITY IN PRAGUE , Czech Republic (Co-ordinating institution)  
UNIVERSITY OF LIÈGE, Belgium  
UNIVERSITY OF NAPLES "FEDERICO II", Italy  
UNIVERSITY OF COIMBRA, Portugal  
'POLITEHNICA' UNIVERSITY OF TIMISOARA, Romania  
LULEÅ UNIVERSITY OF TECHNOLOGY, Sweden

**Contact:**

Dr. Martina Eliášová  
Czech Technical University in Prague  
Thákurova 7  
CZ - 166 29 Prague, Czech Republic  
Email: [eliasova@fsv.cvut.cz](mailto:eliasova@fsv.cvut.cz)

**Maximum grant:**

524 600 € (30 000 € consortium + 494 600 € scholarships), 2012  
604 800 € (30 000 € consortium + 574 800 € scholarships), 2013