



Welcome to SUSCOS_M

Sustainable Constructions under Natural Hazards and Catastrophic Events

European Joint Masters Courses

European Erasmus Mundus Master Course
Sustainable Constructions
under Natural Hazards and Catastrophic Events
520121-1-2011-1-CZ-ERA MUNDUS-EMMC

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Erasmus Mundus Programme

**ERASMUS
MUNDUS**

Action 1

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SUSCOS: Goal and scope

- The main focus of SUSCOS is to provide engineers the 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 Industry**
- Steel and timber structures, buildings, bridges and energy-related infrastructures 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.**

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Sustainable Constructions
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Partner: Czech Technical University in Prague



**(CZ,
coordinator)**



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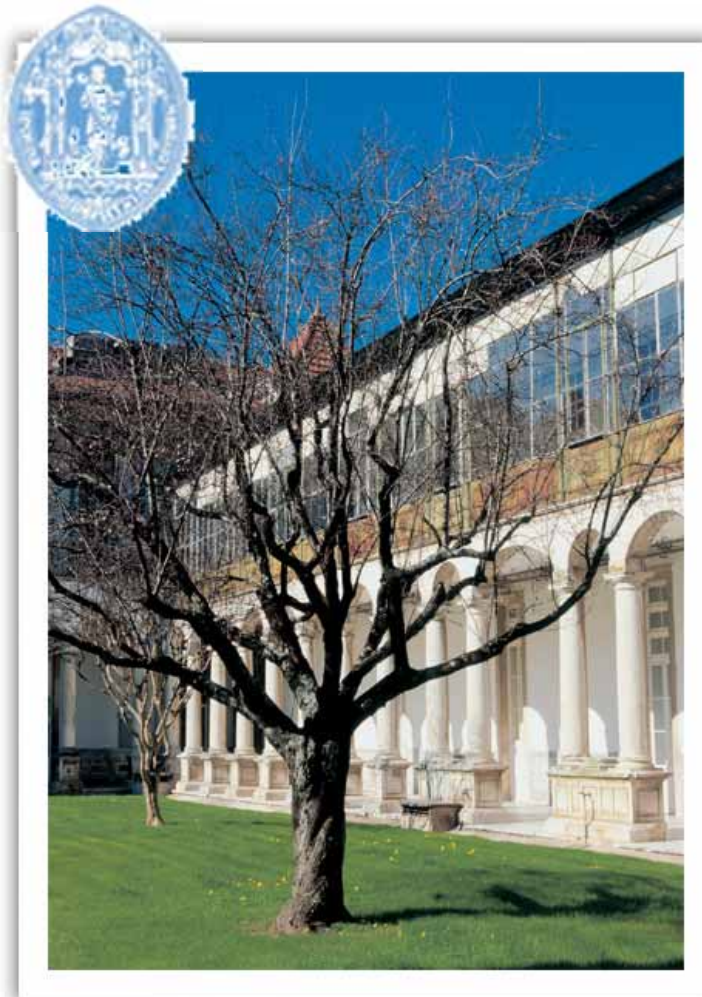


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Sustainable Constructions
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Partner: University of Coimbra (PT)



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Sustainable Constructions under Natural Hazards and Catastrophic Events

Partner: Lulea University of Technology (SE)



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Partner: "Politehnica" University of Timisoara (RO)



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Sustainable Constructions
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Partner: University of Liege (BE)



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Sustainable Constructions under Natural Hazards and Catastrophic Events

Partner: Univeristy of Naples "Federico II" (IT).



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(coordinator)**

 **"Politehnica" University of Timisoara**

 **University of Coimbra**

 **Lulea University of technology**

 **University of Liège**

 **Univeristy of Naples "Federico II"**

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Partners & Associate members

