

VACANCY NOTICE FOR A TRAINEESHIP

AREA OF ACTIVITY	BUILDING CONTROL SYSTEMS
REFERENCE	F4E/TRA/2016/020
START AND END DATE - DURATION	01/10/2016 - 30/06/2017 - 9 months
LOCATION	BARCELONA (SPAIN)
PUBLICATION DATE	02/05/2016
CLOSING DATE FOR APPLICATIONS	31/05/2016 AT 12:00 PM (BARCELONA TIME)

1. DESCRIPTION OF THE DEPARTMENT/PROJECT UNIT

The size of the ITER platform is 42 hectares and Europe is the party responsible for the delivery of the 39 buildings that the ITER platform will host.

The Tokamak complex consists of the Tokamak, Diagnostic and Tritium buildings which is $120~m\times80~m$, 17~m deep, 60~m high , 360~000~T

A Heating Ventilation Air Conditioning (HVAC) system will be installed powerful enough to treat the air flow of 1,000,000 m3/hour which corresponds to the volume of air that is inhaled and exhaled by 3,5 million people/hour.

Furthermore, Instrumentation and Control (IC) systems, power supplies, interior and exterior lighting, gas and liquid networks will be installed.

The Site, Buildings and Power Supplies Project team is responsible to design, construct, install and commission the ITER buildings, and the overall electrical distribution of the site

2. DESCRIPTION OF TASKS

The trainee will be required to carry out the following tasks:

- Participate to the design of the Human Machine Interface (HMI) for the Central supervision of the Building Management System and Electrical distribution. This implies participating to:
 - o Requirements collection on Remote Control needs for different buildings
 - o Participate to design system objects for the development of the HMI
 - Develop different communication driver between various industrial platforms (WinCC
 OA) and Central Supervision systems CODAC (COntrol Data Access and Communication).
 - o design, implementation and testing of hardware and software components
 - o design and implementation of Graphical User Interfaces

3. ELIGIBILITY CONDITIONS

- Be a national of one of the Member States of the European Union or of a Third state fully associated with the Euratom fusion programme (Switzerland);
- The candidate must have finished his/her university degree at least 3 years attested by a diploma. The university degree must have been obtained within the last 3 years before the closing date for applications;
- In order for the trainee to fully profit from the traineeship and to be able to follow meetings and perform adequately, candidates must have good knowledge of English, the main working language of F4E.

Applications will not be accepted from candidates who:

- have already benefited from any kind of in-service training within a European institution or body, or
- who have had or have any kind of employment within a European institution or body.

4. QUALIFICATIONS REQUIRED

- Bachelor degree in Control Engineering, Electronics Engineering, Computer Science or equivalent with specialty in Control Systems design is requested. Candidates with higher qualification can also apply.
- Good knowledge of at least two of the following subjects:
 - Systems theory and/or systems engineering
 - o Digital control system design and implementation
 - o Electronic circuit design and implementation
 - o MATLAB/SIMULINK software
 - o Programmable logic controller
 - o Field Programmable Gate Array

5. WHAT WE OFFER

Trainees are awarded a monthly maintenance allowance. The monthly allowance for 2016 amounts to epsilon1087,39.

Additionally, trainees may receive a travel allowance, subject to budget availability, to compensate for travel expenses incurred from the place of residence to the seat of F4E and vice versa. Trainees whose place of recruitment is less than 50 km from F4E's offices shall not be entitled to a travel allowance.

Detailed information about the F4E traineeship procedure as well as trainees' rights and duties can be found in the Decision of the Director of 'Fusion for Energy' on the Acceptance of Traineeships published on our website. We strongly recommend applicants to read them carefully.

Accommodation costs will be covered by the trainee.

6. SUBMISSION OF APPLICATIONS

The online application process starts upon clicking "<u>CLICK TO APPLY</u>" on the traineeships page: http://www.fusionforenergy.europa.eu/careers/traineeships.aspx.

Applicants must register their applications online through the F4E traineeship's tool by creating a valid F4E user account and choosing the vacancy notice they wish to apply to.

Please note that the online traineeship application tool is the <u>only</u> acceptable means of sending applications. Applicants are responsible for keeping their e-mail addresses and personal details up to date in their profile in F4E online application tool.

The mandatory fields in the profile marked with an asterisk should be duly filled in. Candidates are requested to submit the following 2 documents:

- A detailed Europass curriculum vitae in **English** (can be obtained at the following address: http://europass.cedefop.europa.eu/en/documents/curriculum-vitae)
- A motivation letter of 2 pages maximum in English

Applications must be sent by 31/05/2016 (closing time 12:00 pm Barcelona time).

In case you encounter technical problems when trying to submit your application via the traineeship application tool, please make a screenshot and send it to: traineeships@f4e.europa.eu.

It is the responsibility of the applicant to inform 'Fusion for Energy' about any technical problem without delay within the deadline mentioned above.

Please, <u>do not</u> send any supporting documents (i.e.: copies of your ID-card, educational certificates, etc.) with your application at this stage if not specified in the Traineeships Notice.