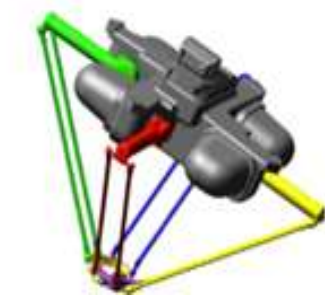


Advanced materials and mechanism design and control to manage complex systems



A unique Engineering Master Program in Clermont-Ferrand

- Lectures and classes given in English
- 10-15 places per year reserved for international students
- 30 % of places are available to national students
- Research activities are supported by the Institut Pascal (National Center for scientific research – CNRS)



INNOMECH – Study program

Semester 1 program (Autumn)

Unit	Course Title	Hours	ECTS Credits
0	Intensive French language course*	25	-
1	French Language course	30	2
2	French culture - Intercultural - communication	28	2
3	Innovation Process	24	2
4	Active Materials and Structures	28	3
5	Visco-elasticity of materials	28	2
6	Advanced Control	30	3
7	Innovative Materials	30	3
8	Advanced Robotics	28	2
9	Computer Vision and Sensor Integration	30	3
10	Artificial Learning	26	2
11	Software for Materials, Robotics and Machines	28	2
Application 1	Industrial and Service Robotics	24	2
Application 2	Mobile Robotics	24	2
Conferences	Various events	-	-

*Required for degree-seeking students whose French level is lower than B1

INNOMECH

- The master is designed to promote a high-quality educational offer in the areas of **advanced materials** and the **design and control of complex systems** (with a particular focus on **industrial machines and robots**)
- After completion the students will have mastered the different areas of complex mechanisms (such as mathematical modelling, mechanical design, material modelling, control engineering and sensor integration)
- The course covers all the main themes necessary to be able to deal with complex mechanisms as a whole, rather than just concentrating on one particular area
- Students may take the **master** as a **professional terminal degree**, or to join **PhD programs** afterwards.

Semester 2 program (Spring)

Unit	Course Title	Weeks	ECTS Credits
Internship	Research project or company internship	22	30





The School

With around 1000 students SIGMA Clermont is a human-sized engineering school connected to the business world, with a **global** and **international perspective**, close to **research** and **entrepreneurship**. It has strong ties with its Foundation and historically with large companies such as Michelin and Limagrain, underlining the importance of an **active involvement** of the **industrial sector** in its teaching programmes. Through different internships students develop their professional expertise and get prepared for the future challenges of tomorrow's industry.



Living in Clermont-Ferrand

Located in **Clermont-Ferrand**, a city voted "best city for studies" by a national survey in 2016, SIGMA Clermont, with its numerous associations and clubs, offers an active and vibrant student life. The city of Clermont-Ferrand also ranks among the **cheapest cities in France for students**.

Located in the north of the Massif Central at the gateway to the Volcano Park area, Clermont-Ferrand is the capital of the Auvergne region of south-central France. The city is 420 km from Paris, 200 km from Lyon, and 500 km from Marseille. The metropolitan area is home to almost 450,000 people.



For more details concerning **admissions, dates, language requirements, accommodation, transport, student life at SIGMA Clermont, etc.**, please contact us or see our website: www.sigma-clermont.fr

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INNOMECH

Master's program in Innovative Mechanisms Materials, Design and Control



An English-language Engineering master's program in the heart of France

