



# SECOND CYCLE DEGREE IN COMMUNICATION ENGINEERING

ACADEMIC YEAR 2014-2015



UNIVERSITÀ DEGLI  
STUDI DI PARMA  
Il mondo che ti aspetta



# SECOND CYCLE DEGREE IN COMMUNICATION ENGINEERING

## INTRODUCTION

The University of Parma is pleased to present the Second Cycle Degree in Communication Engineering (CE), equivalent to a Master Degree. CE is the second course at the University of Parma, Italy, to be offered in English. The university is actively seeking to raise its international profile in teaching and research, and for several years has played a key role in joint projects with several countries. CE is a two-year course tailored to those aspiring to work at an international level.

CE offers diverse categories of students a unique opportunity.

First of all, it is addressed to Italians who wish to improve their command of the English language in a professional context. All lectures and seminars are held in English, so that students will practice the language in its technical jargon while learning about current technology with a sound methodology. Many scientific studies attest the value of such a Content and Language Integrated Learning. CE offers the chance to work towards an advanced qualification in communication engineering and also acquire advanced language skills throughout the two-year course. CE is also aimed at non-Italian students who wish to study in Italy. For many of these students, their limited knowledge of the Italian language has been a barrier until now. But today some of the major Italian universities, as well as many others in the European Union, are offering degree courses in English. We expect that CE will attract significant applications from overseas.

Communication Engineering has a solid tradition at the University of Parma. In the last decades the Department of Information Engineering has been active in research in all three areas of the Information and Communication Technology (ICT), namely, Electronics, Computer Engineering, Communications, and related fields. The Department coordinates both advanced research and graduate studies. The research activity is carried on by several groups often in collaboration with foreign universities and renowned international institutions. The Department also provides scientific and technical consulting to industries, firms and public institutions in Italy and abroad. The Second Cycle Degree in Communication Engineering has been offered in Italian since the early Nineties, in parallel with international-level research in Digital, Wireless and Optical Communications.

Parma is an ideal destination for foreign students. Famous for its art and history, the city also offers a high level of public services. It is small enough for the local people to be welcoming and friendly, but large enough to host important cultural events. The way of life is pleasant and there are many bars and cafés, piazzas and parks, as well as clubs and societies for leisurely activities.

CE may bring various benefits. All students, both Italian and foreign, may gain an advantage in terms of employment. Today, advanced knowledge in ICT needs to be complemented by language skills for access to many professions, and an advanced knowledge of English can open up opportunities for young people in Italy and abroad. But we also look forward to the wider benefits of hosting students from different parts of the world. Inter-cultural exchange, strong international relationships, and diversification of human capital are all outcomes of studying in different countries. The University of Parma today attracts half its students from outside its Region and about fifteen hundred are foreigners, however the number of the latter may increase significantly. Communication Engineering facilitates academic contacts overseas and gives all our students more opportunities in the wider world.

Prof. Giorgio Picchi  
Chairman of the CE Programme Committee

Engineering classroom building





## SECOND CYCLE DEGREE COURSE IN COMMUNICATION ENGINEERING

CE is a second-level degree according to the European categorization (LM 27 - Telecommunication Engineering), offered entirely in English by the Department of Information Engineering of the University of Parma. It is a two-year course which enables successful students to be awarded the Second Cycle Degree Certificate “Laurea Magistrale”.

Globalization today is a great opportunity for young people, but working on the international stage and taking part in innovation all over the world requires a solid background and advanced skills in various aspects of the current technology. At the same time, it requires an advanced knowledge of the English language. For this reason, this programme is taught and examined entirely in English to meet the needs for top-level language skills.

CE is designed for candidates from different academic backgrounds and aims to provide a thorough grounding in ICT. Graduates will be trained to work in companies challenging the global technology competition, in multinational corporations, European and supranational organizations and national and regional institutions operating internationally.

The first year of the course provides the sound and fundamental background tools of the Communication Engineer, but also leaves significant space to interdisciplinary learning by allowing the student to attend courses from other Engineering, Physics or Economics programmes. The second year focuses on specific advanced disciplines within Communication Engineering and leaves significant space to a final thesis work.

