Several opportunities are offered by this course, connected both to the technology and to service industries:

- Web-based systems, services and applications design;
- ICT technologies, integration for web enterprises, energy, health, security, etc;
- Telecommunication structures and remote environmental sensing systems;
- Management of mobile and fixed network infrastructures;
- Internet services and telecommunications marketing;
- Enterprise and ICT projects management.

The Internet Engineer has job opportunities in many other sectors:

Energy / Health / Territory and Environment Sector / Tourism / Automotive Industry / Construction Sector / Vulnerability and Defense of Informative Systems

Just as the spread of Computer has led to the creation of a University Course of Study in Computer Science, so the spread of Internet has created the need for a related University Course that could deal with its peculiar aspects, with an overall view including infrastructural, methodological and practical aspects.
Master's Degree in ICT and Internet Engineering

Università degli Studi di Roma “Tor Vergata” is the first Italian University, which has established the Master’s Degree in “ICT and Internet Engineering”.

Students holding a Bachelor Degree in a pertinent area can attend the Master, such as graduate students of Tor Vergata’s Engineering Sciences (English) and “Ingegneria di Internet” (Italian).

ICT and Internet Engineering is the union of 4 current converging fields:

- Information generation systems: sensors, remote monitoring via satellite, terrestrial and satellite localization, GPS, etc.
- Information processing: compression, cryptography, data mining, big data, etc.
- Technologies and protocols for telecommunication services: optical fibers, antennas, satellites, RFID, NFC, radio links, GMS, UMTS, LTE, Wi-Fi, Bluetooth, TCP/IP, etc.
- Applications and services supply: Web applications, applications for Linux/ Macintosh/Microsoft/Android/iOS Operating Systems, e-commerce, VoIP, social networks, streaming videos, search engines, etc.

Intelligent Infrastructures in practical scenarios

The need for new professional figures has taken shape since the birth of Internet, between the end of the 90’s and the beginning of the 2000’s, and it has strengthened thanks to the vision of the Internet of the Future, with the aim of developing Internet connecting people, objects and services (Internet of People, Internet of Things, Internet of Services).

According to the basic concept of Internet of Things, each object can be connected to the Internet Network and it is provided with an univocal identity. This paradigm allows the development of the so-called intelligent infrastructures, which are capable to control and adapt to the current conditions in different practical scenarios.

The practical scenarios of the Intelligent Infrastructures are placed in many different sectors: Health, Agriculture, Security, Transfers, Energy, Constructions, Public Administration, Industrial Sector.

Information and Communication Technologies are:
- accessible, cheap, fast, versatile, flexible, dynamic, pervasive,...

Information generation systems: sensors, remote monitoring via satellite, terrestrial and satellite localization, GPS, etc.

Information processing: compression, cryptography, data mining, big data, etc.

Technologies and protocols for telecommunication services: optical fibers, antennas, satellites, RFID, NFC, radio links, GMS, UMTS, LTE, Wi-Fi, Bluetooth, TCP/IP, etc.

Applications and services supply: Web applications, applications for Linux/ Macintosh/Microsoft/Android/iOS Operating Systems, e-commerce, VoIP, social networks, streaming videos, search engines, etc.

Laboratories

Many classes include practical activities with specific laboratories:
- Fundamentals of Computer Science
- Internet Technologies and Protocols Laboratory
- Optical Communications Laboratory
- Satellite Tracking
- Vulnerability and Defense of Informative Systems

WHY STUDY ICT?

Information and Communication Technologies are:
- accessible, cheap, fast, versatile, flexible, dynamic, pervasive,...

WHY IN ENGLISH?

- English is the language of Science, Computers, Media Industry;
- English gives you more opportunities to find jobs and to push your career forward;
- English is the language of the Internet...

The language of Communication (English) + The Technologies of Information and Communication (ICT)

ICT and Internet Engineering Master’s Degree

- Open to all Students with an “Information Engineering” Bachelor’s Degree, both in Italian and in English;
- All the classes and exams are in English;
- 5 supplementary subjects to choose for credit recovery only, for Students coming from other Courses.

ICT and Internet Engineering fulfills the need to train experienced professionals capable of coping with all the problems concerning the Internet-related systems, through a systematic approach that allows to develop multidisciplinary solutions, methods and technologies.