ArcelorMittal

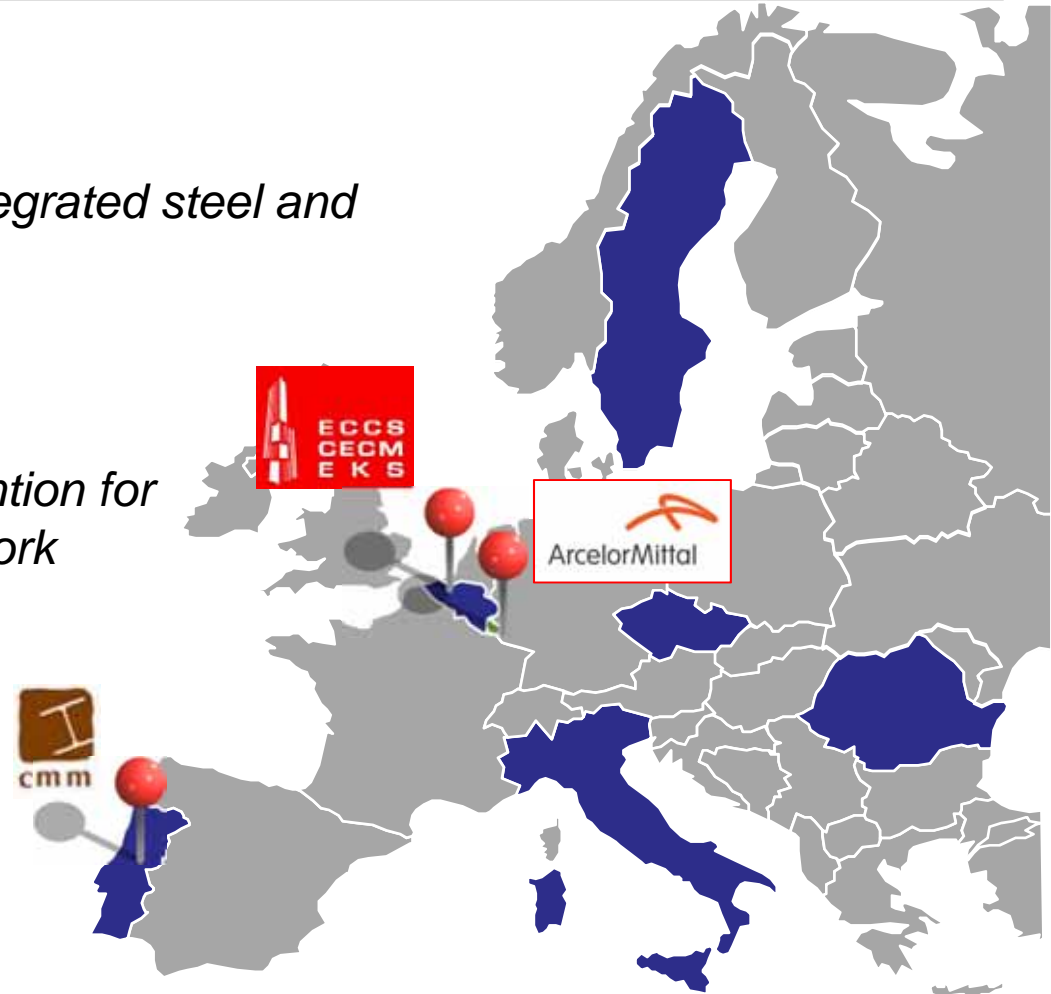
*the world's leading integrated steel and
mining company*

