

## 15.LU: Luxembourg

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Information summarized from <http://wwwen.uni.lu>

### 15.1. General information



Since August 12<sup>th</sup> 2003, the university of Luxembourg offers Bachelor and Master Degrees, and Doctorates in line with the Bologna agreement, as well as other specific courses. Research focuses on certain priorities and is grouped in research units (fig.15.1)

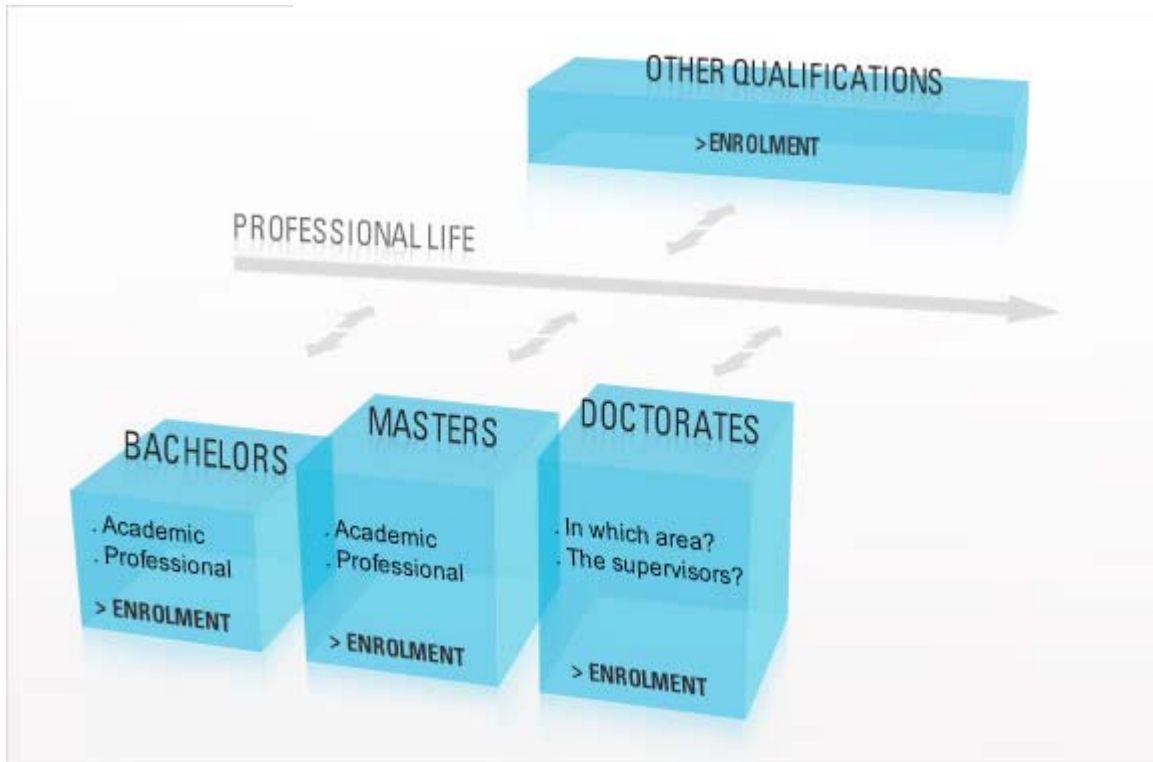


Figure 15.1: Higher Education System in Luxembourg since 2003 (source

<http://wwwen.uni.lu/formations>)

Candidates wishing to enrol for a Masters degree or doctorate must ask for the recognition of their university degree by sending a certified copy of their university diploma to:

Department of Culture, Secondary Education and Research  
Grants for study or research abroad  
20, Mont ee de la P etrusse  
L-2273 LUXEMBOURG

## 15.2. Languages

The University's languages are: French, English, and German.

Multilingualism is a key element in the strategic development of the UL as this can provide the University with a unique asset of being able to offer a bilingual diploma, which is a justifiable and undeniable niche opportunity based on the multilingual context enjoyed by the UL: Luxembourg is bordered by three other countries, right in the heart of Europe and accommodates many European institutions. Multilingualism appears to be an essential element that is indeed central to the international reputation of the UL.

It is becoming essential to place the students at the core of the process and to equip them with an additional asset with which to enter the labour market; something which adds value and can be directly transferred to their qualification. Competence in essential languages on the international market will give them knowledge, flexibility and an open-minded attitude which will distinguish them from candidates with monolingual qualifications.

