

Clermont College of Engineering is located in Clermont-Ferrand, the capital of the Auvergne region in central France. Clermont-Ferrand is a pleasant town, with a population of 300,000 and more than 30,000 students, surrounded by lakes and small mountains and ski resorts. It is one of the safest and least expensive cities in France, where life is agreeable and accommodation is simple to find (many student residences are available*).

The city of Clermont-Ferrand has a long experience in welcoming foreign students (around 4500 foreign students in 2009). They are usually able to custom-build their 2-year programmes quite flexibly, depending on their preferences, by mixing courses which belong to distinct specializations. International cooperation includes the "n+i" selection program and transition semester course, Erasmus agreements for internships and academic exchange, DUBY Master's degree bilateral courses and Doctoral research projects.



Clermont College of Engineering

With 2200 regular students, Clermont College of Engineering hosts five graduate schools within Clermont University, issuing 9 Engineering Master's degrees :

ENITA CLERMONT, National Graduate School for agronomy, food sciences and territorial development

ENSCCF, National Graduate School for Chemistry

IFMA, French Institute for Advanced Mechanics

ISIMA, Graduate School for Computer Science and Applied Modelling

POLYTECH'CLERMONT, Polytechnical School for Bioengineering, Civil, Electrical, Mathematical and Physics Engineering

Clermont College of Engineering concentrates its five Graduate Schools close to the scientific campus of Clermont-Ferrand, where it collaborates with the under-graduate (Licence) and graduate courses (Master) in Science and Technology. The students of the College are initiated into the world of research through projects developed in the research labs of Clermont University, and about 10% of them have the possibility of pursuing their studies with a PhD in Engineering Science.

Recruitment is mainly based on a national entrance exam requiring a high standard of scientific culture, and 10% of students are selected through various international agreements with partner universities throughout Europe and the rest of the world.

The heart of the training focuses on a practical approach to the economic and industrial world through long internship periods with many partner companies and internships in foreign countries.



> Graduate School for agronomy, food sciences and territorial development

Enita Clermont belongs to the network of French "Grandes Ecoles" in Agronomy and Veterinary Sciences. It develops higher education, research and transfer activities through three departments:

- > **Agriculture and environment** : agronomic sciences, animal husbandry, production systems, ecology, landscape management
- > **Food quality and economics** : food technology, sensory analysis, microbiology, food quality, agrofood marketing, agribusiness management
- > **Territories and society** : territorial development, rural space management, new land-based activities, rural heritage and tourism.

Enita Clermont hosts international students for courses and/or research and engineering projects from 1 to 6 semesters.

Graduate degree courses :

- Enita Engineering diploma (Master's degree)
 - Nutrition and food sciences (MSc)*
 - Dynamics of rural territories (MSc)*
 - Genomics, ecophysiology and plant production (MSc)*
 - Food product typicality. (MSc)*
- *Joint Master's degree programs with Clermont University

Research labs :

- Agronomy and soil organic fertility
- Ruminant breeding and production
- Food product typicality
- Rural territorial mutations in activities, spaces and forms of organization

Partnerships :

national research bodies (INRA, CEMAGREF), international scientific networks, industrialists, farmers and manufacturers, regional and local authorities, schools and universities from over 30 countries around the world.



> National Graduate School for Chemistry

A 100-year old institution specialised in Chemistry and Chemical Engineering.

A 5-year graduate programme leading to a graduate degree (Diplôme d'ingénieur) with a strong focus on practical placements. Open to students holding a bachelor's degree or equivalent (180 credits) in chemistry for a two-year programme.

Four scientific options in the final year :

- > Fine and Industrial Organic Chemistry (COFI)
- > Structural Materials (MS)
- > Organic Material (MO)
- > Chemical Engineering (GC)

Master's programmes also available :

- > Research Master's degree in Chemistry
- > "Duby" Master's in Industrial Risk Management

4 leading international research laboratories :

- > Molecular and macromolecular photochemistry
- > Inorganic Materials
- > Chemistry of Heterocycles and Carbohydrates
- > Chemical and Biochemical Engineering

Privileged relationships with

- > Regional and National transfer centres : CASIMIR, CNEP
- > Regional and National industry: polymers, pharmaceutical, cosmetics, agro, metallurgy, cement and concrete.

International partnerships with institutions in over 25 countries.



> French Institute for Advanced Mechanics

Graduate school in Mechanical and Industrial Engineering

Three technical and scientific departments :

- > Materials and Structures (St2M)
- Continuum mechanics, structure design, mechanics of materials, numerical methods

Machines, Mechanisms and Systems (MMS) :

- > Mechanical and mechatronic design - movement, force, control, etc.

Industrial Engineering (SIL)

- > Design, organisation and management of production and processes, supply chain, optimisation, simulation, logistics, etc.

