

## Part-time academic vacancy in the field of Building Acoustics and Lighting

**Start date:** 1 September 2021

### Description of the course load:

A **part-time (5%)** indivisible position in the field of **Building Acoustics and Lighting** within the Architecture, Geology, Environment and Construction Department (ArGEnCo). This post includes teaching, research and services to the Community.

### Work environment

The incumbent will work within the Department of Architecture, Geology, Environment and Construction (ArGEnCo) in the Faculty of Applied Sciences.

The ArGEnCo department and the associated Urban and Environmental Engineering Research Unit provide the ideal framework for developing a multidisciplinary approach to teaching and research, with an international angle, on all social issues related to civil engineering and the management of the natural and built environment.

A detailed description of the department and its activities can be found at [www.uee.uliege.be](http://www.uee.uliege.be).

### Teaching activities:

The main objective of this post is to contribute to training architecture and engineering students in the field of acoustics and construction lighting through the following course:

*Building Acoustics and Lighting*. Compulsory course in the Master's programme in civil engineering and architecture (30h Th., 24h Pr., 16h Proj., Block 1 - 5 credits).

Teaching will be heavily inspired by the post-holder's professional practice and experience.

For the "acoustics" part of this course, the following aspects will be considered in particular:

- basic notions of acoustics (acoustics of enclosed spaces, phenomena and modes of propagation, evaluation and measurement of sound levels, contributions of several sound sources);
- basic notions in psychoacoustics (indicators of noise disturbance, equivalent noise levels, calculation and measurement of reverberation times, dimensioning of the absorption level, etc.);
- acoustic insulation (airborne and impact noise): principles and standards; materials, techniques and their application on site (housing and offices);
- codes of good practice and standards relating to acoustics (traditional construction and wood);
- design/sizing methods for environments with specific acoustic qualities, with a specific focus on the acoustics of large rooms;
- innovative approaches to identifying and resolving acoustic problems in design/renovation (acoustic correction).

For the “lighting” part of this course, the following aspects will be considered in particular:

- basic notions of building lighting (natural / artificial);
- notions of outdoor lighting (dimensioning, light pollution, smart lighting, etc.);
- basic notions in photometry (quantities, fundamental laws, lighting calculations);
- codes of good practice and standards (e.g., NBN EN 17037) relating to lighting technology; concepts of comfort;
- technical inventory of available light sources and their applications;
- methods of design/sizing of an indoor/outdoor lighting installations;
- evaluation of the qualitative and quantitative impact of natural/artificial light in indoor spaces, according to its dimensions, position of light sources and glazed surfaces; impact on spatial and light perceptions;
- innovative approaches to identifying and solving lighting problems in design/renovation.

The successful applicant will also be invited to contribute towards supervising dissertations related to their specialist area.

#### Research activities and services to the Community:

Depending on the successful applicant’s choices and the opportunities available, participation in research activities, doctoral supervision and the organisation of internships is encouraged.

#### Qualifications required / profile:

- Expertise and extensive experience in the relevant field;
- Research experience in an academic environment is an advantage.

#### Selection procedure:

Applications will be subject to a pre-selection on the basis of a dossier by a selection commission created by the Faculty of Applied Sciences. Successful candidates will then be invited to an interview, including the presentation of a model lesson and a discussion with the members of the committee.

#### Applications:

Applicants are requested to submit their applications electronically, to the following address: [Postesacademiques@uliege.be](mailto:Postesacademiques@uliege.be) with a copy to **Ms. Aurélie Lecca** - [Aurelie.Lecca@uliege.be](mailto:Aurelie.Lecca@uliege.be) by **15 February 2021 at the latest**.

#### Required documents:

- ✓ A letter of application;
- ✓ A complete curriculum vitae;
- ✓ A teaching plan presenting the way in which the candidate intends to transmit their professional expertise and experience in their teaching and highlighting the opportunities for developing collaborations between the academic and industrial worlds provided by the applicant.

### Conditions of recruitment:

The post will be appointed for an initial renewable period of three years.

Our institutional policy is based on diversity and equal opportunities. We select candidates according to their qualities whatever their age, sexual orientation, origin, beliefs, disability or nationality.

### Information:

Further information can be obtained from the Head of the Department, **Mr Luc Courard** - tel: +32 4 366 93 50 – [Luc.Courard@uliege.be](mailto:Luc.Courard@uliege.be) or from the **Faculty of Applied Sciences, Ms Aurélie Lecca** – tel.: [+32 4 366 94 68](tel:+3243669468) – [Aurelie.Lecca@uliege.be](mailto:Aurelie.Lecca@uliege.be)

### Remuneration:

Salary scales and how they are applied are available from the human resources department of the University: **Ms Ludivine Depas** – tel.: +32 4 366 52 04 – [Ludivine.Depas@uliege.be](mailto:Ludivine.Depas@uliege.be)