

OPEN POSITION ASSOCIATE/ FULL PROFESSOR OF RAILWAY ENGINEERING INNOVATION

The School of Civil Engineering and the Department of Civil and Environmental Engineering at UPC BarcelonaTech invites candidates to apply for a tenure track position in the broad field of Railway Engineering Innovation, at the level of Full or Associate Professor.

The profile sought corresponds to a dynamic associate professor or junior full professor with an active research line in any aspect pertaining to the wide topic of Railway Engineering. The position is initially funded (for four years) by public companies in the Railway sector and will be eventually integrated in the UPC structure.

The position is supported by the recent agreement signed between Ferrocarrils de la Generalitat de Catalunya and UPC. It is also driven by the European Commission having approved 2021 as the European Year of Rail (https://europa.eu/year-of-rail/index_en), as a way to contribute to the achievement of the objectives of the European Green Deal in the field of transport. The position aims at developing a full line of research with a strong link with the Catalan, Spanish and European industrial and productive sector and to be active at national and international events, such as the UITP Summit 2023 to be held in Barcelona.

Moreover, the core membership of UPC in the EIT Urban Mobility community (<https://www.eiturbanmobility.eu/>) is paving the way for a fruitful collaboration with other universities, city councils and industry in the 2020-2026 period. This collaboration may result in multiple cross-fertilization academic activities (master, doctoral training network, industry-oriented courses) and innovation projects, funded by the EIT UM and more than 90 partners.

Duties:

The selected candidate is expected to perform on three main fields:

- **Teaching:** from broad railway engineering topics at undergraduate level up to specialized areas at master's degree
- **Research:** establishing clear, long-run research lines and the development of a research group at post-graduate level and PhD candidates.
- **Technology transfer to society.** Both within the scope of funded research project (private, national and european level) or specific joint initiatives developed with the sector.

Particular focus is expected on innovation and implementation, the integration of railway systems within the mobility ecosystem and areas related to planning, construction and operation.

The successful candidate will have an increasing involvement in teaching at the undergraduate and graduate level in topics related to Railway Engineering at the School of Civil Engineering in the UPC-BarcelonaTech. In order to make this involvement progressive, he/she will be offered a reduction in teaching duties during the first 4 years, and the support of an assistant teacher.

The person hired is expected to build up a research team being a reference for the Railway sector at the national and the international level. The position also offers funding for a PhD student as the first brick to start building such a research team. It is also expected to develop and collaborate with specific training programs and dissemination activities linked to rail.

Qualifications required:

Candidates must hold a PhD in Railway Engineering or a related topic, and a proved research experience in that same topic. Teaching experience is highly recommended.

Documented ability to teach in Catalan, Spanish or English is a requirement. The holder is expected to be able to teach in Catalan or Spanish within two years after signing the contract.

The **Open Call** is launched, with the (tentative) closing date on **April 30, 2021**. The application must be sent to railwayeng.camins@upc.edu . Applications must include

- a Curriculum Vitae of the candidate
- a motivation letter
- name of two potential referees

All the documents have to be submitted in pdf format.

Assessment Criteria/Ranking of applicants

The ranking of eligible applicants will be based primarily on **research** and **teaching expertise**, with the highest weight given to the former.

The Selection Panel will consider candidates with a proven track record, at least equivalent to the merits necessary to obtain a [Research accreditation](#) by the Catalan Agency for University System Quality (AQU). This requires a successful combination of some, if not all, of the following requirements 1) having co-authored a significant number of papers in international journals with high impact in the fields of Railway Engineering, 2) experience in PhD theses supervision, 3) participation and leadership in competitive research projects, 4) technology transfer to the industrial and professional sectors and 5) experience in teaching at the Bachelor and/or Master level.