

ICAM : *Institut Catholique des Arts et Métiers*

Advanced French Engineering School



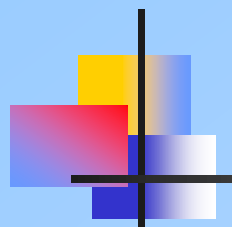
<http://www.icam.fr>

Groupe ICAM



Group ICAM today

- **Eight Campuses located in :**
 - **Europe :**
 - Lille, Nantes, La Roche/Yon, **Toulouse**, Vannes (France)
 - **Africa :**
 - Pointe-Noire (Republic of Congo)
 - Douala (Republic of Cameroon)

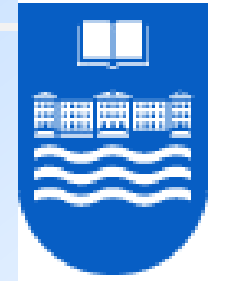




Facts & Figures

- **700** Graduates each year (Master's degree)
- **2700** Students in Engineering
- **110** Professional training in engineering
- **150** Projects each year, in research and technology transfer with Industry

Erasmus or conventional exchanges with :



Bilbao Universidad
de Deusto



Possibilities of academic exchanges

Summer academic program

- **ICAM Lille and Toulouse host in June and July young students for a period of eight weeks**
 - **4 weeks of training Icam Lille site for tutorials, mini-project and company visits...**
 - **4 weeks internship in Lille or Toulouse region**
 - **Cultural visits are available.**

The presence of a group of French students, participating in the work practices and outputs provides a dynamic integration.



Possibilities of academic exchanges

Internship of 6 months in engineer graduation

- One semester of the 5th year in an applied research project

Details:

- Project contracted with a company (in majority)
- Realized in one of ours 5 scientific department:
 - Mechanics
 - Fluid mechanics
 - Materials
 - Electronics
 - Productics

Possibilities of academic exchanges

Engineers double graduation

Double degree : 4th and 5th year

■ 4th year - 1st semester = 30 ECTS

Lectures, lab work, projects in:

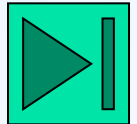
Mechanics, Electronics, Automatics, Materials

■ 4th year - 2nd semester = 32 ECTS - 3 thematics

➡ Aerospace & Spatial (A&S)

➡ Building & Civil Engineering (B-CG)

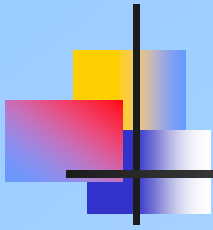
➡ Research and Innovation (INNOV)



■ 5th year – 60 ECTS

• 1st semester: Industrial project into ICAM labs (PFC)

• 2nd semester: Internship in a company (Practicas externas)



Possibilities of academic exchanges

Master Degree proposed to graduated engineers

➤ ICAM Lille :

Master Degree in *Railway Engineering*

➤ ICAM Nantes :

Master Degree in

ECO – Innovation and New Technologies



MASTER degree in Railway ENGINEERING

- Qualified engineers in Railway Engineering
- Specialists for tomorrow's railway world
- Within a network of partner companies

A decorative graphic on the left side of the slide, consisting of a black crosshair with overlapping yellow, red, and blue squares.

MASTER degree in Railway ENGINEERING

Syllabus

- **Railway environnement**
- **Operation : infrastructure and network**
- **Onboards computers and information management**
- **Traction and breaking**
- **Incorporation of equipments**
- **Project Management**

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MASTER degree in Railway ENGINEERING

■ **Candidates :**

- **Holding a French engineering diploma recognized by the Commission for Engineering Qualifications**
- **Holding a foreign diploma equivalent to the French diploma mentionned here above**

■ **Admission :**

- **Based on CV, Internship experience and an interview...**
 - **A letter describing the candidate's professional plans**
 - **Two letters of recommendation**
 - **Certified copies of diploma, or diploma certificates**