Graduate degree courses

- > IFMA engineering diploma (Master's degree)
- > Master's in Mechanical and Civil Engineering

International students

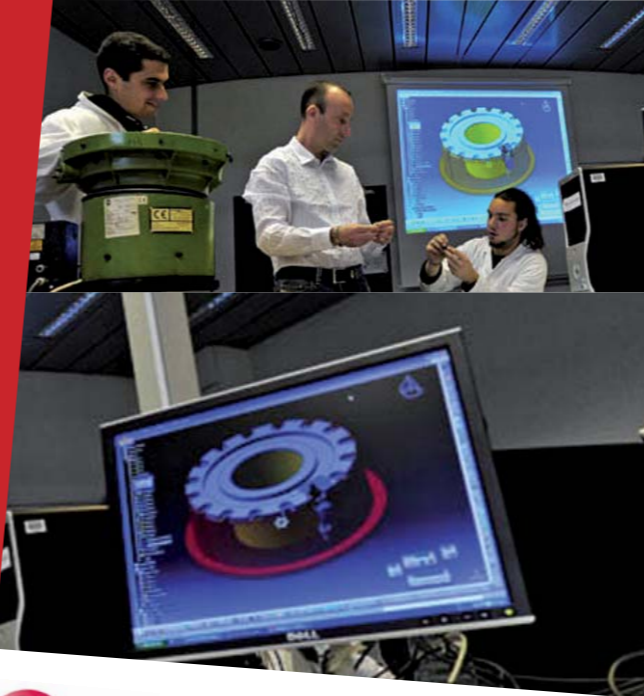
- > Courses and projects from 1 to 6 semesters

Technology transfer centre

- > The Institute's integrated factory, covering 3200 m²
- Flexible machining, sheet metal and assembly cells, high-speed machining facilities, numerical bar turning machines, parallel robots

Three research labs :

- Key research themes :
- reliability - mechanics and materials - modelling of mechanisms, robots and real structures - performance enhancement (quality, costs, delays) - static and dynamic modelling, taking human factors into consideration - automatic systems - vision and robotics



> Computer Science and Modelling Engineering

The ISIMA (*Institut Supérieur d'Informatique de Modélisation et de leurs Applications*) is a French graduate engineering school focused on computing and its applications.

Five technical and scientific options

- > Embedded Systems and Circuit Conception
- > Software Engineering and Computing Systems
- > Information Systems and
- > Computation and Scientific Modelling
- > Telecommunication Networks

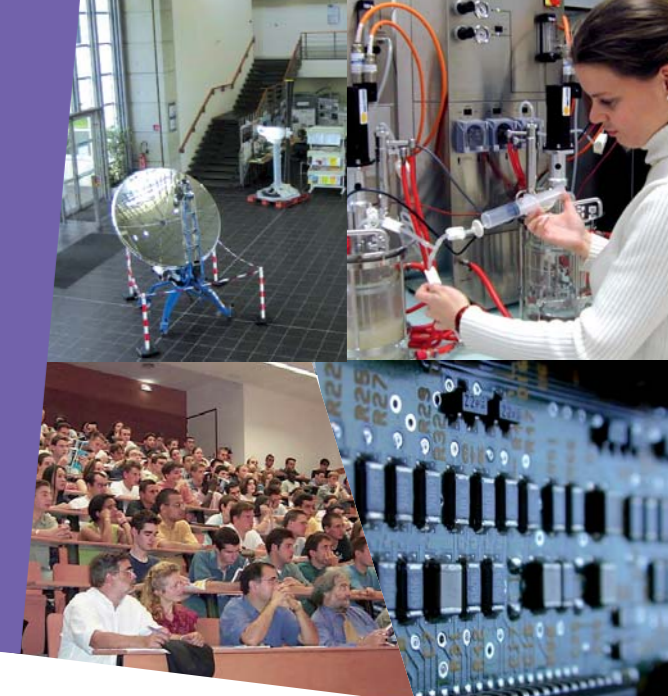
Graduate degree courses

- ISIMA Ingenieur Master degree
- Master in Computer Science, Decision Analysis, Imaging and Robotics
- Double degree courses (in english) with international partners (USA, Canada, China, South Korea, Morocco)

Technology transfer centre around Numerical Simulation and Information Technologies hosting clusters for grid computing and virtual reality

Joint research projects with LIMOS (CNRS Lab in Computer Science, Modelling and Optimization) in the following fields :

- Optimization, Simulation and Forecasting
- Database and Web Services
- Mobile Networks and Embedded Systems
- Production Systems and Logistics



Polytech' Clermont-Ferrand

Five fields of studies and five scientific departments. Partnership with the 12 French engineering schools of Polytech network.

Biotechnology - Bioengineering - Food science
Industrial microbiology - Bioprocess engineering

Civil engineering and environmental science
Architecture - Structure calculation - Geotechnics

Electrical engineering
Control, command, regulation of industrial systems
Mastering component architecture

Physics engineering and material science
Physics - Design and assembly of industrial systems

Applied mathematics and modelling
Simulation of physical, financial and organisational systems

Graduate course (master degree) in the five fields of studies.

2 technology transfer centres in Bioengineering and Civil engineering

Five research labs :
Biotechnology - Mechanical science and civil engineering - Mathematics - Computer science - Automatics and robotics.