

Field of study **Sciences and engineering**

Training available in

Apprenticeship

Initial training

Continuing education

Recognition of prior learning

How to apply :

<https://www.univ-gustave-eiffel.fr/en/formation/applications-and-enrolment/applications>

Course venue :

Campus Marne la Vallée - Champs sur Marne - Bâtiment Copernic 5 Boulevard Descartes 77420 Champs-sur-Marne

Calendar :

Classes: October to March Mandatory work placement: April to September (four to six months during this period)

Contacts :

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Academic secretary

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More information :

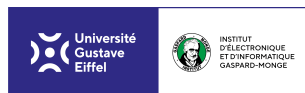
For further details :

<https://www.univ-gustave-eiffel.fr/international/etudiants-internationaux>

Service Information,

Orientation et Insertion Professionnelle (SIO-IP) :

sio@univ-eiffel.fr / Tel : +33 1 60 95 76 76



Master's degree Electronics, electrical energy and automation Technologies and telecommunications



Institut d'électronique et d'informatique Gaspard Monge (IGM)

Master's degree M2

TO GET THERE

For M1, a high school diploma plus three years of higher education in science. For M2, a high school diploma plus four years of higher education in science. Recruitment on the basis of application.

ACQUIRED SKILLS

The objective of the course is to provide solid scientific and technical skills, needed to understand the functioning of the infrastructure of telecommunication networks and communication systems.

The course covers 2nd, 4th and 5th-generation mobile network design, architectures and protocols (radio and core), digital communications, networks and routing, local networks and internet services, QoS, virtualisation / SDN, object-oriented computing, propagation and antennas, electromagnetics, and electronics for telecommunications.

It therefore addresses architectures and protocols of all generations of mobile networks, as well as IP protocols and routing for fixed networks. Computer science is used in increasingly complex systems. Students will comfortably master two popular programming languages by the end of the course. Furthermore, students will also acquire the foundations of mathematics for signal processing and digital communications, solid skills in electronic and digital design, and understanding of the fundamental principles of electromagnetic waves, their propagation in the mobile/HF radio environments and related antenna systems. Lastly, students will understand network virtualisation and new technologies.

YOUR FUTURE CAREER

In the field of telecommunications, the professional opportunities are broad: design and development engineer (software or software functions and / or embedded software), network and telecom deployment coordinator engineer, project manager in companies or administrations, developer of telecom products or embedded systems, information systems integrator operating networks or service providers (operators, ISP), network coverage and/or mobile terminal validation engineer, radio transmission and architecture engineer, test and integration engineer.

BENEFITS OF THE PROGRAM

The course is supported by the ESYCOM Laboratory's excellent skills in the subjects taught and state-of-the-art lessons are given on its research topics. Speakers from the industry present seminars on rapidly changing fields. Part of the curriculum is taught in English, thereby preparing students for entry into the industrial or research sector.

More information



PROGRAM

SEMESTER 3

Télécommunications mobiles

- Antennas : operating and properties
- Digital communications
- Mobile Networks

Informatique/Réseaux

- Software Java/C++
- TCP/IP Networks
- SDN/Virtualization

Digital integrated circuits

- RF Circuits
- Technologies of programmable circuits and memories
- Electromagnetism

English (ECTS:3)

Entreprise

- business management
- Industrial Seminars
- Analyse de Cycle de Vie

Radio -

- Advanced network performances
- HF transmissions
- Radio propagation channel

Réseau

- Advanced Network Programming
- Virtualization/Openstack
- Network security
- Electronic Conception

SEMESTER 4

Stage de 4 à 6 mois (ECTS:30)