ECCS

*The European Convention for
Constructional Steelwork*

CMM

*The Portuguese
Steelwork
Association*



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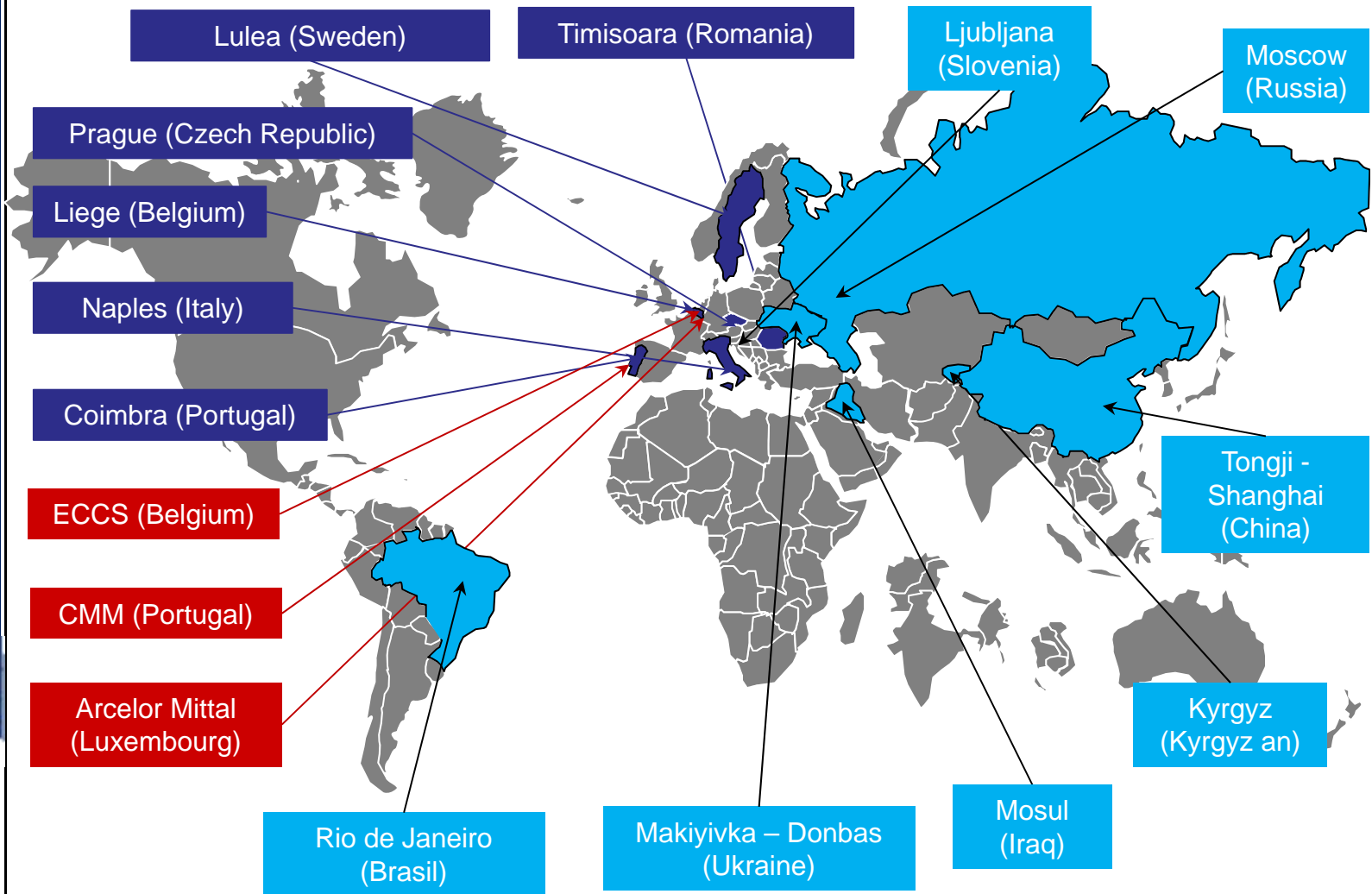
