



Sciences Technologies Santé

Bachelor's Degree in Engineering Sciences Mention: Physics

EOLES

Electronics & Optics e-Learning for Embedded Systems

"Come join us and be part of an innovative English spoken and international online training in the field of electronics and optics on the subject of embedded systems, a growing sector already very active. This training is open to initial, ongoing and permanent students, and is based on an innovative remote laboratory enabling students to carry out practical works on real equipment from anywhere with a good internet connection."

This Bachelor's Degree is a distance training course. The physical presence of students in the Faculty of Science of the University of Limoges is not a requirement.

Objectives

Acquired skills

The EOLES Bachelor's Degree is a general training for students (having already a L2 level corresponding to 120 ECTS) willing to move professionally towards the fields of electronics and optics.

The course, entirely taught in English, allows students to improve substantially their English skills, nowadays an essential tool in the field of science.

Lastly, distance training using «eLearning 2.0» synchronous or asynchronous tools allows students to be part of a «virtual learning community» and so strengthen (among other things) their teamwork capacity.

Acquired knowledges

The Bachelor's Degree EOLES is a 3rd year undergraduate course, focused on the acquisition of general knowledge in Electronics (Analog and Digital Electronics, Power Electronics), in Electromagnetism, in Optics, in Computer Science and in Mathematics for future engineers.

Students will also enhance their knowledge of Signal Processing and Instrumentation. These disciplines will be addressed in terms of embedded systems, a growing sector already very active and highly valued on the job market.

Program

1/ General skills:

- distance learning tools,
- collaborative and communication cutting-edge tools,
- scientific web tools.

2/ General Physics Tools:

This topic discusses general aspects of Engineering Sciences. The main goal is to strengthen the basic knowledge in mathematics, signal processing or instrumentation.

3/ Physics for embedded systems:

This chapter deals with general topics addressed from the perspective of embedded systems. In particular, it concerns electronics (analog, digital or power), optics, electromagnetism or computer science. Please, note that upgrade weeks in electronics and optics are available at the beginning of the year.



Formation 100% en ligne

Student profile

Any student with a 2 year Bachelor level in the field of physics (Electronics, Automatic, Optical, Telecommunications) having completed 120 ECTS credits.

Registration Procedures

In 3 steps

- Step 1: fill the online application (see the link above: <http://campus-cvtic.unilim.fr:8080/candidature/formulaire/80>)

Faculté Sciences et Techniques
Scolarité

123 avenue Albert Thomas,
87060 Limoges - France
Mail: lsciences@unilim.fr

- Step 2: the pedagogical committee selects the accepted students

- Step 3: if your application is accepted, you will receive further instructions in order to make effective your administrative registration.

Contact name

Guillaume Andrieu
Mail: guillaume.andrieu@unilim.fr
Tel. + 33 555 457 739

Training location

E-learning training (PC, webcam, headset and high-speed Internet access are mandatory).

Training costs

The total cost of the training consists in both registration and training fees.

Training fees (in euros)

FI : 0
FC: 2,000
FP: 1,000

In case of doubt about your training regime, please click on this link (in French) (http://www.cvtic.unilim.fr/pratique/regimes_formation).

Registration fees, see the prices here

<http://www.cvtic.unilim.fr/inscriptions/tarifs>

Web

Limoges University:
www.unilim.fr
Faculty of Science and Technology:
www.sciences.unilim.fr

Further studies

Access (in case of successful application) to any type of Master in Telecommunications, Electronics and Photonics including the ARTICC (e-learning) or the iXeo (face-to-face) Master degrees of the University of Limoges.

International Partnership

The EOLES 3rd year Bachelor's Degree is a double degree in partnership with international universities in the Maghreb area. Students enrolled (see «How to Apply») in 2 universities will graduate from each university if they pass successfully the exams. In this case, they will receive a certificate indicating the bilateral nature of this degree.

More information on the site www.l3-eoles.net.

Teaching units

Teaching units	Credits	Semester	Option
UP 121 – Update in Optics 1	-	1	
UP 122 – Update in Optics 2	-	1	
UP 141 – Update in Electronics	-	1	
TU01 – Introduction to Virtual Learning environment	3	1	
TU02 – Mathematics and analysis tools for Physics 1	4		
TU03 – Communication techniques in English	3		YES
TU04 – Analog electronics for embedded systems	4		
TU05 – Digital electronics for embedded systems	4		
TU06 – Wave and propagation for embedded systems	6		
TU07 – Power electronics and embedded systems	6		
TU08 – Business Communication Techniques in English	3	2	YES
TU09 – Mathematics and Analysis tools for Physics 2	3	2	
TU10 – Signal Processing	5	2	
TU11 – Instrumentation	4	2	
TU12 – Optics for embedded systems	6	2	
TU13 – Embedded systems	6	2	
TU14 – Introduction to Entrepreneurship & Business Planning	3	2	YES