



UNIVERSITÀ DEGLI STUDI DI PARMA

ADVANCED DEGREE IN COMMUNICATION ENGINEERING

ACADEMIC YEAR 2012-2013

INTRODUCTION

The University of Parma is pleased to announce a new Advanced Degree in Communication Engineering (CE), equivalent to a US Master Degree, which will become effective in the academic year 2012-2013. CE is the second course at the University of Parma, Italy, to be taught and examined entirely 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 will be 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 communications 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 Advanced 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 will bring many benefits. All students, both Italian and foreign, will gain advantages in terms of employment. Today, advanced knowledge on ICT needs to be complemented by language skills for access to many professions, and an advanced knowledge of English will 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 intake from outside its Region, but the number of foreign students may increase significantly. Our hope is that CE can facilitate academic contacts overseas and give all our students more opportunities in the wider world.

Prof. Giorgio Picchi
Chairman of the CE Programme Committee

ADVANCED DEGREE COURSE IN COMMUNICATION ENGINEERING

CE is a second-level degree according to the European categorization (LM 27 – Telecommunication Engineering), taught and examined in English, offered by the Faculty of Engineering of the University of Parma. It is a two-year course which enables successful students to be awarded the Advanced 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.

Course, 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
Total	120	

Minor changes may be introduced

The final examination consists of a public defence of a written 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
Phone: +39 0521 905762

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

Davide Aimi, Student Registry office (Segreteria Studenti), Faculty of Engineering
e-mail: davide.aimi@unipr.it, seging@unipr.it
Phone: +39 0521 905112 – 905022

ENTRANCE REQUIREMENTS AND DEADLINES ACADEMIC YEAR 2012-2013

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 (Segreteria Studenti) of the Faculty of Engineering 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 and Mathematics. They should be submitted to the Student Registry office (Segreteria Studenti) for assessment by the Faculty 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” (Declaration of Value). This is a declaration of the value in the home country of an overseas degree certificate, specifying course type and duration etc.; it is issued for the purposes of possible recognition of the qualification in Italy solely by an Italian embassy or consulate overseas.

All documents submitted must be original and where necessary 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” (Declaration of Value).

Applications should be submitted to the Student Registry Office (Segreteria Studenti) for assessment by the Faculty Admission Panel.

Non EU citizens

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 UNIVERSITY, ADVANCED DEGREE (Università di Parma - Laurea Magistrale in Communication Engineering). Pre-enrolment applications **for the 2012-2013 academic year can be submitted from April 2012 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-enrolment application form:

- Degree certificate
- List of module/course examinations comprising the degree
- Syllabus or programme of each module/course
- Passport
- Two passport photos

All documents submitted 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” (Declaration of Value)**. This is a declaration of the value in the home country of an overseas degree certificate; specifying course type and duration etc., it is issued for the purposes of possible recognition of the qualification in Italy solely by an Italian Embassy or Consulate overseas.

The Embassy or Consulate forwards applications for assessment by the Faculty 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**.

On arrival in Italy, students must register at the Student Registry Office (Segreteria Studenti) of the Faculty of Engineering, University of Parma, and must apply for a residence permit at an authorized Italian postal office within 8 days.

WHEN AND HOW TO ENROL

Completed enrolment forms can be submitted to the Student Registry Office (Segreteria Studenti) of the Faculty of Engineering **from July 2012 to December 2012**.
(Please check the web site of the University for the exact dates)

Applications can be made either in person to the Student Registry Office (Segreteria Studenti) or online (Italian and EU students only) at <http://www.unipr.it/immatricolazioni>. Please check the University website 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 enrolment.

Study Skills in English: 10-14 September 2012 at the Settore Abilità Linguistiche,
Parco Area delle Scienze, 45/a (Campus), 43124 Parma - Italy

Monday 11-13 14-18

From Tuesday to Friday 9-13 14-16

Tel. +39 0521 905578, Fax +39 0521 905580, e-mail: c.ling@unipr.it

To register for the course to send a mail to segrstec@unipr.it

FACULTY OF ENGINEERING

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Administration Office:

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Opening hours

Monday 9 h - 12 h
Tuesday 9 h - 12 h
Wednesday 9 h - 12 h
Thursday 9 h - 13 h
Friday 9 h - 12 h