TOULOUSE

Eric LOUPIAC













In conclusion



Welcome and bienvenido to ICAM through :

- **Industrial Projects in our laboratories (5th year)**
- **Double Degree (4th and 5th year)**
- **Master Degree in railway engineering or intelligent building (after graduation of Engineer)**
- **Summer program**

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ICAM Engineering Degree cursus

Professionnal
(1 year)

5th year:

Industrial project at ICAM for one semester
Internship in a company for one semester

4th year:

1st sem. - Lectures, lab works, projects by ICAM' professors

**2nd sem. – 3 thematic modules by industrials,
researchers from other institutes**

3rd year: Technical Lectures, lab work, projects

2nd year: Maths, Physics,

Mechanics & Technology, Social Sciences, Languages

1st year: Maths, Physics,

Mechanics & Technology, Social Sciences, Languages

1st

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Specific
(2 years)

Basic
Formation
(2 years)

4th year, 2nd semester: 3 Thematic modules

AERONAUTICS AND SPATIAL

Structures and Strength

- Electronics
Systems

- Supply chain

Speakers from
Industry or
Research centers:

Latecoere, Airbus,
CNES, Aerolia,
Goodrich

THERMAL BUILDING AND CIVIL ENGINEERING

- Energy in Buildings
- Intelligent Building
(Domotic)

Speakers from
Industry:

Bosch (energy
efficiency), Tenesol
(solar panels), Legrand
(domotic)

RESEARCH AND INNOVATION

- Management
of innovation
- Creativity
- Robotics

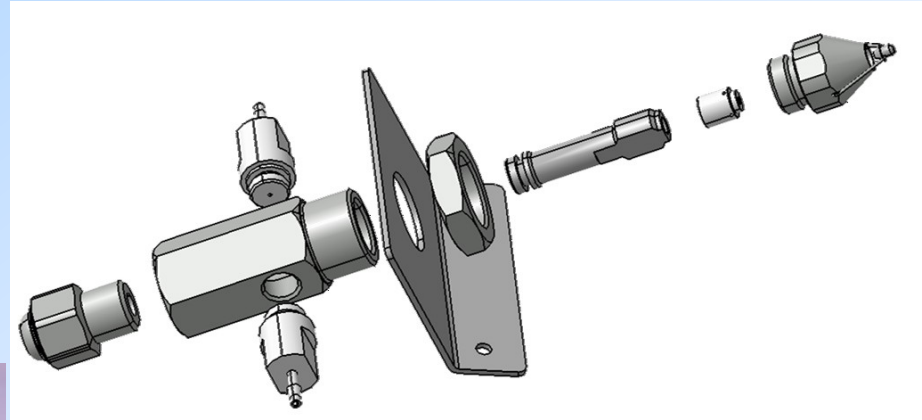
Examples of Industrial Projects

"Spray characterization

Conception and reliability of a medical spray diffuser"



