# le cnam

# International Master's program - MR14602A Sciences, Technologies, Health Telecommunications and Networks

#### Introduction

To pursue your studies in a pretigious school in France, our two-year training program taught in English is an excellent choice as you can prepare a Master's degree in Sciences and Technologies in the area of Telecommunications and Networks, and at the same time explore French culture and history and integrate into a multicultural learning environment.

Our diploma is awarded upon successful completion of a specialized study program. The Master's degree in Sciences and Technologies in the area of Telecommunications and Networks opens a way to a professional career in an intercultural context or to further education towards the PhD degree. If your university is our partner, your study with us will lead to a double degree.

This two-year, full time master's program trains students to take responsibilities as managers or chiefs in multicultural projects at international enterprises in telecommunication section (manufacturers, operators) or other areas having a specific department in telecommunications.

#### We are in figures

- 2014 Year of creation
- HCERES accreditation
- RNCP registration level 7
- Ranking 5th on Eduniversal Best Master's program in Telecommunications and Networks.
- 18 nationalities
- 100% got job after graduation
- 32 graduates
- 2 students followed PhD program
- 3 MoU with universities in China, Italy and Vietnam

### Conta**ct**

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### eeap.cnam.fr

## About Conservatoire national des arts et métiers (Le Cnam)

Le Cnam is a prestigious French institution with long-standing and deep scientific tradition. It was established in 1794, during the French Revolution, in the location of a medieval monastery. Today, thanks to its integrated network, le Cnam spreads higher adult education and life-long training to 54700 students and auditors in France and abroad.

Le Cnam has 20 research laboratories and one Doctoral school in a variety of disciplines strongly oriented toward technological research.

#### Requirement

The Master «Telecommunications and Networks» is open for students from foreign universities applying through Campus France or university partners of Cnam. Candidate must hold a four-year Bachelor's degree (or equivalent qualification) in telecommunications and networks.

#### **Admission procedure**

Application: CV, letter of motivation, bachelor's degree, transcripts of bachelor's degree, two recommendations letters, English certificate equivalent to B1 for Master 1 and B2 for Master 2. Application must be submitted online via our website.



Depuis décembre 2021, le Cnam est certifié Qualiopi pour l'ensemble des entités de formation de l'établissement public, et pour les quatre types d'actions couvertes par cette certification :

le cnam

Processus certifié



Handi cnam

Aider les auditeurs en situation de handicap : handi.cnam.fr

#### With us

#### You master to:

- Analyze and compare technical offers of telecommunication networks
- Control and manage telecommunication/ network projects
- Conscious of safety and economical intelligence issues
- Develop protocols and architectures of professional networks
- Organize network development and network exploitation
- Organize maintenance, traffics follow-up and networks evolution preparation
- Implement digital processing algorithms

#### You will become:

- Analyst
- Consultant
- Manager/Chief of project
- Researcher
- Telecommunications/Network expert
- Telecommunications/ Network engineer

#### Why us ?

#### Research and practical activities

We are managing 4 well-equipped laboratories: Cedric (Telecommunications and automatics), Esycom (Electronics, Communication system and Microsystem), LCM (Metrology) and Satie (Electrical systems). A new teaching studio is under construction with drones, electrical trains, autonomous vehicles, tracking cameras, high performed PC... This new studio is reserved specially for courses related to future transportation, and smart city including telecommunications and networks.

#### Teaching quality

Professors and associate professors are not only giving lectures but also keep doing research at laboratories to update advanced technologies. Our programs are accredited HCERES, all engineering degrees are awarded Cti and EUR-ACE labels. We have just got Qualiopi certification, the highest commitment to administrative management quality.

#### Strong anchorage with leading industrial or hi-tech companies

We encourage our students to do their internships or research with Alstom, SNCF, GE, Thales, Renault etc. to which we collaborate and establish solid contacts as we invite their experts to teach and organize conferences with us.

#### Strong international network

China, Korea, Lebanon, Morocco, Russia, Tunisia, Vietnam are among some countries we are developing our training courses as well as sending our students for exchange programs.

#### And beyond with this Master's degree:

- Eiffel scholarship for the best admitted students
- Opportunity to follow PhD's program
- Courses fully taught in English
- French course offer at the same time enjoy your daily French speaking environment in the heart of Paris
- Joint course with Sorbonne University
- Multicultural environment with international students from 5 other international master's programs
- in Cnam
- Housing assistance with Crous

#### Partner universities



Dongguan University of Technology, China



Politecnico di Milano (POLIMI), Italy <u>Companies offer internships to our students</u>





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Master's program Telecommunications and Networks		
Code	Course	Crédits
	MASTER 1	
USEEJ6	Network Architecture	6
USEEJ1	Mathematics of Random Signal	6
USEEJ2	Digital Signal Processing	4
USEEJ3	Introduction of signal processing	4
USEEJ4	Digital Communications (1)	4
USEEJ5	Digital Communications (2)	4
USMC87	Basics of scientific programming - Python/ Matlab	3
USEEJ7	Networks - Complements and Applications	6
USEEJ8	Wireless Mobile Networks	6
USEEJ9	French as foreign language	6
USEEK1	English	6
USMC84	Scientific Communication I - Disseminating	2
USEEK3	Contemporary Economic Issues - I - Economic growth and public policies	3
	MASTER 2	
USEEN4	Network Virtualization and Automation	6
USEEK7	Network security	6
USEEK4	Antennas and diversity	3
USEEK9	Internet of things	2
USEEK5	Radiocommunications (1)	6
USEEK6	Radiocommunications (2)	4
USMC88	Basics on Artificial Intelligence and Machine Learning for sciences	3
USMC7D	English	6
USMC85	Scientific Communication II - Dialoguing	2
USMC86	Contemporary Economic issues - II - Innovation and firms	2
UAEE1S	Internship at Company	20

