MOBILE COMPUTING SYSTEMS  
MASTER OF SCIENCE

ACCREDITATION
National Accreditation by the French Ministry of Education, Higher Education and Research. The degree can lead to enrollment in a PhD program.

KEY WORDS
Wireless communication and computing, Mobile communication Systems, Mobile networking and computing, Mobile Applications and Services, Telecommunications, Signal Processing Technology.

STRONG POINTS OF THE PROGRAM
> During their Master, students will have access to cutting edge technological platforms within Eurecom’s Wireless Communications Laboratory.
> Students are supervised by internationally renowned researchers.
> A 6-month paid internship which provides a cutting-edge experience. Eurecom has its own database of internship offers in several countries.
> A fully dedicated team providing administrative support to international students.
> The teaching program benefits from a unique location and from the expertise of renowned industrial partners.
> Eurecom is located in Sophia Antipolis, Europe’s largest technology park, a hotbed of internships and jobs opportunities for students.
> Eurecom is a consortium of leading international universities and top ICT companies and has established a synergy with the local industrial environment on advanced research topics.

SCHOOL OFFERING THE MASTER
Eurecom, a "Grande Ecole" with a 100% curriculum in English. It is located on the French Riviera, between Nice and Cannes. The degree is co accredited by Institut Mines-Télécom (IMT).

INDUSTRIAL PARTNERS
BMW Group, IABG, Orange, Monaco Telecom, SAP, Symantec.

LANGUAGE OF TEACHING
100% teaching in English. French is taught as a foreign language throughout the program. A 3-week program of intensive French courses is organised in September.

ENVIRONMENT
This Master provides a comprehensive set of competences in Communication Systems: from physical layer (wireless communications theory and implementation aspects), mobile computing systems (based on SDN, NFV, MEC, IPv6 among the others), to applications (for smartphone, tablets...). Sophia-Antipolis is considered The European Silicon Valley for telecommunications research and development in southern France. Eurecom has established over the years a synergy with both local and international industrial environment on advanced research topics.

COURSE AIMS
> Provide the theoretical background and the applied knowhow for engineers in Mobile Communications Systems.
> Learn to tackle problems from a system viewpoint, spanning across all the layers taking a vertical cut.
> Acquire and master tools and methods to follow the rapid evolution of technology and provide solutions leading to future generation of wireless communication and computing systems.
> Acquire managerial knowledge to provide innovation in Mobile Communications Systems (Project Management, Organization, innovation management...).

PROGRAM
The Master’s program is made of 4 full-time semesters: 3 semesters of courses followed by a 6-month Msc thesis in industry or in a research lab.

Scientific and technical modules
> Information theory
> Essential Mathematical Methods for Engineers
> Mobility Modeling
> Fundamentals of Optimisation
> Distributed Systems and Cloud Computing
> Operating systems
> Secure communications
> Software development methodologies
> Mobile Communication Systems
> Mobile Communication Techniques
> Advanced topics in Wireless communication
> Digital Communication
> Statistical Signal Processing
> Mobile application and services
> Network modeling
> Radio Engineering
> Wireless Access technologies
> Mobile Networking
> Mobile Advanced Networks
> Signal Processing Technologies
> Channel Coding theory
> Signal Processing for Communications

Management modules
> Introduction to Management
> Personal development and Team
> Leadership
> Entrepreneurship and Capital Venture
> Innovation and new product development
> Business Simulation
> Sociological approaches of telecom technologies (course given in French)
> Project Management
> Sustainable ICT’s (Green IT)
> Intellectual Property Law
> General Introduction to Law

Also part of the program
> Company visits and seminars
> Scientific and Technical Projects
> French language
> Professional coaching (workshops on CV/professional interviews)
> 6-month thesis in Industry or Research lab
MOBILE COMPUTING SYSTEMS
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ADMISSION REQUIREMENTS
- A Bachelor’s degree (3 years min) in the engineering fields covered by the Master’s program (Electrical engineering/computer sciences/communication engineering…)
- B2 level in English

LANGUAGE REQUIREMENTS
English (at least one of the following)
- Mother tongue
- English Language Qualification:
  - TOEFL 564 (PBT), 213 (CBT), 80 (IBT)
  - IELTS: 5.5
  - TOEIC: 750
  - Cambridge CAE

COMPETENCES ACQUIRED
- A global view of the major challenges of future Mobile Communications Systems
- A strong theoretical background in communications and networking to address the fixed/wireless convergence
- Knowledge of the most recent industrial developments and standards
- Introduction to advanced research topics

TYPICAL JOBS
The Master in Mobile Computing Systems gives access to the Telecom Equipment industry, to the Telecom Operators industry and to the academic/theoretical research world. All national and international institutions in the field of communications systems provide career opportunities to graduated students:
- Operators
- Telecommunications industry
- Consulting companies in Information Technologies
- Regulators
- Software editors
- Semi conductor industry
- Other industries (car manufacturers…)

PROFESSIONS
- Research and development in Communication Systems
- Network Consulting
- Network Architect
- Communications Software Development
- Communications Hardware Development
- Project Management
- Telecom Policy Making

COST
Tuition fees for the full program (2 years):
- €12,000
- €6,000 (European Union and Erasmus zone)
Possible partial fee waivers and scholarships.

DURATION
2 years (starting in september):
3 semesters of courses followed by a 6-month paid internship in a lab or company. Some of the companies offering internship opportunities to our students: SAP, BMW, Symantec, IABG, Orange, Amadeus, Renault, Siemens, ARM, Fortinet, PSA, KMPG, Nokia, Accenture, HP, Magnetti Marelli, DLR…

APPLYING
All applications should be made online:
https://www.eurecom.fr/en/postulant/new
The website provides full information on application procedures:

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