

Before submitting your application, kindly review the task descriptions, required qualifications, and competencies outlined below for each profile.

The profiles are grouped by domains:

- Engineering and Physics
  - Electrical Engineering Instrumentation & Control (I&C) Control, Data Access, and Communication system (CODAC)
  - Metrology and Reverse Engineering
  - o Analysis and Codes
  - o In-Vessel
  - o Remote Handling
  - o Material & Manufacturing Technologies & Processes
  - o Vacuum Vessel
  - Cryoplant and Fuel Cycle Programme (CPFC)
  - o Test Blanket Modules and Materials Development
  - Heating and Current Drive
  - o Engineering Management
- Office of Director
  - o Internal Audit Capability
  - Governance & Commitees
- Project Management
  - Project Performance Management
  - o Risk Management
  - Programme Planning & Controlling/Cost Management
  - Nuclear Safety/Engineering Management
- Broader Approach
  - o Beam Physics (International Fusion Materials Irradiation Facility IFMIF)
  - System Engineering (International Fusion Materials Irradiation Facility IFMIF)
  - Power Supplies (Japan Torus-60 JT60sa)
  - Divertor (Japan Torus-60 JT60sa)
  - Magnets and Cryogenics (Japan Torus-60 JT60sa)
- <u>Commercial</u>
  - o Market Analysis & Business Intelligence
  - Programming, Reporting & IT tools
  - Budget Management
  - o Procurement
  - Contract Management
- <u>Administration</u>
  - Data Protection, Ethics and Anti-Fraud Law

- EU Corporate Law
- Buildings, Infrastructure and Power Supplies (BIPS) Law
- Human Resources Management
- o Event Management
- Communication
- Digital Transformation

F4E is currently under a reorganization process. It means you will witness firsthand how we are implementing changes to our departments and structures. Your flexibility and understanding during this period will make your experience even more enriching. Let's embrace this dynamic time together!

# **ENGINEERING AND PHYSICS**

## Profile 1 - Electrical Engineering – Instrumentation & Control (I&C) -Control, Data Access, and Communication System (CODAC)

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Electrical Engineering – Instrumentation & Control (I&C) - Control, Data Access, and Communication) system (CODAC)	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Support in the modelling and design of custom electronics circuits.
- Support in the development and testing of embedded software (FPGA and micro-controllers).
- Assistance in the development and deployment of custom test rigs for electronic circuits.
- Conduct software integration of custom electronics into large control systems.

#### **Your qualifications**

Essential:

• Bachelor's degree in Electronics/Control/Industrial Engineering, Physics or similar.

#### Advantageous:

- Understanding of analogue and digital electronics design (first principles).
- Experience with C or C++; or with VHDL or Verilog.

#### Competencies

• Proactive approach to problem-solving and initiative-taking.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Electrical Engineering – Instrumentation & Control (I&C) - Control, Data Access, and Communication system (CODAC)	Cadarache (France)	12 months	1

### **Description of tasks**

- Support the commissioning of highly distributed and heterogenous control systems.
- Modelling and design of control system architectures.
- Assistance in the development and testing of control system software.
- Cooperate in the development and testing of integration software (including user-interfaces).

#### Your qualifications

Essential:

• Bachelor's degree in Electronics, Control, Physics, Industrial Engineering or similar.

#### Advantageous:

- Understanding of control systems theory (first principles).
- Experience with PLC programming; or with C or C++.

#### Competencies

• Proactive approach to problem-solving and initiative-taking.

## **Profile 2 - Metrology and Reverse Engineering**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Mechanical Engineering/ Assembly/ Tolerancing/Metrology	Barcelona (Spain)	12 months	1

### **Description of tasks**

Supporting the Metrology and Reverse Engineering Team, the trainee will carry out the following tasks:

- Prepare digital twin of components for the Assembly and Alignment phases of the ITER tokamak.
- Perform Mechanical tolerancing stuck up studies.
- Support Metrology and Reverse Engineering practical activities/workshops.

### Your qualifications

Essential:

• Bachelor's degree in Mechanical Engineering, Aerospace Engineering or similar.

### Advantageous:

- 3D CAD modelling.
- Technical drafting of 2D drawings.
- Basics knowledge of programming languages (e.g. VBA/Python/C++).

- Ability to work in multicultural team proactively.
- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

## **Profile 3 - Analysis and Codes**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Analysis and Codes Group	Barcelona (Spain)	12 months	1

#### **Description of tasks**

- Support in the thermo-hydraulic Analyses of the ITER TF coils during opera region of the scenario.
- Assistance in the Thermal Finite Element Analyses of High Heat Flux Components such as FW panels.
- Support in the CFD Analyses of Cooled Components.
- Electromagnetic Analyses of active and passive magnetic shielding of large components.