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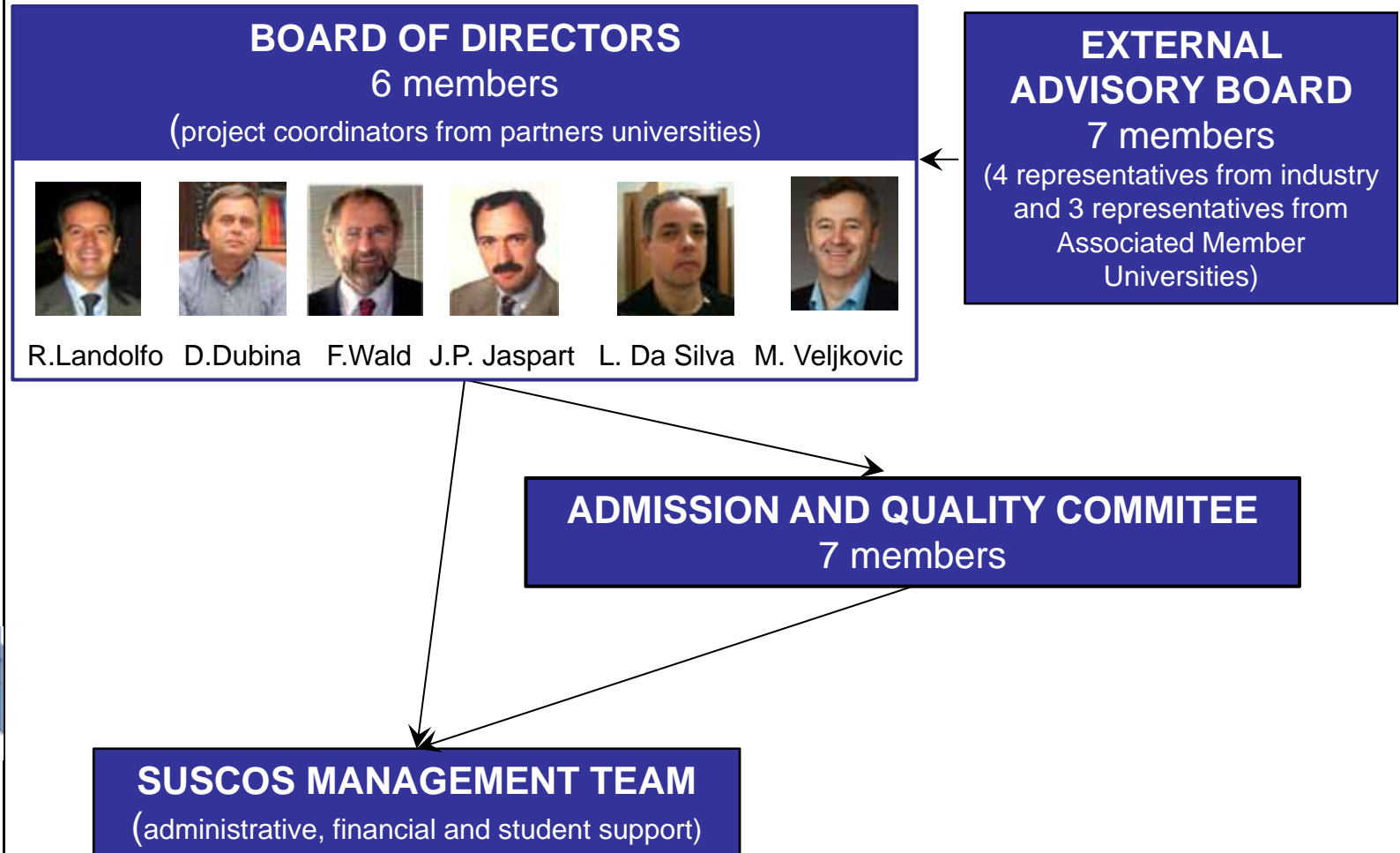
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Education programme

