

## REASONS TO APPLY

Communications and Digital Media are pillars of the modern Information and Communication Society, an essential infrastructure for the Economic and Social development of advanced Countries;

Communications and Digital Media continuously expand and innovate;

Communications and Digital Media are pervasive in everyone's life, playing a crucial role for any production reality and for the provision of Services;

Communications and Digital Media are the basis of Industry 4.0, 5G and IoT that are reshaping from scratch life and economy.

The wide choice of Courses and Teaching Activities enables the Students on one hand to understand the theoretical foundations at the very roots of the contemporary Communication Society, on the other to become acquainted with the technological framework that made this revolution come true.

After graduating, immediate and exciting job opportunities open up in leading-edge sectors of Industry and Services characterized by a stimulating environment with a highly scientific and technological content.

### Coordinator of MSc degree in Communication and Digital Media Engineering

Prof. Amedeo Capozzoli  
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#### Useful Links

##### Polytechnic and Basic Sciences School

[www.scuolapsb.unina.it](http://www.scuolapsb.unina.it)

##### Department of Electric Engineering and Information Technology

Via Claudio 21, 80125 Napoli  
[www.dieti.unina.it](http://www.dieti.unina.it)

##### Communication and Digital Media Engineering Degree links

[ingegneria-telecomunicazioni.dieti.unina.it](http://ingegneria-telecomunicazioni.dieti.unina.it)  
[www.facebook.com/ingegneria.telecomunicazioni.federicoll](https://www.facebook.com/ingegneria.telecomunicazioni.federicoll)

##### Degree Program Counselors

Prof. Giovanni Poggi  
[giovanni.poggi@unina.it](mailto:giovanni.poggi@unina.it)

Prof. Giovanni Breglio  
[giovanni.breglio@unina.it](mailto:giovanni.breglio@unina.it)

##### Student Secretariat

Piazzale Tecchio 80, 80125 Napoli  
Opening hours: Monday to Friday, from 9.00 to 12.00  
Tuesday and Thursday also from 14.30 to 16.30



UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II  
SCUOLA POLITECNICA E DELLE SCIENZE DI BASE

# ENGINEERING

## MASTER'S DEGREE IN COMMUNICATION AND DIGITAL MEDIA ENGINEERING



2020|21

## LEARNING OUTCOMES

The Master of Science in Communications and Digital Media Engineering trains high-profile Engineers who are capable of designing and managing systems for the transmission and processing of Information, even those with a high degree of complexity.

The Degree in Communications and Digital Media Engineering trains a versatile Engineer, able to fit into highly qualified, rapidly evolving production realities typical of Information and Communication Technologies.

The Master of Science in Communications Engineering is divided into two academic years. The training activity is organized in two semesters for each academic year. In addition to the Courses, the Internship period in external qualified research centers or industries and the preparation of the Master's Thesis complete the Student's skills.



## ADMISSION REQUIREMENTS

Admission to the Master of Science in Communications and Digital Media Engineering requires a Bachelor's degree or another qualification obtained outside Italy, declared equivalent.

A Committee evaluates the Candidate's curriculum, his first level qualification and verifies that marks are above a minimum threshold to guarantee a sufficient level of the Candidate's basic knowledge.

## MASTER'S DEGREE PLAN

Program: 2 years / 120 CFU

### THREE THEMATICS AREAS:

- Safety and Security;
- Communication Networks for 5G and Beyond;
- Multimedia.

### First Year Compulsory Courses:

▪ Comunicazioni Digitali	9
▪ Elaborazione di Segnali Digitali	6
▪ Ottica e Iperfrequenze	9

### Some relevant Courses according to the Thematic Area of interest:

#### Safety and Security:

▪ Sistemi Radar	9
▪ Radiolocalizzazione Terrestre e Satellitare	9
▪ Network Security	6
▪ Sistemi ad Alta Frequenza per la Sicurezza e il 5G	9
▪ Progetti di Sistemi di Telerilevamento	9
▪ Quantum Information	6

#### Communication Networks for 5G and Beyond:

▪ Sistemi di Telecomunicazione	9
▪ Reti Wireless	9
▪ Wireless and Mobile Networking Architectures	6
▪ Sistemi ad Alta Frequenza per la Sicurezza e il 5G	9
▪ Radiocopertura per Reti di Telecomunicazioni	9
▪ Comunicazioni Wireless	6

#### Multimedia:

▪ Elaborazione di Segnali Multimediali	9
▪ Image Processing for Computer Vision	9
▪ Realtà Virtuale e Computer Graphics	6
▪ Tomografia e Imaging	9
▪ Progetti di Sistemi di Telerilevamento	9
▪ Ingegneria del Suono	6

#### Some other relevant Courses:

▪ Machine Learning	6
▪ Tutela della Sicurezza e della Riservatezza dell'Informazione	6
▪ Modelli e Algoritmi di Ottimizzazione	9
▪ Misure su Sistemi Wireless	9
▪ FPGA per l'Elaborazione dei Segnali	9
▪ Information Theory	9
▪ Componenti e Circuiti Ottici	9
▪ Misure a Microonde ed Onde Millimetriche	9
▪ Tecnologie Multiportante per le Comunicazioni	9

Internship	6+3
Final exam	15

## JOB OPPORTUNITIES

The Communications and Digital Media Engineer operates in multidisciplinary, highly scientific and technological environments, where he is asked to plan, design, implement and manage components and systems for the acquisition, transmission, processing and delivering of Information.

The role of Information Transmission and Processing in Life and Industries offers opportunities in:

- Technical, Commercial, Management, Manufacturing and Service Industries;
- Design, implementation, manufacturing, installation and maintenance of Communication Networks and Systems;
- Production and delivering of multimedia and radio-television contents;
- Telephony and data transmission providers;
- Public Administrations and Agencies;
- Security and Defense;
- Biomedical, IT, Aerospace and Automotive Companies.

## FURTHER STUDIES

Communications and Digital Media Engineer with MSc degree can have access to post-grad research fellowships or PhD positions. In particular at DIETI are active two PhD Schools:

### iteePhD - Information Technology and Electrical Engineering

[itee.dieti.unina.it/index.php/en/](http://itee.dieti.unina.it/index.php/en/)

### ICTHPhD - ICT for Health

[icth.dieti.unina.it/index.php/en/](http://icth.dieti.unina.it/index.php/en/)

## CAMPUS AREA

Teaching and laboratory activities take place in the campus of Napoli Ovest, via Claudio, Napoli.

This area is easily accessible and well connected via public transport.