### **Your qualifications**

Essential:

• Bachelor's degree in Nuclear, Mechanical, Electrical Engineering or equivalent.

#### Advantageous:

- Knowledge of Finite Element methods and tools such as ANSYS (thermal, EM, CFD) simula on tools.
- Knowledge of programming languages, preferably Matlab and/or Python.

- Proactive approach and ability to think-out-of-the box.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER- Delivery	Analysis and Codes Group/Nuclear Analysis	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Assist in the collection, processing, and analysis of results obtained in radiation transport simulations.
- Participate in the preparation of complex neutronics models based on detailed engineering CAD geometry.
- Perform nuclear analyses in support of the design of ITER, JT-60SA or another relevant fusion device.
- Carry out neutron activation and inventory calculations.
- Contribute to the development and improvement of tools used in the workflow for nuclear analyses.
- Collaborate in the validation and verification of nuclear data libraries and particle transport codes.
- Prepare technical reports and presentations to communicate findings and progress.
- Assist in the technical meetings.

#### Learning opportunities:

- Gain hands-on experience in the field of nuclear analyses in support of fusion devices like ITER, JT-60SA and any other relevant.
- Learn about and contribute to the latest advancements in fusion neutronics.
- Develop professional skills through collaboration with multidisciplinary teams.
- Atend workshops, seminars, and training sessions to expand your knowledge and skills.
- Network with worldwide recognised professionals in the field of nuclear analyses and related disciplines.

#### Your qualifications

Essential:

• Bachelor's degree in Engineering or Physics or equivalent.

#### Advantageous:

- Knowledge of relevant nuclear physics, shielding and radiation transport principles.
- Basic knowledge of radiation transport codes (e.g., MCNP, OpenMC) and activation codes (e.g., FISPACT-II, ACAB).
- Basic knowledge of Python and collaborative code development.
- Basic knowledge of fusion-based experimental devices: ITER, IFMIF, JT-60SA and DEMO, in particular.

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Analysis and Codes Group/Mechanical Analysis	Barcelona (Spain)	12 months	1

### Description of tasks

The objective of this traineeship is to provide a recent graduate in Industrial or Mechanical Engineering with a comprehensive understanding of the qualification of components and structural dynamics in the context of mechanical engineering in the field of Nuclear Fusion (ITER, Broader Approach, IFMIF Dones, etc...). The trainee will develop his/her skills in engineering analysis, including Finite Element Analysis (FEA) and analytical techniques, while also gaining experience in experimental activities. The trainee is expected to carry out the following tasks:

- Assist in the design, analysis, and qualification of mechanical components and structures.
- Perform Finite Element Analysis (FEA) and analytical calculations to predict the behavior of components and structures under various loading conditions.
- Participate in experimental activities, including the preparation of test setups, execution of tests, and analysis of results.
- Contribute to the development and improvement of design and analysis methodologies in support of the qualification of components.
- Collaborate with multidisciplinary teams to ensure the successful completion of qualification, its preservation (documentation, database, etc...) and its extension.
- Prepare technical reports and presentations to communicate findings and progress.
- Stay updated on the latest advancements in mechanical engineering, structural dynamics, and earthquake engineering.

#### **Your qualifications**

#### Essential:

• Bachelor's degree in Industrial or Mechanical Engineering.

#### Advantageous:

- Specialization in structural analysis and/or tests.
- Strong background in engineering analysis, including FEA and analytical skills.
- Interest in experimental activities (testing laboratories or in-situ tests).
- Basic knowledge of earthquake engineering principles.
- Basic knowledge of the environmental conditions and tests done for the qualification of nuclear components.

- Communication skills, both verbal and writen, fostering open dialogue and ensuring information is effectively conveyed among team members.
- Strong problem-solving and critical thinking skills.
- Ability to work autonomously and as part of a team.

## Profile 4 - In-Vessel

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Engineering/ Welding & NDT	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Develop assessment, inspection, audit and reporting tools for following-up welding and NDT activities.
- Support on the follow-up of technical studies specific to welded joints in IVT series.
- Support in the drafting of documents and reports, handling technical and/or administrative. work and ensuring timely communication of outcomes.

#### **Your qualifications**

• Bachelor's degree in Mechanical or Materials Engineering or similar.