- The MSc has a duration of **18 months** (90 ECTS)
- The **course** is organized in **3 modules**
- The courses are lectured in English by academics from all partner institutions and invited teachers from associated members

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Diploma awarded

- The degree awarded is a Master Degree provided as a multiple diploma



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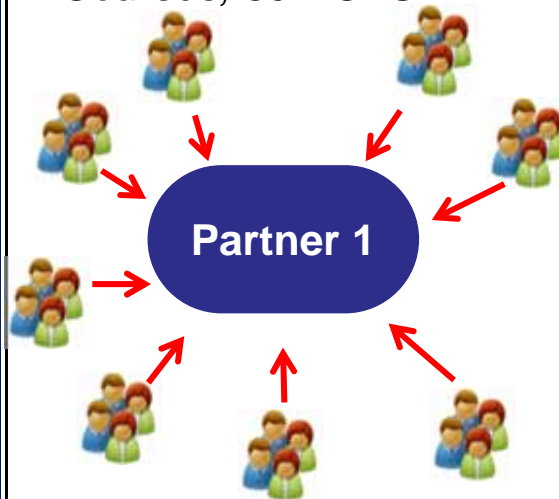


Sustainable Constructions
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Mobility plan

First semester

Courses, 30 ECTS



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Mobility plan

First semester

Courses, 30 ECTS

Second semester

Courses, 30 ECTS



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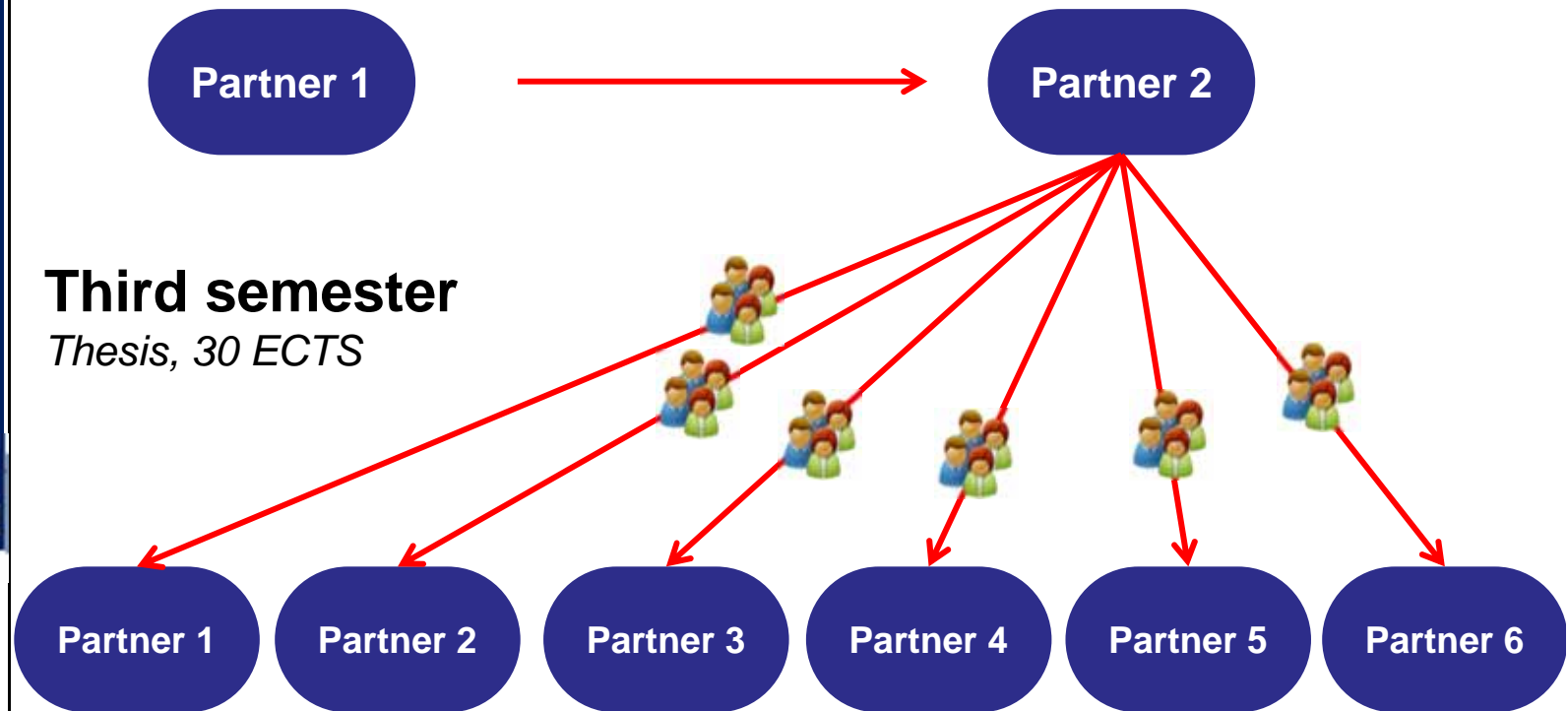
Mobility plan

First semester

Courses, 30 ECTS

Second semester

Courses, 30 ECTS



Third semester

Thesis, 30 ECTS

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Mobility plan: Second edition 2013-2015

