

July 4th, 2011 - to interested II cycle (4th and 5th year) students

IP ERASMUS – CALL FOR PARTICIPATION

Dear Student,

We are glad to inform you that the Erasmus Intensive Programme titled *Structural Architectures – Geometry, Code and Design* will start in September 2011 (maybe from September 2nd to 13th, or from September 5th to 16th), at Politecnico di Milano, Campus Leonardo.

Here the most relevant information:

1_TOPIC

Objectives

The objective of the IP “*Structural Architectures – Geometry, Code and Design*” is to acquaint the students with structural thinking as method for designing architecture. They learn to formulate rules on the basis of mathematical/geometric/physical structures. Comparisons between various codes representing the structures help to get aware of their role. According to the developed topics, in order to improve structuralist literacy, a special attention will be devoted to the related literature and to the bibliographic selection. Learning and teaching will be experienced in mutual processes between students and professors in multidisciplinary and international teams.

Target groups

The four participating universities Politecnico di Milano (Italy), Universidad CEU San Pablo Madrid (Spain), ETH Zürich (Switzerland) and TU Kaiserslautern (Germany) will prepare and carry out the IP jointly for their students of Architecture. The IP will target students with basic knowledge in the Geometry, Graphics, Structural and Architectural Design as well as Computer-Aided Architectural Design during their fourth year of studies or later (BA, MA or Diploma).

Main activities

Students work mainly in small international groups. The professors make introductory lectures. The working process of the students will be accompanied by short presentations, discussions and proposals in three steps. An excursion to relevant architectural projects support the work in order to encourage structure recognition (including microstructure and macrostructure recognition) by analysing realized architecture. Finally the results will be presented, discussed and evaluated in the whole group of students and professors and shown in a public exhibition.

Learning outcomes

The participants learn how to cooperate in a multidisciplinary and international group for a joined project. They learn how to use effectively ICT-based tools. The students learn how to use and formulate precisely rules for architectural design, to transfer them in codes for their representation and to apply them with analogue and digital tools in the design processes. The students learn to use digital design methods in order to investigate patterns of organization in space and the architectural utilization of these patterns by means of parametric and geometric variation.

Expected outputs

The projects will be presented in drawings, sketches, images, and models at the end of the IP in the final forum and a public exhibition. The students work out a documentation. The results will be presented on a website and published in a booklet. At the end of the three years the results of the IP will be presented additionally in a final public meeting.

Awarded ECTS (cfu)

The projects will award 4 ECTS (cfu) to the involved students.

2 PARTICIPATION

Concerning the first year of the project, to participate in the selection, interested students have to send via e-mail to luigi.cocchiarella@polimi.it and to gennaro.postiglione@polimi.it, the following material as PDF files:

1_ *Letter of motivation*, written in English (500 words)

2_ *Transcript of your former courses*

3_ *Short portfolio in "A3 landscape" printable size (maximum 5 experiences recorded, 1 page per experience, each page including a 300 words comment box, written in English)*

The following skills and competences are requested:

_Written and spoken English

_Traditional analog representation and digital 3D modeling

_Passion for Design Processes, Geometry and Graphics

Interest in Architectural Structuralism and in its methodological approach [see: [http://en.wikipedia.org/wiki/Structuralism\(architecture\)](http://en.wikipedia.org/wiki/Structuralism_(architecture))]

Deadline: July 15th 2011.

As for the other Universities, 8 students will be selected at Politecnico di Milano, then the teamwork will be composed on 32 students and 8 teachers.

Here in detail, the involved 4 Universities and 8 teachers:

_Technische Universitaet Kaiserslautern: proff. C. Leopold (*project coordinator*), A.Kretzer

_Universidad CEU San Pablo Madrid: proff. M.Garcia Hipola, A. Bresnik

_ETH Zürich: proff. T.Kotnik, B.Dillenburger

_Politecnico di Milano: proff. L. Cocchiarella (*local coordinator*), G. Postiglione

Please, contact us for any question or doubt.

Regards,

Proff. Luigi Cocchiarella, Gennaro Postiglione