

## Concrete and Composite Structures

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## Competitive Promotion 2019

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### Annex 3: Teaching portfolio

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## Contents

Competitive Promotion 2019 .....	1
Annex 3: Teaching portfolio .....	1
1 Award of Senior Fellow from Higher Education Academy.....	3
2 Teaching in brief: Teaching load and responsibilities .....	6
2.1 In general.....	6
2.2 Course director of the Professional Bachelor in Engineering (“Bachelor professionnel en ingénierie”) (BING).....	6
2.3 Elaboration of the Professional Bachelor in Engineering (“Bachelor professionnel en ingénierie”) (BING) in cooperation with colleagues .....	7
2.4 Elaboration of the Academic Bachelor (“Bachelor académique en ingénierie”) (BASl) in cooperation with colleagues.....	7
2.5 Elaboration of the Master in Sustainable Development (“Master en développement durable”) (MDD) in collaboration with the University of Liège (Belgium).....	7
2.6 Coordinator of the new Master in Civil Engineering (MSCE) since 2016 .....	8

## Annex 3: Teaching portfolio

### 1 Award of Senior Fellow from Higher Education Academy

In 2015, I was awarded **SENIOR FELLOW** of the **Higher Education Academy (HEA)**, a British professional institution promoting excellence in higher education. It is jointly owned by Universities UK and GuildHE and publicly funded. The HEA advocates evidence-based teaching methods and awards fellowships as a method of professional recognition for university teachers. The **Higher Education Academy** is responsible for the UK Professional Standards Framework for higher education practitioners. The HEA operates a professional recognition scheme to encourage excellence in teaching and to provide academics with a portable qualification transferable between institutions. They award four grades: AFHEA – **Associate Fellow** of the Higher Education Academy; FHEA – **Fellow** of the Higher Education Academy; SFHEA – **Senior Fellow** of the Higher Education Academy; PFHEA – **Principal Fellow** of the Higher Education Academy. The **Associate Fellow** grade represents the minimum level of competence expected of any university teacher, with the **Fellow** grade representing the level normally required in an established academic post. These grades can be awarded based on an assessed portfolio (containing a candidate's statement and supporting references) or on completion of an accredited course such as a PGCHE or PGCAP. The higher grades of **Senior Fellow** and **Principal Fellow** represent **significant leadership** in the promotion of teaching excellence, and are only awarded based on an assessed portfolio. I am the only professor who has been awarded **Senior Fellow so far** in Luxembourg (whereas until now the title of **Principal Fellow** has not been awarded at all in Luxembourg).



## Certificate

This is to certify that

**Danièle Waldmann-Diederich**

has achieved the status of

**Senior Fellow**

of The Higher Education Academy

in recognition of attainment against the

**UK Professional Standards Framework** for  
teaching and learning support in higher education.

Recognition reference:

**PR090149**

Date of recognition

**28/09/2015**



**Professor Stephanie Marshall**

Chief Executive

The Higher Education Academy



**Professor Rama Thirunamachandran**

Chairman of the Board of Directors

The Higher Education Academy Board

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**This recognition is based on the following achievements:**

In 2003, I joined the newly created University of Luxembourg (UL) – a multilingual and international higher education institution – as associate professor. The new law prescribed that all former existing institutions of Higher Education in Luxembourg would be merged within the new university and all existing post-secondary qualification degrees would be transformed into bachelor and master degrees; this included specialisations in applied mechanical, electrical and civil engineering – my own area of expertise. At that time, almost no rules or regulations existed. When I started, as one of the few pioneering colleagues I had the opportunity – and the luck – to determine and to design the programmes and study rules within the limits of the provisions of the new law creating the UL. This experience allowed me to help shape engineering education and teaching within our institution, bringing in and building upon my previous experience in civil engineering education as well as my time in industry.

## 2 Teaching in brief: Teaching load and responsibilities

### 2.1 In general

- Over **20 years** of teaching experience with an average load of **360 teaching units/year** between 2003 and 2018.
- Very good contacts with students.
- Ability to teach in four **languages (English, German, French and Luxembourgish)** of the university.
- Supervision of **four to five** bachelor and master theses on average per year.
- Organisation **every year** of **one excursion** to construction sites for about 30 students and on average **one conference** for the students within the yearly **Construction Forum** (“Bauforum”) seminars aimed at both industry experts and students.
- Member of the group **“Better Teaching”**, a group dedicated to quality in teaching, at the Faculty of Science, Technology and Communication (FSTC).
- Member of the group **“Better Teaching”** of the vice-rector of Academic Affairs of UL, a group which helped elaborate e.g. a “charte pédagogique” and discusses how to enhance the quality in teaching, at my Faculty of Science, Technology and Communication (FSTC).
- **Elaboration of three successful curricula**, in collaboration with colleagues, with **increasing number of students** participating (Fig. 1).
- **Modification of the curriculum** of the **Master in Civil Engineering (MSCE)**.
- Use of contacts to find **industrial internships/practicals for students**, sometimes resulting in work contracts.
- Member of the **Round Table for Education in the domain of construction** of the **Association of Architects and Engineers OAI** (“Ordre des Architectes et Ingénieurs”) in Luxembourg.