The main aim of the Communication Engineering course is to provide advanced insight into the current information and communication technology, while simultaneously emphasizing a methodological approach to the analysis and design of complex systems - an essential ability in a fast moving world.

### Courses, number of credits and years of study

COURSE	CREDITS	YEAR
Detection and Estimation	9	1st
Information Theory	6	1st
Microwaves	6	1st
Network Security	9	1st
Network Performance	6	1st
Elective Complementary Courses	15	1st
Elective Courses	9	1st
Photonic Devices	9	2nd
Digital Communications	9	2nd
Wireless Communications	9	2nd
Optical Communications	9	2nd
Thesis and final examination	24	2nd
<b>Total</b>	<b>120</b>	

Minor changes may be introduced

The final examination consists of a public defence of a theoretical or experimental thesis, focussing on a theme consistent with the subjects of the degree course.

**For online information:**

<http://ingegneria.unipr.it/communication-eng/>

**For academic advice on CE, contact:**

Chairman of the CE Programme Committee: Prof. Giorgio Picchi

e-mail: [giorgio.picchi@unipr.it](mailto:giorgio.picchi@unipr.it)

Phone: +39 0521 905762

**For administrative queries on admissions and recruitment on CE, contact:**

Ms Alessia Bambini, Student Registry office, Engineering section (Segreteria Studenti),

e-mail: [alessia.bambini@unipr.it](mailto:alessia.bambini@unipr.it), [seging@unipr.it](mailto:seging@unipr.it)

Phone: +39 0521 905176

## ENTRANCE REQUIREMENTS AND DEADLINES

### ACADEMIC YEAR 2014-2015

#### Italian students

**a)** Holders of a first level Italian degree certificate in the Class L-8 ex 270/04 or Class 9 ex 509/99 (Information Engineering) are admitted to CE with no further requirements.

The Student Registry office (Engineering section) verifies the validity of the degree certificate presented by the applicant. Applications from candidates holding degree certificates from classes other than Information Engineering are also welcome, especially from other Engineering classes, Physics, Mathematics and Computer Science. They should be submitted to the Student Registry office for assessment by the Department Admission Panel. The detailed requirements are specified in the Degree Regulations (Regolamento didattico).

**b)** Applicants holding a degree certificate as specified in a) but with a mark below 88/110 or equivalent are required to attend an interview. Interviews will be held in January, March, September and November.

#### EU (including Iceland, Liechtenstein, Norway, Repubblica di San Marino, Switzerland) and non-EU students resident in Italy-Italian citizens holding an overseas degree certificate.

EU citizens (including Italians), non-EU citizens holding a residence permit (permesso di soggiorno) legally resident in Italy and Italian citizens holding an overseas degree certificate must submit these documents together with their application:

- Degree certificate
- List of module/course examinations comprising the degree
- Syllabus or programme of each module/course
- Passport
- Dichiarazione di Valore (DV). This document, aimed to certify the number of required schooling years as well as the accreditation of the attended schools, is mandatory and is issued by the Italian Embassies or Consulates residing in the Country where the school awarding the title is located. Instead, when the awarding institution is part of the education system of another Country, the competent diplomatic authority is the Italian Embassy/Consulate General in the Country of the education system of reference.

All submitted documents must be original and where required must be supplied with a certified Italian translation. The translation of official documents must be certified by the Italian Embassy or Consulate of the home Country or by a Court or Local Official in Italy (the syllabus or programme of each module or course can be submitted in English).

But, please note: only the Italian Embassy or Consulate in the Country where you obtained your degree, can issue the “Dichiarazione di valore” (DV).

