

Communication Systems Engineering is an international Master program taught in English and offered jointly by Grenoble Institute of Technology and Politecnico di Torino.

The primary goal of the Communication Systems Engineering Master degree is to train students for successful careers in telecommunications systems engineering. Students who successfully complete this training are able to design and supervise communication systems: from point to point communication links to more complex heterogeneous networks.

Depending on the applicant background, Master CSE student will receive the degree of Grenoble INP-Phelma or Grenoble INP-Ensimag and Politecnico di Torino. An admission committee will decide in which engineering school the student will be registered. At the end of this international training, Master CSE student will receive the certificate of joint international training in Communication Systems Engineering in addition to his degree.



Grenoble Institute of Technology

For more than 100 years, Grenoble Institute of Technology has trained engineers and doctoral students in key technologies. Grenoble Institute of Technology combines high-quality academic programs with fruitful research (32 laboratories - among which 10 are international), business partnerships to help meet major challenges in industries such as micro and nanotechnologies, energy, digital world, environment, and industry: globalization and innovation.

www.grenoble-inp.fr



Politecnico di Torino

Politecnico di Torino is Italy's oldest Technical University. It offers top-ranking educational programs in Engineering and Architecture. Students amount to 26,000, 10% are foreigners. Faculty staff amounts to 900 professors and researchers. Politecnico di Torino interacts with the local social and economic context, as well as with companies and research centers from all over the world. Six Faculties are in charge of education and 18 Departments of research.

www.polito.it



Admissions

To be admitted to the program, candidates must have previously completed their undergraduate studies and been awarded a Bachelor degree either in Science (BSc) or Engineering (BEng), preferably in the fields of electrical engineering, informatics, applied mathematics or electronics.

Tuition and Fees:

approximately 750 euros per year. Note that tuition fees are highly subsidized by the French Government.

Language requirement

- For Grenoble INP and Politecnico di Torino applicants no minimum English level is required.
- For other applicants, a minimum level of IELTS 6/TOEFL IBT 87/TOEIC 550 required (or equivalent).

At the end of Master CSE program, and for all the students, a minimum level of English corresponding to B2 European standard level (TOEIC 750) is compulsory to be awarded the Grenoble INP engineering degree.



**Deadline for applications
Mid April**

Notification of results in May

Application form available on-line <http://cse.ensimag.fr>



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Grenoble Institute of Technology Politecnico di Torino

Communication Systems Engineering International Master

Photos: Fotolia / Alexis CHEZIERE / Christian MOREL / James CROWLEY / Patricia RIGAUD - MARS 2012



CSE International Master Academic Program

Two highly reputed European Universities

Technical skills

A successful career in Communication Systems engineering requires skills in both hardware and software.

CSE students master devices, systems and techniques used in digital communication systems, including informatics, networks and signal processing. This large range of competencies provides the necessary skills to interact with top-level specialists in networks and equipments.

Management and soft skill courses allow our graduates to:

- Work in a cross-cultural environment, master one or several foreign languages.
- Manage a project and a team, communicate efficiently.
- Build a business network.

A variety of jobs and PhD opportunities

CSE provides a well balanced training program at the intersection of the three main fields of telecommunications: informatics, signal processing and electronics.

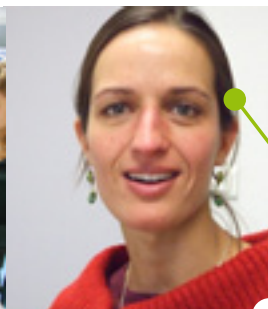
Our graduates find jobs as:

- Designer of transmission systems: specification of components in a transmission system, integration, building up test-bench, validation of the complete system.
- Telecommunications network engineer: design of telecommunications networks, specification of network equipments, evaluation of network resource, integration and validation.
- Supervisor for networks and information systems: analysis and diagnostic of network problems, implementation of solutions, control of the results.

PhD opportunities in a wide range of research areas: computer and networks, emerging telecommunication technologies, signal processing, electronics.

“ This master’s program is highly regarded by recruiters. The program being in two different countries is a real added-value for languages competence. ”

Céline



Zine



“ This Master’s program is really pluri-disciplinary, a well balanced education in informatics, applied mathematics and electronics. The courses are taught by recognized Faculty members who publish research papers frequently and who regularly attend international conferences. ”



First year: Politecnico di Torino

Semester 1

Operating Systems and system programming
Statistical Signal Processing and Multimedia

Select one of these two courses:

Discrete Mathematics / Stochastic Processes

Select one of these two courses:

Digital Electronics / Network management and Quality of Service provisioning

Internship: 10 weeks internship in industry or research lab

Semester 2

Digital communications
Microwave electronics

Select one of these four courses:

Guiding Electromagnetic systems / Radiating Electromagnetic systems

Radio Planning / Radar and remote sensing

Select one of these two courses:

Analog and Telecommunication Electronics

Network modelling : theory and simulations

Italian or French



Second year: Ensimag, Grenoble INP

Semester 3

Optical Fiber Communication Systems
Architecture of Integrated Radio Systems

Lab Radiofrequency Project

Wireless Networks

Computer Networks

Network project

Numerical Transmission Systems

Quality Management

Strategy and Marketing

Project Management

Semester 4

End of studies project

Double Degree

- Grenoble INP Engineering Degree (equivalent to a Master degree)
- Politecnico di Torino Master Degree

The Turin Area and Piedmont

The North-Italian Industry Triangle and the Alpine Diamond

Ideally located between France, Switzerland, Italy,

the Alps and the Mediterranean coast, Turin and its surrounding region, Piedmont, host 7% of the population of Italy and produce 10% of its GNP, accounting for 13,3% of Italy’s export and 27% of Italy’s high-tech export.

Innovation in its 300,000 companies (1600 with more than 50 employees) is boosted by its 4 Universities with more than 100,000 students and in its Research Laboratories (Italian National Research Council, corporate Research Laboratories (FIAT, Telecom Italia, etc.)).

Turin

has a population of 900,000 (metropolitan area 1,400,000).

It is rich in museums, art and culture and offers a wide variety of activities, ranging from entertainment to sports. Turin hosted the XX Winter Olympic Games in 2006. Ski resorts and the Mediterranean coast are within a 1.5 hour drive.

The Grenoble Area

A major scientific center in the fields of physics, informatics and applied mathematics

Excellence in Research

- 23,400 jobs including 15,800 in public research institutions
- 120 research laboratories

8 National Research Organizations, including:

CEA, Atomic Energy Commission

CNRS, National Centre for Scientific Research

INRIA, National Institute for research in Computer Science and Control

4 European Research Centres

ESRF, European Synchrotron Radiation Facility

ILL, Institut Laue-Langevin

IRAM, Millimetric Radio-Astronomy Institute

EMBL, European Molecular Biology Laboratory

A university city, with over 61,000 students.

A superb campus situated 10 minutes away from downtown with convenient public transportation.

On-campus accommodation, with a choice of students residence halls, and university restaurants.

An exceptional natural setting, in the heart of the French Alps.

The city is surrounded by three mountains ranges, providing easy access to a wide range of mountain activities including skiing, hiking and hang-gliding. The area’s many lakes allow the practice of water sports in summer.