First semester

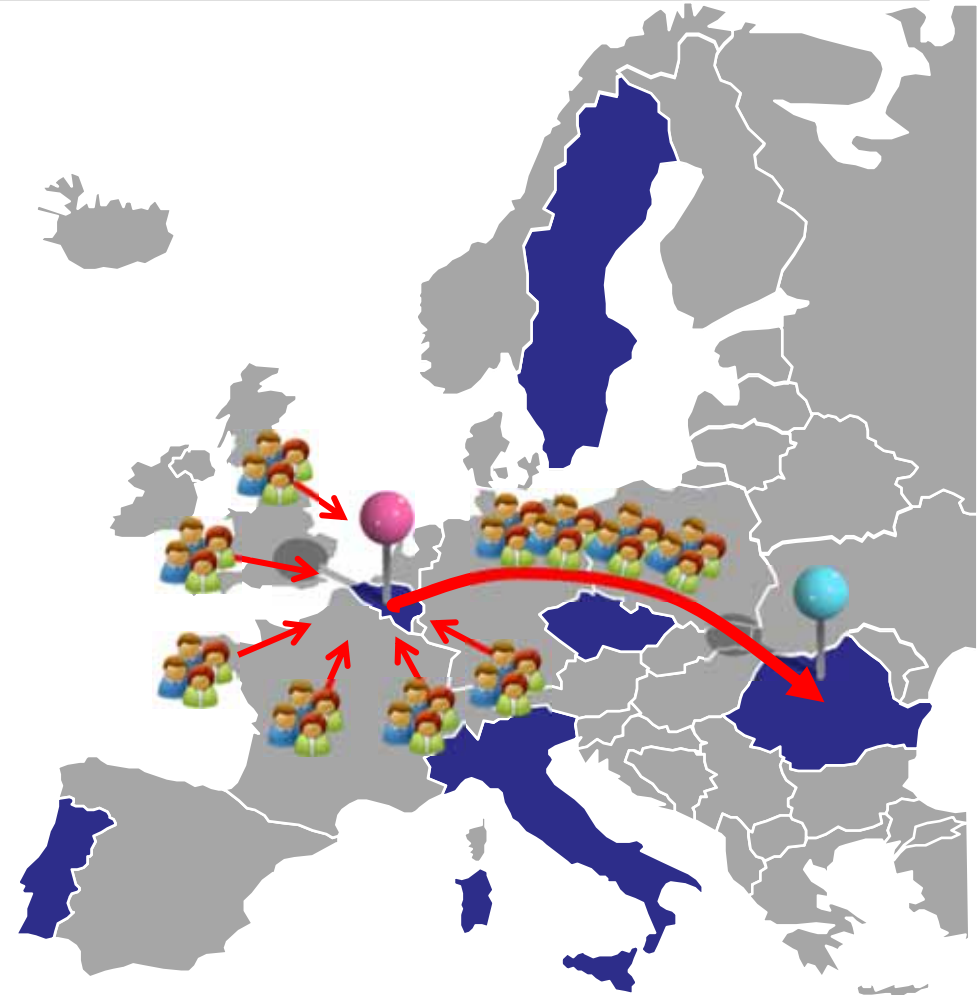
Courses, 30 ECTS

University of Liège

Second semester

Courses, 30 ECTS

"Politehnica" University of Timisoara



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First semester

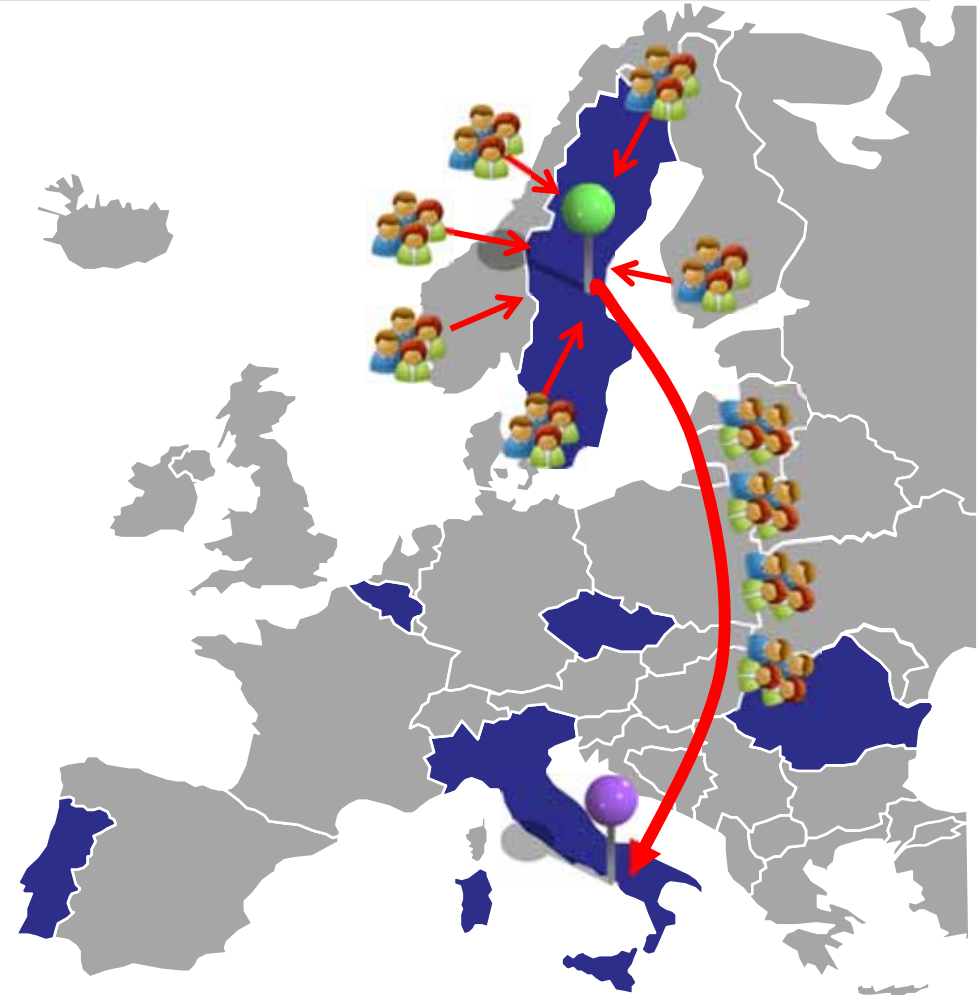
Courses, 30 ECTS

Lulea University of
Technology

Second semester

Courses, 30 ECTS

University of Naples
Federico II



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Lecture content

First semester (30 ECTS)

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

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Lecture content

Second semester (30 ECTS)