1. All degree courses must be bilingual and the secondary language should represent at least 25% of the course, except in cases where the language determines the content of the discipline.
2. Masters: the majority of masters courses must be bilingual (the secondary language should represent at least 25% of the course) and a minimum of 20% will be in English, except in cases where the language determines the content of the course.
3. Each of the three languages must at least be evident in 20% of the courses.
4. To have students, academic staff engaged in teaching and research and administrative staff who are trilingual, if possible.
  - o For students, competence in the languages required for the course is sufficient.
  - o For academic staff engaged in teaching and research and administrative staff, most must be competent in at least two and ideally three of the languages used within the University (French, English, and German).
  - o Administrative staff in direct contact with students must be competent in at least three and ideally four of the following languages: French, English, German, and Luxembourgish.

## 15.3. Degrees

In Luxembourg, the Bachelor programme consists of 6 semesters, at least one of them **must** be made in another country. Two types exist: “academics bachelors” are preparing towards a master degree, while “professional bachelors” directly prepare to professional life. A master degree can be obtained after 4 further semesters. Two types also exist: “academics masters” are preparing towards doctoral studies, while “professional masters” directly prepare to professional life

The EIE topics are included in the Faculty of Science, Technology and Communication (FSTC). In our fields, the Faculty offers three bachelor and two master teaching programmes:

- Bachelor in Science and Engineering (Academic Bachelor),
- Bachelor in Computer Science (Professional Bachelor)
- Bachelor in Engineering (Professional Bachelor)

- Master in Engineering Science (Academic Master)
- Master in Information and Computer Sciences (Academic Master)

The University of Luxembourg offers students the opportunity to pursue doctoral studies; the academic staff authorized to manage research supervise PhD students. These can be managed either autonomously by the University of Luxembourg or in under a joint supervision with a co-supervisor who is also authorized to manage research in its institution. Among the areas of research were the university can confer the title of “doctor” , we find for our fields:

- engineering,
- informatics,
- physics

## **15.4 References**

The information given in this monograph is based on the following documents and web links:

- liste formations officielles pour année académique 2008\_9.pdf
- Procédure de soutenance de doctorat à l’Université du Luxembourg
- <http://wwwen.uni.lu>



## **15.5. Doctoral Studies in Luxembourg**

### **15.5.1. Supervision**

In an initial phase, the University of Luxembourg implemented a strict policy for granting authorization for the management of research to its academic staff, thus enabling them to establish who, at the University of Luxembourg, has the capacity to supervise a research project or a doctoral thesis.

In a second phase, the faculties proceeded to set up and organise research units (RU). A RU is made up of one or more laboratories, and its objective is to use and share a common team with a high level of expertise, research and scientific activity so as to foster and encourage administration and investment synergies. Doctorate students are supervised by the academic staff of the RU having the authorization for the management of research. The RUs develop work around the research projects.

### ***PhD student- Registration procedure***

#### **Eligibility for Admission:**

You can enrol for the Ph.D. degree, without nationality requirement, if you hold a second-level university diploma or foreign diplomas and degrees entered in the register of titles at the Ministry of Culture, Higher Education and Research (valid only for European candidates or any candidate residing in the Grand Duchy of Luxembourg).

#### **How to be a doctoral candidate at the University of Luxembourg**

Two possibilities:

##### **Case 1 : Assistant**

1. Reply to a recruitment advertisement (mentioning the advert reference)
2. Once the candidate has been selected, the dissertation director sends the following documents to SEVE: "request to accept a doctoral candidate/ demande d'acceptation d'un étudiant doctorant" and "task description for an assistant in the non-professorial teaching staff/ configuration de tâche pour assistant du corps intermédiaire."
3. The candidate completes the registration documents and sends them to SEVE
4. The Rector confirms the recruitment of the candidate in writing.
5. Before signing the contract, the future assistant proceeds to the definitive registration with SEVE
6. The assistant's contract is signed at the Human Resources Department
7. The dissertation supervision committee must be communicated to SEVE within 2 months after registration

##### **Case 2: Scholarship holder (BFR\*) or doctoral candidate working on a project**

1. Choose a dissertation director

2. The dissertation director consents by sending the “request to accept a doctoral candidate/ demande d’acceptation d’un étudiant doctorant” to SEVE.
3. The candidate completes the registration documents and sends them to SEVE
4. The Rector confirms the recruitment of the candidate in writing.
5. The dissertation supervision committee must be communicated to SEVE within 2 months after registration.

