

This Summer 2012

# International Summer School

One month for a  
french tour

In English  
« Materials & Design »

French lessons  
and culture

PARIS



NANCY



SAINT-ÉTIENNE



Paris / Nancy / Saint-Étienne

# A unique experience !

École des Mines de Saint-Étienne and École des Mines de Nancy, two prestigious French graduate schools of Engineering put together a unique program combining Engineering, Design, Industry Heritage and Culture.

”

## OVERVIEW

### PROGRAM DATES

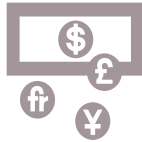
July 3<sup>rd</sup> to 28<sup>th</sup>, 2012



application deadline :  
March 2012

### PROGRAM FEE

Euro 3 500  
USD 4 666  
including all listed  
program components and  
accommodations



### HOW TO APPLY

Request Application  
form

granger@emse.fr  
(+33) 4 77 42 93 14

LIMITED  
ATTENDANCE  
!!!

### CONTACT

École Nationale des Mines  
de Saint-Étienne

138, cours Fauriel / 42 000

Saint-Étienne - France

granger@emse.fr

(+33) 4 77 42 93 14

### COURSES

45 hours technical courses

- Materials and Design basics
- Design and Innovation Tools
- Hands-on Materials !
- + 30 hours French courses



### VISITS

Louis Dandrel sound design  
studio, LUTIN user lab,  
Centre Pompidou-Metz, Le  
Corbusier de Firminy site...



SCHOOLS CERTIFICATE  
DELIVERED

## ADVANCED SCIENTIFIC AND CULTURAL TOUR

A 3-stage hands-on  
experience on how to make  
Engineering and Design  
work together for successful  
industrial creation

- > PARIS : Technology for Design
- > NANCY : Design and  
Innovation Toolbox
- > SAINT-Étienne :  
Creativity, workshops and  
experiments

French environment and  
high scientific expertise for  
International students with a  
bachelor degree in theoretical or  
applied science:

- > Scientific lessons in English,
- > French language lessons,
- > Visits of French industries and  
laboratories,
- > Visits of French cultural  
landmarks : Paris, Museum of  
École de Nancy, Le Corbusier ...



## MEET THE EXPERTS



Pr. Abdessalam  
DAHOUN

Head of  
Scientific  
department  
«Materials», in

charge of the Master of science  
«Design Global» at École des  
Mines de Nancy

abdessalam.dahoun@  
mines.inpl-nancy.fr  
(+33) 3 83 58 41 54  
www.mines.inpl-nancy.fr



Pr. David  
DELAFOSSE

Head of the  
center for  
Materials  
Science and

Mechanical Engineering at  
École des Mines de Saint-  
Étienne, Manager of the  
project «Design Industriel»

david.delafosse@emse.fr  
(+33) 4 77 42 02 98  
www.emse.fr

# Program :

## 1<sup>st</sup> Week - PARIS

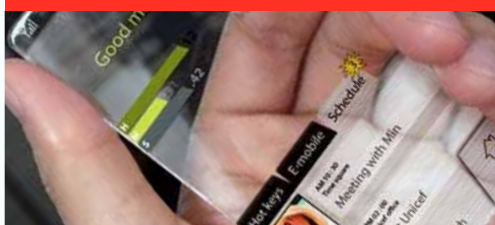
JULY 3 - 10, 2012

### COURSES



#### TECHNOLOGY FOR DESIGN

The abundance of information on materials and processes : how to gather and organize it ; how to use it ; how to turn it into an advantage for innovative product design.



- > Overview of materials and processes
- > Methodology for rational selection
- > Methodology for «not so rational» selection
- > Perceptions and sensory properties
- > Genealogy of objects / technologies

### VISITS

#### DISCOVER THE CITY OF LIGHT



- > Louis Dandrel Sound Design Studio
- > MateriO : materials library for design and architecture
- > Industrial R&D center: Technocentre Renault...
- > LUTIN user lab @ La Villette Cité des Sciences



## 2<sup>nd</sup> Week - NANCY

JULY 10 - 18, 2012

### COURSES



#### DESIGN AND INNOVATION TOOLS

Tools and methods : How to favour and drive creativity in an industrial environment.



- > Creativity methods
- > Engineering design methodology
- > Value engineering
- > Intellectual and industrial property
- > e-business and design

### VISITS

#### EXPLORE ART NOUVEAU



- > Museum of École de Nancy
- > Centre Pompidou Metz
- > Steel Museum
- > Cooking and design : cooking lesson by a chef + practical session : Design and cook your own dinner !



## 3<sup>rd</sup> Week - SAINT-ÉTIENNE

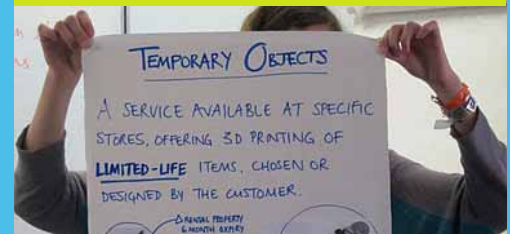
JULY 18 - 26, 2012

### COURSES



#### HANDS-ON MATERIALS !

Case studies and experiments: how engineers can rationalize Designer's dreams



- > Sensory properties II
- > Sensory metrology
- > Materials mood boards
- > Creative workshop on using emerging technologies in design

### VISITS

#### ENJOY LANDS OF CULTURE AND CREATIVITY



- > Museum of Art and Industry
- > Le Corbusier Firminy site
- > Design Collection of Modern Art Museum
- > Advanced production platform of École Nationale d'Ingénieurs de St-Étienne (ENISE)



## 4<sup>th</sup> Week - PARIS

JULY 26 - 28, 2012

- > Debriefing and free time

## ÉCOLES DES MINES DE SAINT- ÉTIENNE / NANCY

Members of the GEM-network (Groupe des Écoles des Mines), these schools are two of the highly selective French "Grandes Écoles" dedicated to the task of educating engineers and researchers responsive to industry demands. The school's pioneering spirit has been nurtured through its exploration of new scientific themes and international partnerships, which makes them key players among the top 15 French "Grandes Écoles d'Ingénieurs".



## Industrial Design projects : the engineering of "co-creation"

Through a dialog between Engineering and Design, the « École des Mines » aims at training future engineers capable of handling the full complexity of modern innovation projects, including their technical, creative, social and environmental dimensions.

The key is to favour cross-discipline interactions through training and practical experiences.

### In Saint-Étienne :

A specific 360 hours teaching program implements this "co-creation" process in the curriculum of engineering students.

### In Nancy :

Artem-Nancy is the name of the Alliance of the École des Mines of Nancy, ICN Business School and the École Nationale Supérieure d'Art of Nancy (the Nancy Fine Arts School). The Artem-Nancy Alliance offers the possibility for a crossdisciplinary curriculum and an intercultural outlook on Art-Science relations, paving the way for new lines of work in traditional sectors or new to the economy.



## BENEFITS

This programme is an opportunity...

- > to study in FRANCE in three cities, PARIS and NANCY or SAINT-ÉTIENNE
- > to discover French culture and way of life
- > to develop knowledge in scientific fields, with a program in English

**An experience not  
to be missed in a  
student's life !**



Photos MINES ParisTech, agence Contextes