**Applications should be submitted to the Student Registry Office, Engineering section, for assessment by the Department Admission Panel.**

Applicants of non-EU citizenship who are not resident in Italy should submit a pre-enrollment application form to the **Italian Embassy or Consulate** in their Country of residence specifying the University (*Università degli Studi di Parma* or *University of Parma*) and the Second Cycle Degree Course (*Laurea Magistrale in Communication Engineering*). Pre-enrollment applications **for the 2014-2015 academic year can be submitted from April 2014 onwards**. The deadline for submission is fixed by the Italian Embassy or Consulate in each Country. See these websites for details and updated information:

**www.miur.it** and **www.esteri.it**

The following documents must be submitted with the pre-enrollment application form:

- Degree certificate
- List of module/course examinations with grades
- Syllabus or programme of each module/course
- Passport
- Two passport photos

All submitted documents must be original, and, where necessary, must be supplied with an Italian translation. The translation of official documents must be certified by the Italian Embassy or Consulate of the home Country or by a Court or Official (the syllabus or programme of each module or course may be submitted in English). The Embassy or Consulate must issue a “Dichiarazione di Valore” (DV). This is a declaration of the value in the home Country of an overseas degree certificate. It specifies the course type and duration etc. It is issued solely by an Italian Embassy or Consulate overseas for the purpose of possible recognition of the qualification in Italy.

The Embassy or Consulate forwards applications for assessment by the Department Admission Panel at the University of Parma. For successful applications, a letter of acceptance is sent to the Italian Embassy or Consulate in the applicant’s home Country, which then issues a **visa for study purposes**.

Upon arrival in Italy, students must register at the Student Registry Office, Engineering section, University of Parma, they must apply for a residence permit at an authorized Italian postal office within 8 days of the arrival date.

#### WHEN AND HOW TO ENROL

Completed enrollment forms can be submitted to the Student Registry Office, Engineering section, **from July 2014 to December 2014**.

**(Please check the web site of the University for the exact dates).**

Applications can be made either in person to the Student Registry Office or online (Italian and EU students only) at <http://www.unipr.it/immatricolazioni>. Please check the University web site for the exact dates.

For queries and assistance contact **seging@unipr.it**

## ENGLISH STUDY SKILLS COURSE

This pre-sessional course is aimed at students whose first language is not English and offers tuition in English for Academic Purposes. It aims at helping students develop and practise their study skills in English through a learn-by-doing approach. Students will be actively involved in carrying out tasks associated with academic assignments, such as listening and taking notes, writing a paper from notes, skimming and scanning, reading and writing a summary, making a presentation, verbalising data, commenting on graphs, etc. CE students are strongly advised to follow this course even if they have not completed their enrollment.

**Study Skills in English:** September 2014 at the University Language Centre (Settore Abilità Linguistiche, Parco Area delle Scienze, 45/a, Campus Universitario, 43124 Parma - Italy)

The exact timetable of the next course will be published here:

[www.cla.unipr.it](http://www.cla.unipr.it) > English Study Skills Course

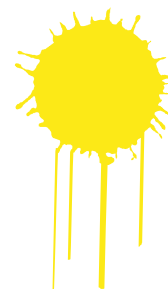
For further information:

Phone +39 0521 905578, Fax +39 0521 905580, e-mail: [c.ling@unipr.it](mailto:c.ling@unipr.it)

To register for the course please send an e-mail to [alessia.bambini@unipr.it](mailto:alessia.bambini@unipr.it) and cc [marina.corradini@unipr.it](mailto:marina.corradini@unipr.it)



Fiber-optic and laser lab



Multimedia classroom







## DEPARTMENT OF INFORMATION ENGINEERING

### Department Director:

Prof. Stefano Selleri

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e-mail: [direzione.informazione@unipr.it](mailto:direzione.informazione@unipr.it)

Phone: +39 0521 905800

### Administration Office:

Student Registry Office, Engineering section  
(Segreteria studenti)

Address:

Parco Area delle Scienze, 23/A 43124 Parma - Italy

e-mail: [seging@unipr.it](mailto:seging@unipr.it)

Phone: +39 0521 905111 / 5176

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Opening hours:

Mon, Tue, Wed, Fri: 9 a.m. - 12 (noon)

Thu: 9 a.m. - 1 p.m.

<http://en.unipr.it>



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