# le cnam

au change votre vie

# Engineering Master's Degree - MR146

# Sciences, Technologies, Health Telecommunications and Networks

#### Introduction

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

Recognized by the French Ministry of Higher Education and Research, our diploma is awarded upon successful completion of a specialized study program. The Master's degree in Engineering 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.

## Conta**cts**

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# 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 100 000 students in France and abroad.

Le Cnam has 25 research teams and offers 36 doctoral programs in a variety of disciplines strongly oriented toward technological research.

#### **Career opportunity**

The Master's Program provides possibilities to start a career in line with the changing world of computer networks and telecommunications (fix or mobile). The convergence of communication networks that carry either voice or data and images is now operating. The migration of 3G and 4G mobile systems toward full IP transmission is one example. Industrial and telecommunications networks, telecommunications network operators, enterprises of the internal and external computer networks are hiring those able to understand such systems in their entirety.

In this prospect, the program offers courses in both high data rates communications and techniques of business networks. The former focuses on technological bases of transmission and propagation, while the latter focuses on mastering the techniques of business networks: hardware architecture and broadband transmissions, network protocols, databases access and exchange of multimedia data, network engineering, distributed systems.

#### 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, score record of bachelor's degree, two recommendations letters, English certificate equivalent to B1 (IELTS 5.0) for Master 1 and B2 (IELTS 5.5) for Master 2.

	Course	ECTS
	Programme Master 1 (60 ECTS) - Code : MR14602A	
MASTER 1	Mathematics	6
	Digital Signal Processing	4
	Introduction of Signal Processing	4
	Bases of Digital Communications (1)	4
	Bases of Digital Communications (2)	4
	Networks and Telecommunications	6
	Networks – Complement and Applications	6
	Wireless Mobile Networks	6
	French as a foreign language	6
	English	6
	Engineer job	4
	Company organization	4
MASTER 2	Programme Master 2 for Telecommunications and Networks (60 ECTS) Code : MR14602A	
	Antennas and diversity	3
	Radiocommunications (1)	6
	Radiocommunications (1)	4
	Network security	6
	Advance Projects in Networks	6
	Internet of things	2
	French as a foreign language	6
	English	6
	Internship at company	21
	Programme of Master 2 major Telecommunications (60	
	Code : MR14602B	
	Antennas and diversity	3
	Signal Processing for Telecommunications	6
	High Speed Technologies	6
	Radiocommunications (1)	6
	Radiocommunications (2)	4
	Internet of things	2
	French as a foreign language	6
	English	6
	Internship at company	21
	Programme of Master 2 major Networks (60 ECTS) Code : MR14602C	
	Network security	6
	Wireless Mobile Networks	6
	Advanced Projects in Networks	6
	New Network Architectures	6
	Advanced Topics in Networking	3
	French as a foreign language	6
	English	6
	Internship at company	21



#### **Partner Universities**

#### In China

- Beijing University of Technology
- Dongguan University of Technology
- Southeast University
- South China University of Technology
- Wuhan University
- Xidian University

#### In Vietnam

• Hanoi University of Science and Technology