Jointly supervised dissertations are possible in both cases. Nevertheless, the candidate may and indeed must register without necessarily knowing the partner university.

The registration is available online at all times. You can complete it and file it with SEVE accompanied by the required documents .

If you wish to reside in Luxembourg, you must obtain a “ residency permit ”

\*BFR: for details on how to apply, please go to [www.recherche.lu](http://www.recherche.lu) . All applications for Research Training Scholarships must **necessarily** be filed with the Research Administration. **Contact** : Nathalie.klopfenstein@uni.lu

## 15.6. Questionnaire

### *LUXEMBOURG*

#### 3 – ACTIVITIES DURING DOCTORAL STUDIES

##### 3.1- SUPERVISION OF DOCTORAL STUDIES

<b>3.1.1</b>	Are the doctoral studies supervised by a Scientific Board/supervisor? If no, please proceed to 3.1.5.	Y
<b>3.1.2</b>	<b>How many members are in the Scientific Board?</b>	3
<b>3.1.3</b>	How are the members of the Scientific Board chosen?	
<b>3.1.3.1</b>	Elected by the Faculty, Department?	Y
<b>3.1.3.2</b>	Chosen by the student?	N
<b>3.1.3.3</b>	Chosen in another way? Please specify:	N
<b>3.1.4</b>	Which are the main tasks of the Scientific Board/ Supervisor?	
<b>3.1.4.1</b>	General management of the doctoral studies.	Y
<b>3.1.4.2</b>	Deciding the layout of the course, advising the students on their coursework.	N
<b>3.1.4.4</b>	Assigning the thesis subject.	N
<b>3.1.4.5</b>	Other. Please specify:	
<b>3.1.5</b>	Does the student need a personal supervisor during her/his studies?	Y
<b>3.1.5.1</b>	Does the same person supervise her/his thesis work?	Y
<b>3.1.6</b>	Must the subject of the doctoral thesis be an active research area in the department?	Y

3.1- SUPERVISION OF DOCTORAL STUDIES

3.1.7 The doctoral thesis subject is normally assigned:

3.1.7.1 At the beginning of the doctoral studies? Y

3.1.7.2 After a specified period of coursework? N

3.1.7.3 Other. Please specify:

3.1.8 The thesis supervisor of a doctoral student can be:

3.1.8.1 Any professor or lecturer in the department? Y

3.1.8.2 Any researcher in the department? N

3.1.8.2.1 In this case, is there a need for a second supervisor who is a professor or lecturer in the department?

3.1.8.3 Any researcher in another institution? Y/N

3.1.8.3.1 In the latter case, is there a need for an internal supervisor? Y/N

3.1.8.4 Other methods. Please specify: Y

**One of the supervisors should be a Full Professor or Associate Professor with Habilitation**

3.1.9 The thesis subject is assigned by:

3.1.9.1 Agreement between the student and the proposed supervisor? Y

3.1.9.2 Other methods. Please specify: Y/N

Imposed subject.

3.2- COURSE WORK

3.2.1 Do the students have to take coursework during their doctoral degree preparation? If no, please proceed to 3.3. N

3.2.2 **Extension and assessment.**

3.2.2.1	What is the number of contact hours spent in coursework in each year?	Year 1	Year 2	Year 3	Year 4
		hrs	hrs	hrs	hrs

3.2- COURSE WORK

**3.2.2.2 In which form is this coursework offered?**

- As specialist graduate course units.
- As course units taken from the undergraduate programme.
- Other. Please specify.

Two specialist graduate courses and a professional course (English for Science, Meetings with industrials).

**3.2.2.3** Is the coursework assessed by examinations?  
If not, please give details:

**3.2.3 Credit system**

**3.2.3.1** Is the coursework in your institution described by a credit system?

**3.2.3.2** Is it the ECTS system?

If not, what is the relationship with ECTS?

**3.2.3.3** How many credits are allocated to coursework? \_\_\_ credits

**3.2.4 Monitoring**

**3.2.4.1** Do you monitor the performance of the doctoral student taking coursework?

**3.2.4.2 What regulations apply in case of failure in one or more course units?**

- Retake the exam.
- Take a different course unit.

