Fiche formation

VAE disponible

le cnam

Science, Engineering, Technology, specialized in Electronics, Electrical Energy and Automation

Communication systems in a complex environment

Master 2 — MR15200A

A Master's degree in Science, Technology, Health, specialized in Electronics, Electrical Energy and Automation, Communications Systems in a complex environment course offers a qualified training program dedicated to theories, concepts, and general tools in High frequencies. This dual accredited Master's program in 2nd year with University Gustave Eiffel, has a special teaching team which combines University professors and Associate professors from *Conservatoire national des arts et métiers* (Cnam), University Gustave Eiffel (UGE), and Télécom SouthParis. Our teaching members coming from recognized research laboratories bring a truly added value to this master's program.

Objective of the program

Master the concept of research in the field of communications based on radio links (wireless or guided) in the spectrum covering the radio to optical frequencies. This specialized master program focuses essentially on the physical and electronic aspects which involve in design, simulation, modeling and implementation of the systems.

Prospective candidate

- 1st year Master students and/or Master 1 degree in Electronics, Electrical Energy and Automation, Applied Physics, Fundamental Physics with specialization in Electronics.
- Graduate students of Engineering Schools wishing to follow a specialization in research.
- Last year students from engineering schools on the recommendation of their institutions, would also follow this master's program together with their initial training.

Acquired skills

Master the techniques in measurement of high frequency and optics, computational tools, the concept, and implementation of very high frequency communication systems.

Professional Opportunity

This master's program prepares for profession in research and development (R&D), bringing basic expertise on communication systems. For those who want to continue their study in PhD degree, the careers in research and higher education will be an excellent choice. Those who wish to integrate rapidly into working life, they would become research engineers in telecommunications, and high frequency electronics.
Surveys carried out by the university showing that a majority of former master's students in the field of Sciences and Technologies join the workforce immediately. 18 months after their graduation, 87% of them are employed. However, after following this master's degree, a majority of students continue their PhD degree. Other students enter to professional environment after finishing the program within 6 months.

Internship

Obligatory internship in industrial company or laboratory for a minimum 5 months starting from March (equivalent to 30 ECTS).

Language of instruction

French

Partners

Université Gustave Eiffel

Program

Code	Course	ECTS
USEA3E	Radio access networks	3
USEA3F	Advanced electromagnetics	3
USEA3G	RF circuits and systems	3
USEA3H	Optoelectronics	3
Optional course – 6 courses (18 credits) to choose :		
USEA3J	Radio access systems for cellular networks	3
USEA3K	Radio transmitter architectures and companion processing	3
USEA3L	Computational electromagnetics	3
USEA3M	Radio wave propagation	3
USEA3N	Statistical methods applied to electromagnetics	3
USEA3P	Microwave and millimeter integrated circuits	3
USEA3Q	MEMS micro-sensors	3
USEA3R	Optical link for very high throughput	3
USEA3S	Next-generation optical transmission systems	3
USEA3T	Antennas	3
USEA8A	Energy harvesting for Internet of Things	3
USEA8B	RF and microwave laboratory	3
UAEA0N	Internship	30

eeam.cnam.fr

mission Handi'cnam

Contact

Department EEAM – EPN03
Pedagogical secretary
secretariat.easy-eeam@lecnam.net