### 2.2 Course director of the Professional Bachelor in Engineering (“Bachelor professionnel en ingénierie”) (BING)

**Course director** of the Professional Bachelor in Engineering (BING) (“**Bachelor professionnel en ingénierie**”) with about **300 students** and **8 different study programs** in the domains of Civil Engineering, Mechanical Engineering, Electrical Engineering, and Energy and Environment from 2011 to 2016 with the following **responsibilities**:

- Management and guidance of the 47 adjunct senior lecturers;
- Organisation and accomplishment of jury sessions;
- Management of the mobility period of students and dispensations;
- Organisation of regular meetings of the **“Commission consultative”** with members coming from Luxembourgish industry and administration;
- Member of the Commission for validation of prior experience (“Commission de validation des acquis”);
- Budget planning;
- Accompaniment of an **employability study** executed by the external consultancy DELOITTE with very good results: the employability of the student was judged **excellent**, all graduates found jobs without problems. The **technical education** was judged by the employers as **very good**. One of the main problems identified was the fact that we did not produce enough graduates to cover the existing **job market demand**;
- Organisation of **outreach and student recruiting campaigns** such as local interventions at different schools of Luxembourg and the Greater Region.

## 2.3 Elaboration of the Professional Bachelor in Engineering (“Bachelor professionnel en ingénierie”) (BING) in cooperation with colleagues

- Elaboration of the **curriculum of the two Civil Engineering study programs GCC and GCU** out of the pre-existing structures of the former institute IST (Institut Supérieur de Technologie)
- Establishment of **cooperation agreements** with different universities for the **mobility** of the students.
- **Study program director** for the domains Civil Engineering Construction (GCC) and Civil Engineering Urban Planning (GCU) from 2005 to 2016.
- Responsible for the **tri-national Construction Management program** in Civil Engineering from the past **2006-2016**.

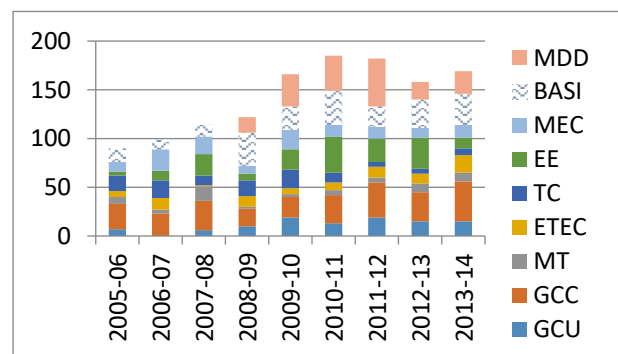


Figure 1. Success of our curricula as shown by 1<sup>st</sup> semester student number evolution from 2005 to 2014.

## 2.4 Elaboration of the Academic Bachelor (“Bachelor académique en ingénierie”) (BASI) in cooperation with colleagues

- Elaboration of the **curriculum**.
- Elaboration of a **cooperation agreement** with the **University of Darmstadt (Germany)** and the **University of Liège (Belgium)** for the mobility of the students.

## 2.5 Elaboration of the Master in Sustainable Development (“Master en développement durable”) (MDD) in collaboration with the University of Liège (Belgium)

- Responsible at the University of Luxembourg for the project **funded by INTERREG IV A** for the elaboration of the master.
- Elaboration of the **curriculum** in collaboration with colleagues.

## 2.6 Coordinator of the new Master in Civil Engineering (MSCE) since 2016

- Restructuring of the curriculum;
- Elaboration of advertisement and recruitment concept for postgraduate students out over the whole world. For the academic year 2018-2019: out of 300 applications, 25 students have been selected to start in the first semester;
- Management and guidance of adjunct senior lecturers;
- Organisation and accomplishment of jury sessions;
- Elaboration of a **common mobility concept** with the **University of the Lorraine** (France) and the **University of Liège** (Belgium) in order to exchange students. This exchange of students will permit to **recruit**, especially in the first two semesters, supplementary **students from the partner universities** which will help to **establish** this new curriculum;
- Management of the mobility period of students and dispensations;
- Organisation of regular meetings of the “**Commission consultative**” with members coming from Luxembourgish industry and administration;
- Member of the Commission for validation of prior experience (“Commission de validation des acquis”);
- Budget planning.