3.3- PRESENTATION OF WORK RESULTS:

- |              |                               |                |
|--------------|-------------------------------|----------------|
| <b>3.3.1</b> | In the department.            | Y              |
| <b>3.3.2</b> | At national conferences.      | Y              |
| <b>3.3.3</b> | At international conferences. | Y <sup>1</sup> |

<sup>1</sup>This point should be achieved before the PhD can be passed.

3.4- CONTRIBUTION TO TEACHING:

- |              |  |                |
|--------------|--|----------------|
| <b>3.4.1</b> | Supervision of undergraduate laboratory. | Y <sup>2</sup> |
| <b>3.4.2</b> | Teaching undergraduate courses.          | Y <sup>2</sup> |

<sup>2</sup>It depends but generally Y.



**4 - AWARDING OF DOCTORAL DEGREE**

4.1- SUBMISSION OF DOCTORAL THESIS

4.1.1	Which language is normally used for the thesis?	Français, English or Deutsch
4.1.2	Are alternative languages used for the thesis? Please Specify: <b>It could be in some specific cases (international juries, bi-national theses).</b>	N
4.1.3	Which language is normally used for the oral presentation and/or examination?	Français, English or Deutsch
4.1.4	Are alternative languages used in the oral presentation and examination? Please Specify: <b>It could be in some specific cases (international juries, bi-national theses).</b>	N
4.1.5	Are credits allocated to the doctoral thesis?	N
4.1.6	<b>The doctoral thesis is:</b>	
4.1.6.1	A previously unpublished substantial written report.	Y
4.1.6.2	A collection of individual or co-authored scientific papers with an introduction and/or commentary.	Y
4.1.6.3	Other. Please specify:	

4.2- THESIS EXAMINATION AND DEGREE AWARDING

4.2.1	Is there an oral presentation of the thesis work or an open audience as part of the evaluation procedure?	Y
4.2.2	Composition of the thesis examination board. Please, give the typical number of:	
4.2.2.1	Internal examiners.	2 or 3
4.2.2.2	External examiners.	3 or 2
4.2.2.3	TOTAL.	5

## 4.2- THESIS EXAMINATION AND DEGREE AWARDING

<b>4.2.3</b>	How is the examination board chosen?	
<b>4.2.3.1</b>	By the supervisor.	N
<b>4.2.3.2</b>	By the scientific committee of the institution.	N
<b>4.2.3.3</b>	By the rector or equivalent.	Y
<b>4.2.3.4</b>	By the national ministry.	N
<b>4.2.3.5</b>	Other. Please specify:	
<b>4.2.4</b>	Do the examiners base their evaluation mark on:	
<b>4.2.4.1</b>	Reading the thesis.	Y
<b>4.2.4.2</b>	The oral presentation of the thesis work.	Y
<b>4.2.4.3</b>	Both.	Y
<b>4.2.4.4</b>	What is the typical duration of the oral part of the thesis examination, if applicable?	
<b>4.2.4.5</b>	Is there an upper limit to the duration of the thesis examination?	N
	.	
<b>4.2.5</b>	Is the oral part of the examination taken behind closed doors?	N
	Normally not, sometimes YES due to the confidentiality of some works (need specific authorization).	

4.2- THESIS EXAMINATION AND DEGREE AWARDING

4.2.6 What happens if the student fails?

4.2.6.1 May not resubmit for doctorate.

4.2.6.2 May resubmit revised thesis.

Y

4.2.6.3 May do further work as specified by examination board.

Y

4.2.6.4 If the thesis is to be re-submitted is there a time limit for this to occur?  
Please specify:

Y

<sup>5</sup> If he is allowed to proceed his oral session He never fails.

<sup>6</sup> Only for the manuscript.

<sup>7</sup> If the authorization of presentation of the thesis has been given by the " pre-evaluation, on the written document.

<sup>8</sup> This is very, very rare.

4.2.7 Is there a grading system for the doctoral degree based on the quality of the work?

Y

## LU: Luxembourg

<b>City</b>	<b>Name of the institution (national language)</b>	<b>Name of the institution (English)</b>	<b>http address</b>
Luxembourg	Institut Supérieur de Technologie de Luxembourg/ Fachhochschule Luxembourg	Luxembourg university of applied sciences	<a href="http://www.ist.lu">http://www.ist.lu</a>