- 2C8 Advanced design of steel end 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

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Lecture content

Third semester (30 ECTS)

- Dissertation work

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Teaching methods

Frontal lesson+ laboratory activity + group project

Class support material

- Lectures
- Suggested readings
- Notes
- Tutorials

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Admission requirements

A Bachelor of Science in the field of Civil engineering

*(B.Sc. degree or a nationally recognized degree equivalent to **minimum 180 ECTS**), with a minimum grade of “B–“ in the ECTS grading scale (at least a score of 70%), from a field in relation with the scope of the SUSCOS_M master.*

Additional 30 ECTS points of courses within the minor in Structural Engineering

(i.e. subjects in the field of Structural Mechanics, Building Materials, Structural Analysis, Design of structures)

180
ECTS



30
ECTS



210 ECTS

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Participation cost

Third-country Students → 4000 € per semester

European students → 2000 € per semester

The fees include : tuition, laboratory, library, social security, insurance and other administrative/operational costs, language training included in the programme.

The fees do not include housing rentals and administrative costs other than academic ones (i.e. costs due to immigration procedure, banking etc.).

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Grants: first edition

- **6 ERASMUS MUNDUS GRANTS for European students (edition 2012-2014)**

Monthly allowance (17 x 500 €) + Participation costs per term (3 x 2000) = Total 14 500 €.

- **9 ERASMUS MUNDUS GRANTS for third-country students**

Monthly allowance (17 x 1 000 €) + Participation costs per term (3 x 4 000 €) + Contribution to travel (8 000 €) = Total 37 000 €.

Grants

- **6 ERASMUS MUNDUS GRANT for third-country students from:**
 - "Western Balkans and Turkey"
 - "Tunisia and Egypt"
 - "Eastern Neighbourhood Countries" (i.e. Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine).
- **12 SUSCOS CONSORTIUM GRANTS**

Participation costs $3 \times 2000 = 6000$ €. The travel and accommodation expenses of European students may be covered by Erasmus national grant based on bilateral University agreements as well.

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Important deadlines

- The **first call** is open to all students.
- **Second call** is open to EU students for SUSCOS Consortium Grants

	Application Deadline	Notification of Admission	Grants Notification
1 st Call	<u>10 Jan 2013</u>	28 Mar 2013	25 April 2013
2 nd Call	10 Apr 2013	15 May 2013	30 May 2013

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Web site: <http://steel.fsv.cvut.cz/suscos>



About the European Erasmus Mundus Master Course - 520121-1-2011-1-CZ-ERA MUNDUS-EMMC Sustainable Constructions under natural hazards and catastrophic events

The focus of master course SUSCOS_M 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 industry. The course is organized in three modules covering buildings; bridges and energy-related infra-structures from concrete, steel, timber, and composite 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 one term in one country and the coursework part of the second term in a second country. The dissertation can be carried out at any of the six partner countries.

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 courses will start at University of Coimbra and continue at Czech Technical University in Prague.

Activity of international consortium SUSCOS is summarised at URL: www.dec.uc.pt/suscos.

Leaflet in pdf. The Consortium agreement in pdf

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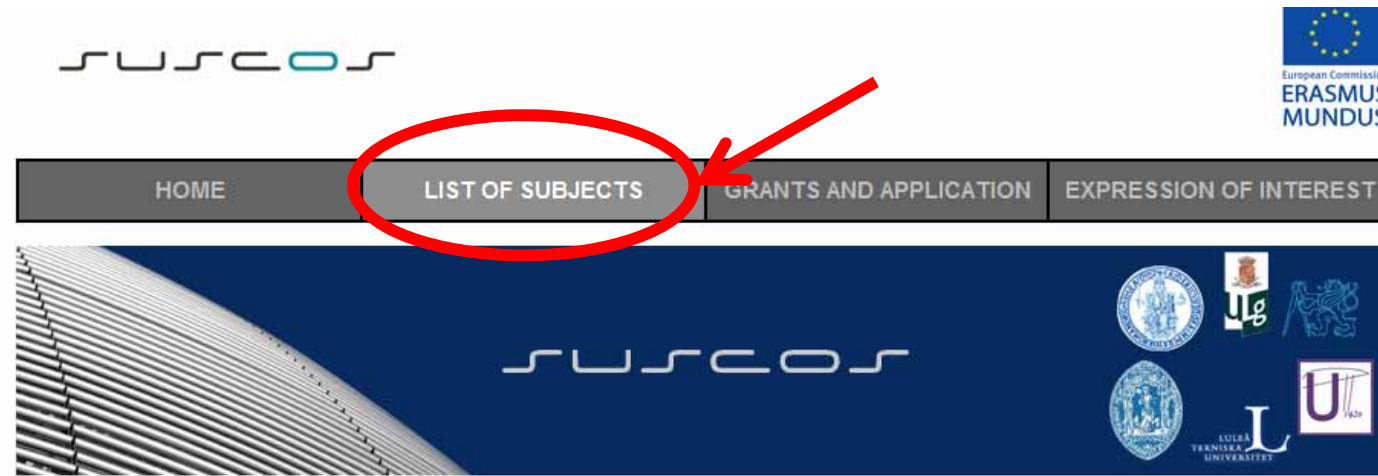
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List of Subjects in European Erasmus Mundus Master Course - 520121-1-2011-1-CZ-ERA MUNDUS-EMMC Sustainable Constructions under natural hazards and catastrophic events

