Partner Laboratory

LIRMM

More informations

Faculté des Sciences
Université de Montpellier
Département EEA
Place Eugène Bataillon
34095 Montpellier Cedex 5

Website :

https://eea-fds.umontpellier.fr/?-Robotique-Automatique-
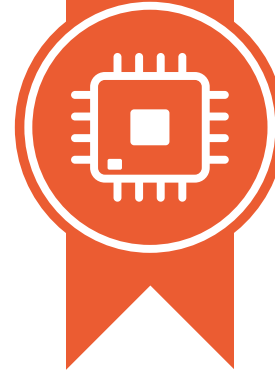
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Faculté des Sciences Montpellier

MASTER

Robotics

The main objective of the robotics program is to prepare high-level specialists in Robotics, Industrial data processing, Image processing and Control Systems.

UNIVERSITÉ DE MONTPELLIER

FACULTÉ DES SCIENCES DE MONTPELLIER

Master Robotics

Taught Courses

Robot manipulators: Modelling and controlling serial robot arms.
Robotic Perception: 3D vision, calibration, distance and position sensors.
Artificial Intelligence: Machine learning and its applications in robotics.
Optimisation: Linear/non linear optimisation, applications in robot optimal control.
Embedded Systems: Programming a micro-controller in C, practicals on Raspberry Pi.
Robot Programming: ROS with practical projects on real robot platforms.
Applied Robotics: Medical robots, humanoids, rigid-link and cable-driven parallel robots, soft robots, UAV, underwater robots, virtual reality.
Career Development: Improving presentation skills, writing a CV, succeeding in job interviews.

Calendar

- September - February: taught courses and project (in a lab or in a company)
- February: exams
- March - August: internship in a lab or in a company
- August: oral defence of the internship

Requirements

At least four years of university studies (equivalent of 240 ECTS), in a field related to Robotics, such as : Mechatronics, Automatic control, Computer science, Electrical engineering, Mechanical engineering, Applied mathematics.
Undergraduate average grade of 13/20 (French system) or GPA 3.0 or equivalent (other systems).

The applicants must write and read fluently in English (if possible, provide a TOEFL or TOEIC certificate with the application)

Applications

Applicants resident in one of the following countries:
Algeria, Argentina, Benin, Brazil, Burkina Faso, Burundi, Cameroon, Chad, Chile, China, Colombia, Comoros, Congo, Democratic Republic of Congo, Djibouti, Egypt, Gabon, Guinea, Haiti, India, Indonesia, Iran, Japan, Kuwait, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mexico, Morocco, Niger, Nigeria, Peru, Russia, Saudi Arabia, Senegal, Singapore, South Korea, Taiwan, Togo, Tunisia, Turkey, United States, Vietnam, should apply via:

https://pastel.diplomatie.gouv.fr/etudesenfrance/

All other applicants should apply via:

https://sciences.edu.umontpellier.fr/admissions-candidatures/

Fees

The exact cost is decided by the French Ministry of Higher Education shortly before the start of the Academic year.

Follow-up studies

Graduates from the Master Robotics can apply for doctoral studies in France and abroad.

Perspective jobs

Among the Master Course graduates:

- **25%** continue their studies with a **PhD thesis**
- **75%** are employed in the **private sector**. Among those employed in the private sector: 50% work in Robotics, and 50% in related fields (software development, industrial computing, vision, control systems,etc.).