Device:
Glosair 400



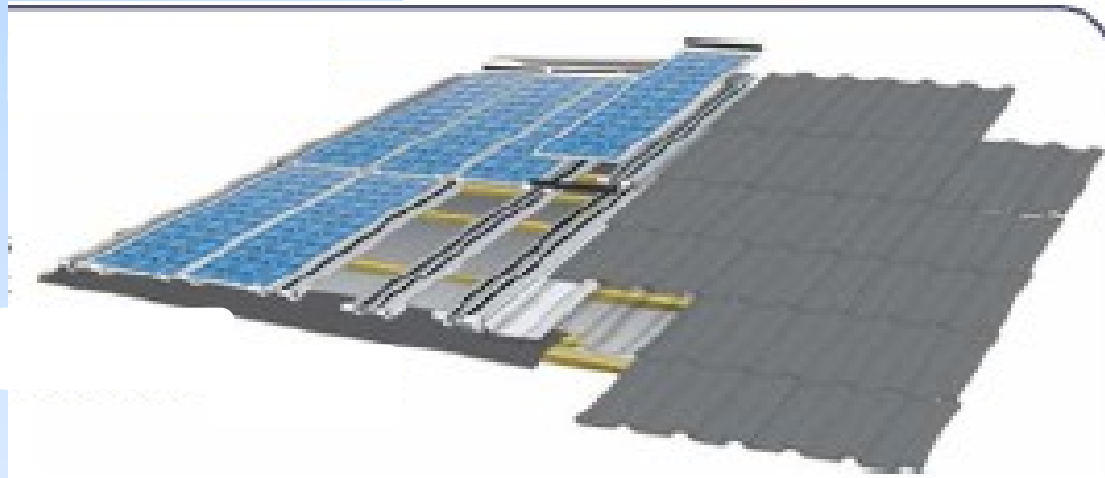
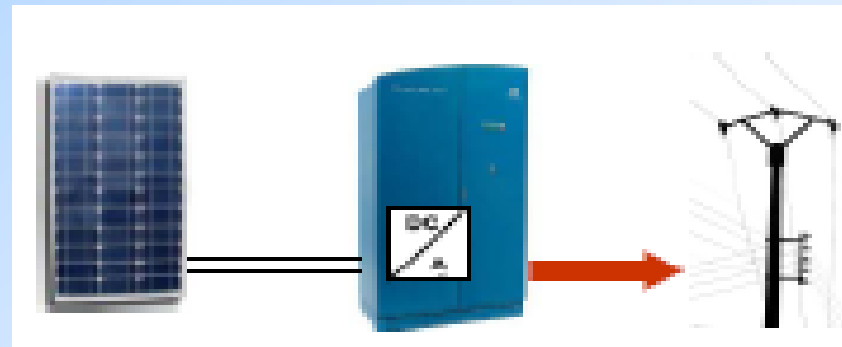
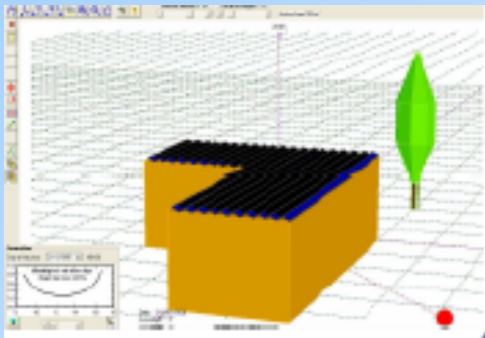
Injector