The minimum requirements for applying to EMMC SUSCOS M
Requirements, Example of additional courses.

Requirements

- First semestr
- 1C1 Design of sustainable constructions**
Syllabus
- 1C2 Conceptual design of buildings

DETAILED COURSES OUTLINE AVAILABLE!!!!

Link to lectures and references

To the page with Description of lectures.



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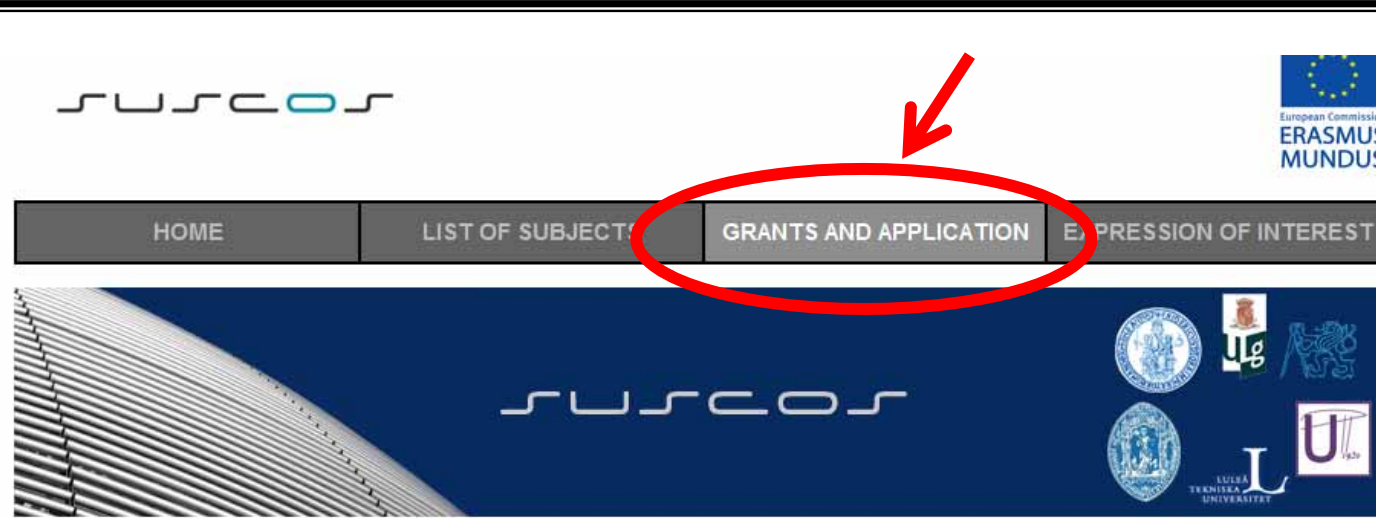
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APPLICATION AND GRANTS

for European Erasmus Mundus Master Course - 520121-1-2011-1-CZ-ERA MUNDUS-EMMC Sustainable Constructions under natural hazards and catastrophic events

Each student may apply in one edition for one SUSCOS grant only. Students with two passports are asked to selected under which country they prefer to apply.

APPLICATION

The signed Application form and all required documents have to be sent in pdf format by e-mail on address eliasova@fsv.cvut.cz. The receiving of the application will be confirmed by email. Original documents will be check if the application will be accepted. The potential appeal procedure following the rejection of a scholarship/fellowship application should be explained.

Application form: in PDF format, in RTF format, and in ZIPped rtf format.

Information relating to individuals (personal data) is collected and processed in accordance with the Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 (Official Journal L 281, 23/11/1995 P. 0031 – 0050).

Download
application form

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**Thank you
for your attention**

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

