



EMIMEO

Erasmus Master on Innovative
Microwave Electronics and
Optics



Co-funded by the
Erasmus+ Programme
of the European Union



Project Summary

The EMIMEO Masters offers a programme centred on microwave engineering and photonic technologies which **ensures that students acquire advanced and cross-disciplinary expertise**. In a context of increasing demand of research and industrial applications around these topics, EMIMEO Masters is a concrete solution to improve the number of highly qualified students for feeding the research labs and for meeting the demand of industry. EMIMEO is a thoroughly integrated programme with a **jointly developed curriculum**. Areas covered range from the fundamentals of microwave electronics and photonics to their implementations with new technologies in wired and wireless communications, moving from components to system architectures for communication systems and networks.

The **project partners** are: The University of Limoges (UNILIM, France), the University of Brescia (UNIBS, Italy), Aston University (UK), and the University of the Basque Country (UPV/EHU, Spain). The associated partner University of Cluj-Napoca (Romania) will also contribute to the learning programme. A panel of 15 industrial Associated Partners, including SMEs, large companies and associations, will support the EMIMEO programme through concrete contributions and will constitute an effective network for Master's theses with the prospect for future career development.

The Master study programme is divided into **four semesters of 30 ECTS each**. The first three semesters are based on lectures, lab exercises and laboratory sessions, while the last one is based on independent work related to the Master thesis.

The **first-year programme** combines the contributions of modules of Masters of UNILIM and of UNIBS: with a first placement period in France and then in Italy the mobility scheme offers a synergic programme of fundamentals in analogue and nonlinear electronics and photonics.

Students in the **second year** will move to one of the four partner institutions intensifying their study around one of the four paths and the associated and dedicated lab equipment for the third semester (S3): Active Management of Power Waves (AMPW) at UNILIM, Remote Sensing (RS) at UNIBS, Communication Systems and Networking (CSN) at ASTON, Instrumentation and Control Systems (ICS) at UPV/EHU. The mobility at this point can widen the student's choice with respect to the offer of each single university. Finally, the Master thesis (fourth semester) can be carried out in any of the partner institutions or associate partners, under the guidance of a professor from one of the partner universities.

English will be the official language of the Masters programme.

In order to be eligible for admission, the applicant should have been gained within a Bachelor degree programme (180 ECTS at time of application) in Electrical Engineering, Electronics, Telecommunication Engineering, Computer Science or Physics. Admission criteria are based on applicant personal records, demonstrated potential, motivation and language skills.



Erasmus Mundus Joint Master Degree

What is Erasmus Mundus ?

An Erasmus Mundus Joint Master Degree (EMJMD) is a co-operation and mobility programme in the field of higher education

The programme is funded by the European Commission under the Erasmus+ program. The international study programme is jointly delivered by an international consortium of Higher Education Institutions (HEIs) from different countries. Other partners with specific expertise and interest in the study programme could participate in the implementation of the Erasmus Mundus projects.

An EMJMD promotes talent, innovation and internationalisation in the HEIs

Higher Education Institutions become a centre of excellence in learning and promoting multicultural dialogue through collaboration with young talent from all around the world as well as examples of best practices for HEIs in third countries.

An EMJMD promotes an integrated approach of the educational programmes

The integrated approach of the study programme shall boost the attractiveness of the European Higher Education Area (EHEA) and support the EU's external action in the field of higher education. The courses must be "integrated" in order to be eligible under Erasmus Mundus, which means that they must foresee a study period in at least two of the three universities and that it must lead to the award of a recognised double, multiple or joint diploma.

An EMJMD enhances HEIs visibility and employability

The selected EMJMDs will receive high levels of funding for four intakes of students to allow them to increase their worldwide visibility and reinforce their sustainability prospects, as well as it will improve the level of competences and skills of Master graduates and their employability.



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