Partner : ASP
***Advanced Sterilization
Products***

<http://www.aspjj.com/emea/products/area-decontamination/glosair-400-system>

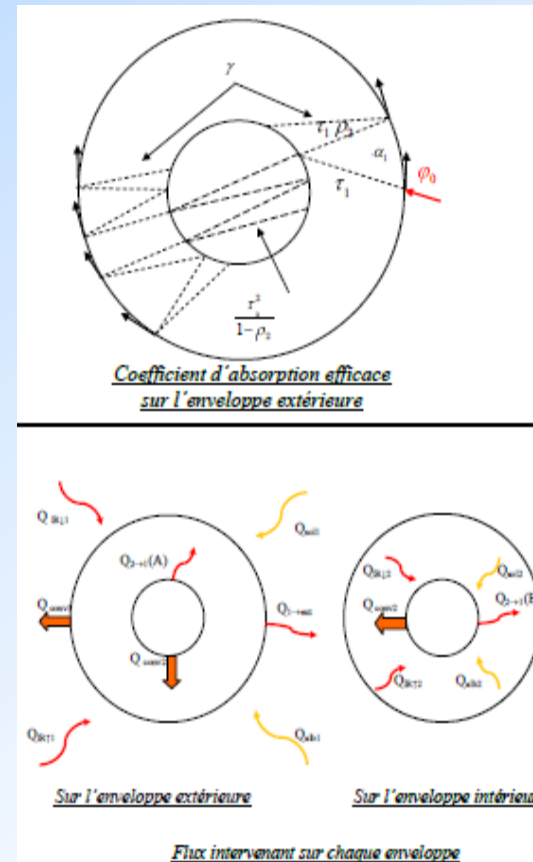
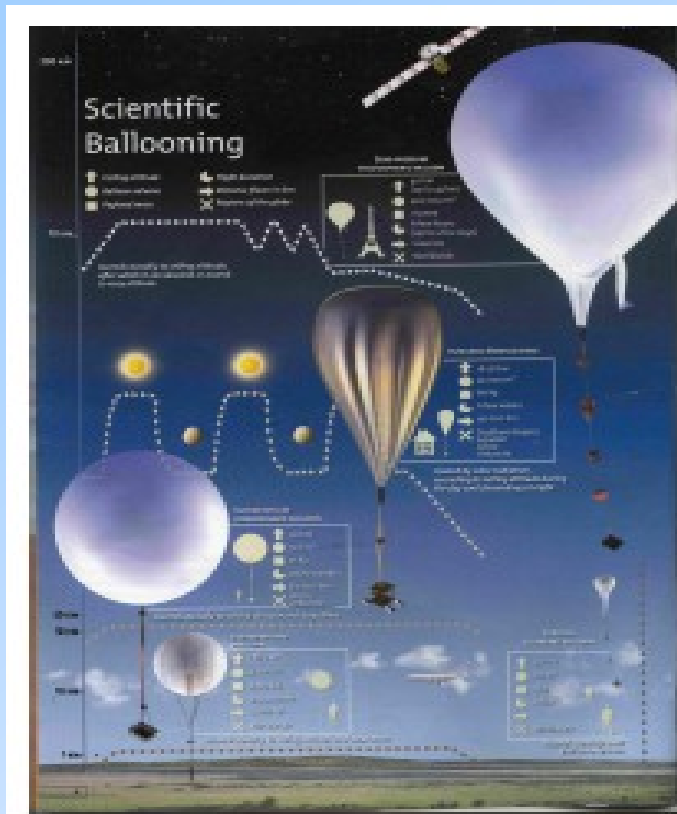
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"Analysis of Solar panel network efficiency Rentability and cost calculations"



Partner : OSTWIND

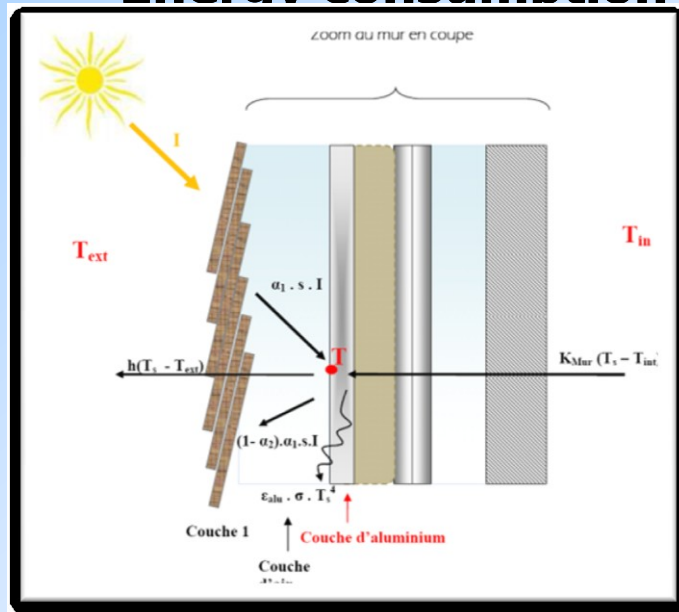
"Thermal study of meteorological balloons"



Partner : CNES

“Heat transfer for building Software development for energy consumption prediction”

- Software development for heat transfer in a house
- Taking account of thermal radiation
- Energy consumption
- Excel/VBA development
- Conductivity measurements for new materials



Partner : GDF

jeune icam