FACULTY POSITION

Department of Electronic Engineering
Universidad Técnica Federico Santa María
Santiago, Chile

Job description

This call is aimed at filling a full-time faculty position for the **Department of Electronic Engineering at Universidad Técnica Federico Santa María** (**UTFSM** or **USM**, for short) in the field of **Telematics (Code 22-04-67)**. **Telematics Engineering** at UTFSM is a professional career that has been implemented since 2003 to provide the knowledge needed to conceive, design, implement and operate all kinds of telecommunication networks, as well as knowledge of network security mechanisms, data transmission, protocols, services, and applications.

Candidates may be Chilean or foreign nationals, in possession of a doctoral degree with specialization in one of the following areas: telecommunication systems planning and performance analysis (layers ISO/OSI 3-7); and integration of telecommunication systems, including Internet of Things (IoT) infrastructure.

The selected candidate is expected to be a competent and highly motivated academic who will contribute to teaching in undergraduate and graduate (Master and Doctorate) programs, to do research, and to participate in innovation activities. The willingness of the candidate to perform theoretical and experimental teaching and experience in projects of multidisciplinary basic and applied research is particularly encouraged.

Benefits

UTFSM offers an attractive starting salary, depending on initial academic evaluation. Additional benefits include free lunch, supplemental health insurance and incentives for publications in Web of Science indexed journals. Additional economic incentives are possible, if the candidate has been granted a research project funded by the national scientific research agency ANID.

Responsibilities

The successful candidate is expected to contribute to teaching in undergraduate and graduate (Master and Doctorate) programs and to exhibit research and innovation capabilities. A performance agreement will be established for an interim period of one, two, or three years depending on the candidate's academic experience, establishing teaching and research goals to be achieved in that time frame. If necessary, the interim agreement will also provide a Spanish language training program, to achieve language proficiency for teaching purposes. Fulfilling the agreement goals will enable the candidate to participate on tenure track.

The successful candidate will be working in the implementation of Telematics Engineering in the San Joaquín Campus of UTFSM in Santiago, starting 2023. This Campus can be reached easily by the Public Transportation System, that is Metro train and Buses. He must show a willingness to travel to the Valparaiso Campus, to interact with colleagues and students from this location and teach at least one course per semester at this location in the first year. He will be joined by a staff consisting of an increasing number of professors from the main Campus and new hires in the years to come.

Desired skills and experience

Candidates must also meet the following additional requirements:

1. The trajectory and expertise of the candidate must be consistent with the teaching and research duties in the fields advertised.
2. To have teaching abilities and to be willing to teach at undergraduate and graduate levels (theoretical and experimental).
3. To have enabling academic training to teach some of the following subjects: optical networks, wireless networks, sensors networks, digital communications, and fundamental signal transmission.
4. To be willing to participate in training programs aimed at the use of modern educational methodologies and also in the planning of the engineering education curriculum.
5. The candidate must demonstrable ability for application and granted of competitive funds.
6. Exhibit demonstrable results in the creation of knowledge, through publications in WoS indexed journals, international conferences or patents.
7. Writing and speaking proficiency in English, and basic Spanish. Applicants not fluent in Spanish should show willingness to acquire within two-year sufficient proficiency to be able to teach and interact with students.
8. Willingness to carry out innovation, technology transfer, and industrial consulting projects.

Documentation required to apply

1. Curriculum Vitae.
2. Formulation of a personal proposal for academic development in research and teaching.
3. Undergraduate and graduate grade transcripts.
4. Certificates of diplomas and degrees.
5. Contact information (postal and email) of two senior academics who are willing to provide academic and personal references. One of the referees should be the Ph.D. thesis advisor. These references will be requested directly by the Head of the Department of Electronic Engineering, UTFSM.

Selection procedure

The Department of Electronic Engineering will select candidates for a shortlist of each available position, who will be interviewed by a Selection Committee. All those in the shortlists should present a public lecture on a topic chosen in agreement between the applicant and the Department (via video-conference if a visit to UTFSM cannot be arranged). The Selection Committee will then rank these candidates, for the University authority to make the final decision.

Submission of applications and important dates

Applications should be sent in electronic format to: postulaciones.ddrrhhad@usm.cl, sending a copy to: concursos.elo@usm.cl. The subject of the message should include the position Code 22-04-67**:**

- Application Deadline: October 15th, 2022
- Preliminary Selection (shortlist) will be informed by: November 15th, 2022
- The selected candidate could fill the position starting January 1st, 2023, depending on availability.

About the employer

Universidad Técnica Federico Santa Maria (www.usm.cl) was the first Latin American university to offer a doctoral program in Engineering (since 1962). UTFSM is one of the oldest and traditional universities in Chile, with more than 90 years of history. Since its foundation, the University has been focused on the development of Science, Engineering and Technology. Our University has a strong emphasis on research and on scientific and technological education. UTFSM is consistently ranked among the top three engineering schools of the country; it is ranked first place nationally in Engineering and Technology (US News Education – Best Global Universities 2020: Engineering, Times Higher Education (THE) WUR 2019: Engineering and Technology), 9th place in Latin America (US News Education – Best Global Universities Latin America 2020). In the THE Impact Ranking 2020, it is ranked in 34th worldwide. In QS World University Ranking 2020-2022 by Subject: Engineering and Technology, it is ranked in 3rd place nationally.

In **Electrical and Electronic Engineering**, **UTFSM** was ranked number one in Latin America at the Shanghai Academic Ranking of World Universities for the years 2017 to 2021, and in the range 101 to 150 worldwide. In the same ranking in 2017, UTFSM is also considered number one in Latin America in the subjects of Instruments Science and Technology (47 in the World), and Automation and Control (76 to 100 Worldwide). In the 2020 QS World University indicator in Electrical and Electronic Engineering, UTFSM ranked in the position 201-250 worldwide and 3rd place in Chile. Also, in the 2021-2022 QS World University indicator in Electrical and Electronic Engineering, UTFSM ranked 3rd place in Chile

The Electronic Engineering Department of UTFSM is located at the main Campuses of the Universidad Técnica Federico Santa María, namely the Valparaíso and Santiago Campuses. Valparaíso is a major city, seaport, and university center as well as an important touristic attraction, being declared a UNESCO World Heritage Site and Chile's cultural capital. It is located at a 120 km distance from Santiago, the capital of Chile where the San Joaquín Campus is located. According to the United Nations Development Programme, Chile is one of South America's most stable and prosperous nations, leading Latin American nations in human development, competitiveness, income per capita, globalization and economic freedom. Since July 2013, Chile is considered by the World Bank as a "high-income economy", and hence as a developed country.

Activities of the Department of Electronic Engineering are described at the websites: www.elo.usm.cl and www.telematica.usm.cl. General information on the University can be found in http://www.oai.usm.cl/en/usm.

Further questions are welcome and can be formulated to: concursos.elo@usm.cl.