



sigma
CLERMONT

INNOMECH MASTER

INNOVATIVE
MECHANISMS:
MATERIALS, DESIGN AND
CONTROL



BECOME A SPECIALIST

- 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 modeling, 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.



PROGRAM STRENGTHS

- All 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).



PROGRAM CONTENT

SEMESTER 1			
Intensive French language course*	25h	-	
French Language course	30h	2 credits	
French culture - Intercultural - communication	28h	2 credits.	
Innovation Process	28h	2 credits	
Active Materials and Structures	28h	2 credits	
Visco-elasticity of materials	28h	2 credits	
Computer Vision	28h	2 credits	
Innovative Materials	28h	2 credits	
Advanced Robotics	28h	2 credits	
Sensor-based Control	28h	2 credits	
Machine Learning	28h	2 credits	
Software for Materials, Robotics and Machines	28h	2 credits	
Service robotics and Soft robotics	28h	2 credits	
Student project	100h	6 credits	
Various additional events & conferences			

Individual support and supervision

**mandatory for non-French speakers*

SEMESTER 2			
Research project or company internship	22 weeks	30 credits	
Including report and oral defense			

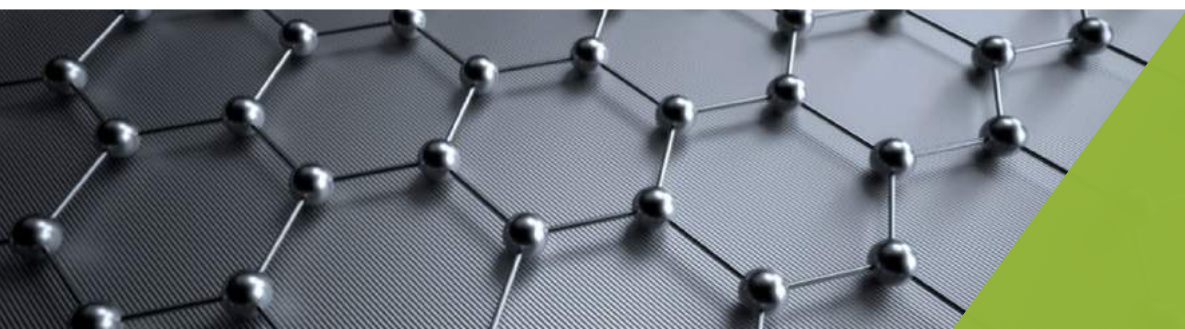
Program Schedule

Start Semester 1 - September

Start Semester 2 - February of the following year

Career Options

- Project Manager
- Design Engineer
- Development Engineer
- Scientific Advisor
- Technical Sales Engineer



WELCOME TO SIGMA CLERMONT



Situated in the heart of France, SIGMA Clermont is a human-sized engineering school connected to the business world, with a global and international perspective, close to research and entrepreneurship. Via its Foundation, it has strong historical ties with large companies such as Michelin and Limagrain, underlining the active involvement of the industrial sector in its teaching programs.

Located in Clermont-Ferrand, a city voted "best city for studies" by a national survey in 2017, 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.

ADMISSIONS

ENTRY REQUIREMENTS

Validated Master 1 or Bachelor equivalent (French or international), and an official English certificate certifying at least B1 level

APPLICATION

<https://www.sigma-clermont.fr/en/admissions>

TUITION FEE

8000 € (a partial fee waiver may be granted to eligible students)

CONTACTS

HEAD OF PROGRAM

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ADMISSIONS

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INNOVATION



MINISTÈRE
DE L'ÉDUCATION NATIONALE,
DE L'ENSEIGNEMENT SUPÉRIEUR
ET DE LA RECHERCHE



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