

## Lecturer

Ecole/Institution/Société:

**Vrije Universiteit Brussel, Belgium / Brussels**

Discipline:

**Electrical Engineering**

Type d'emploi::

**Full-time**

Date de publication:

**2022-02-28**

Personne à contacter:

**If you wish to apply for this position, please specify that you saw it on AKATECH.tech**

### **Tenure track lecturer 'Electronics Engineering**

#### **1 - Working at the VUB**

For already 50 years, the Vrije Universiteit Brussel has stood for freedom, equality and connectedness. These values are strongly present on our campuses, in our students as well as our staff. At the VUB, you'll find a diverse collection of personalities: pure innovators and especially people who are 100% their authentic selves. With about 3.500 employees, we are the largest Flemish-speaking employer in Brussels, an international city with which we are all too happy to be connected, and around which our four campuses are located.

Our education and research are grounded in the principles of free research with an eye on human progress. We disapprove of every purely authoritative argument and guarantee the free formation of judgement that is necessary for this basic principle to be incorporated in the community.

The VUB is autonomous and managed democratically. As such, we guarantee fundamental freedoms within our university, as well as the right of the university community to be involved in making and checking university policy.

#### **The mission of the university includes:**

- the development, the transfer and the application of high-standing academic education and scientific research, free from any prejudice;
- community integration of this in a spirit of social compassion;
- critical development of everyone in light of the responsibilities borne in the community.

#### **2 - Position description**

The Faculteit Ingenieurswetenschappen, Department Elektriciteit, is looking for a tenure track lecturer.

More concretely your work package contains:

#### **Education and Research domain:**

- Measurement, calibration and modelling of systems and components in transdisciplinary application domains including electronics, telecommunications, mechanics, electrochemistry,

and biomedical engineering.

- Research and innovation portfolio in post 5G micro- and millimetre wave electronics and telecommunication.

**Education tasks:**

- You will run courses in the Bachelor in Engineering and the Master in Electrical Engineering:
- introductory Bachelor courses on basic electricity, and on the design, synthesis and analysis of electrical networks;
- Master courses on nonlinear system measurement and modelling, micro- and millimetre wave electronics, and telecommunications.

**Research tasks:**

- You will inspire and oversee the research group on microwave engineering, targeting measurement and calibration of microwave and millimetre wave systems, and the modelling of these systems in a linear, nonlinear, and parameter and/or time-varying framework. Close collaboration with the team members and the other research groups in the department will allow developing your research and innovation activities.
- You will inspire the team to collaborate in a national and international context, and detect and develop relevant real-world and industrial applications, and develop and effective solutions.
- You will inspire and guide a research group with several PhD collaborators and master students.
- You will train and motivate co-workers, and engage and interact with your colleagues in a friendly and open-minded way.
- You will be collaborating with other research institutes, industrial partners and with other universities. You will facilitate and organize these interactions, and define joint projects, manage these projects, and report results adequately.

**Other tasks:**

- You are committed to the further development and proper functioning of the department and faculty;
- You are expected to actively contribute to the promotion of the department, the programme, the faculty and the university ([e.g.](#) departmental activities, student recruitment, study information days, popularising science, etc.), and to be prepared to take on tasks in faculty (and possibly university) bodies.
- For this function, our Brussels Humanities, Sciences & Engineering Campus (Elsene) will serve as your home base.

**3 - Profile**

What do we expect from you?

- You hold both a degree in academic engineering in electronics or information theory and a PhD in Engineering.
- You can convey knowledge to the audience in an inspiring way, adapt seamlessly to the level of the audience, and display empathy towards the public.
- For the Bachelor courses, in-depth knowledge of the Dutch language is crucial and required, as these courses are completely taught in Dutch. The courses in the Master are taught in English, and hence these require a very good knowledge of English as well.
- You need to have demonstrable and quantifiable expertise in the following scientific domains:
- the measurement of systems, including the calibration of instruments, using frequency domain techniques in general, and the use and application of the latter for microwave and

- millimetre wave measurements;
- the modelling of linear and nonlinear systems in general, with the focus on frequency domain techniques. This includes the measurement and modelling of microwave and millimetre wave power amplifiers operating under a variable load in the frequency domain.
- Possessing the capabilities to define, guide, and execute research and innovation projects, experience with the following is appreciated:
- identification techniques for linear/nonlinear systems, including machine learning/deep learning techniques;
- micro- and millimetre wave 'over-the-air' measurements.
- A practical and problem-solving mindset, excellent collaboration skills and the strong will to integrate well with all the research activities of the department are vital.
- You must be willing to integrate in the department ELEC and in the faculty of engineering, and define the steppingstones and the vision underpinning the scientific strategy of the department and the faculty.
- You subscribe to the university's vision of education. The full text in relation to this is available on the university website.
- Every first appointment is dependent upon the successful delivery of a teaching session.
- Members of the academic staff who, as title-holders, are charged with teaching assignments, must be able to demonstrate the required knowledge of the language of instruction for the relevant course units. Example: When a course unit is taught in English, the candidate is required to have the appropriate certificate. More information about the regulations concerning the language proficiency you can find via <https://jobs.vub.be/content/Regulations-concerning-language-proficiency/>

#### **4 - Offer**

Are you going to be our new colleague?

You'll be offered a tenure track appointment, for an assignment of 1 FTE, for 5 years, with eligibility for tenure in the rank of senior lecturer by the end of this initial period, with planned starting date 01/10/2022.

You'll receive a salary linked to one of the scales set by the government.

At the VUB, you're guaranteed an open, involved and diverse workplace where you are offered opportunities to (further) build on your career.

#### **As well as this, you'll enjoy various benefits:**

- Full reimbursement for your home-work commute with public transport according to VUB-policy, or compensation if you come by bike;
- Cost-free hospitalisation insurance;
- The space to form your job content and continuously learn via VUB LRN;
- Excellent facilities for sport and exercise;
- Ecocheques;
- Delicious meals at attractive prices in our campus restaurants;
- An open, family-friendly work environment where attention is paid to work-life balance, and exceptional holiday arrangements with 35 days of leave (based on a fulltime contract).

#### **5 - Interested?**

Is this the job you've been dreaming of?

- your motivation letter, including your vision on education and research, and an explanation about the development of your future research;

- your curriculum vitae, including your academic dossier;
- your degrees and diplomas (not applicable for VUB alumni) and language certificates.

Do you have questions about the job content? Contact Prof. Yves Rolain at [yves.rolain@vub.be](mailto:yves.rolain@vub.be) or on +32 (0)2 629 29 44.

Would you like to know what it's like to work at the VUB? Go to [www.vub.ac.be/vacatures](http://www.vub.ac.be/vacatures) and find all there is to know about our campuses, benefits, strategic goals and your future colleagues.

## **Job details**

**Title** Tenure track lecturer 'Electronics Engineering'

**Employer** Vrije Universiteit Brussel (VUB)

**Location** Boulevard de la Plaine 2 Brussels, Belgium

**Job type** Lecturer / Senior Lecturer, Tenure Track

**Field** Biomedical Engineering, Electrical Engineering, Electrochemistry, Electronics

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