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	In Vessel components	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Assess the current Earned Value Management process and provide support for the optimization of the process of Earned Value Management Excel file linked to Manufacturing Database.
- Provide support in the definition of the KPIs related to manufacturing activities such as machining, welding and Non Destructive Tests in Manufacturing Database.
- Provide support to develop Reporting proposals in Manufacturing Database/Integrated Reporting System/Reporting system among In-Vessel Teams.
- Write guidelines regarding Manufacturing Inspection Plans processes and PRIMAVERA (P6) codes used to link Manufacturing Database with P6 (schedule).

### **Your qualifications**

#### Essential:

• Bachelor's degree in Engineering (e.g. Mechanical) or equivalent with experience in data management.

#### Advantageous:

- Good experience with Excel and know-how of MS Office apps in general.
- Basic knowledge on quality management systems (processes).
- Basic knowledge of basic manufacturing technologies (welding/machining).

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and written, fostering open dialogue, and ensuring information is effectively conveyed among team members.

## **Profile 5 – Remote Handling**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Remote Handling	Barcelona (Spain)	12 months	1

#### **Description of tasks**

GENROBOT is a generic software controller for teleoperated robotics equipment developed by F4E and industrial partners. It is going to be installed on various types of remote handling robotics devices that will perform maintenance tasks on the ITER reactor. These remote handling machines are tele-manipulator arms, multifunctional movers, cranes, and special tools. GENROBOT is connected through networks to sophisticated interfaces for the operator allowing to control, monitor, diagnose and 3D view the remote handling equipment from a distant control room. F4E is currently preparing the integration of the GENROBOT-based control system for several remote handling applications in digital mock-ups, i.e. simulated environment using the final user interface applications but with GENROBOT controllers running with simulated I/O signals.

Considering the trainee's knowledge and experience, the work could address one of the following topics:

- Robotics manipulators modelling and implementation on GENROBOT, and verification on a digital mockup.
- Configuration and testing of the control system digital mock-up for a remote handling application.
- Adaptation of Qty<sup>©</sup> based graphical user interfaces to command & control special remote handling devices.

#### **Your qualifications**

Essential:

• Bachelor's degree in Engineering with a background in robotics and/or automation.

#### Advantageous:

- Experience in developing C/C++ software applications for embedded systems, robotics applications or graphical user interfaces is a requirement.
- Knowledge and experience on ROS, motion control and Virtual Reality applications is an advantage.

- We are looking for people with a proactive approach to problem-solving on an exciting but challenging project.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Remote Handling	Barcelona (Spain)	12 months	1

#### Description of tasks

The ITER In-vessel Viewing system is a laser metrology tool used to generate viewing images and 3D measurements of components inside the ITER reactor. Trainees will work with a Python-based simulator integrated into Blender, a 3D graphics software, to simulate and analyze damage to ITER reactor components. This role involves using the simulator for performance studies. If the trainee knowledge allows, the work will be extended to enhancing the simulator by adding new functionalities like direct 2D image generation, implementing surface reflectivities, improving user interfaces, and automating scan scenarios.

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

- Simulating IVVS inspection of 3D damage profiles taken from real tokamak components.
- Evaluating the positioning of the IVVS inside the ITER tokamak to optimize coverage of components.
- Optimising the scan speed and path to minimize the time required for IVVS measurement campaigns.

#### **Your qualifications**

Essential:

• Bachelor's degree in Computing, Physics, Science, or Engineering and familiarity in working with large datasets.

Advantageous:

- Experience working with experimental data and large datasets using at least Excel is a requirement. The simulator can be run via a user-friendly graphical interface meaning anyone with some experience in technical software (matlab/excel/python/similar) will not have an issue.
- Knowledge of computer programming in python, and/or Blender is a strong advantage.
- Familiarity with raytracing of surfaces, surface reflectivity modelling is an advantage.
- Familiarity with image processing, OpenCV and similar is an advantage.

#### Competencies

• Proactive approach to problem-solving, ready to work in a small team on an exciting but challenging project.

## **Profile 6 - Material & Manufacturing Technologies & Processes**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Materials Science/Engineering	Barcelona (Spain)	12 months	1

### **Description of tasks**

The First Wall Panels Team is looking for a trainee in the field of Materials Science/Engineering to support the work on the Tungsten armour development. The Frist Wall Panels Team is starting a new task to develop and qualify bonding technology of Tungsten Tiles to First Wall Panel CuCrZr/Stainless Steel structure. Currently the most promising bonding technology is based on Diffusion Bonding. The qualification programme is likely to cover activities like, bonding trials, fabrication of representative mock-ups, testing of the mock-ups, etc.

Examples of tasks for the trainee are expected to cover the following types:

- Literature reviews of Tungsten to CuCrZr joining techniques and related material properties.
- Drafting and reviewing of qualification and testing plans and reports.
- Reviews of material and manufacturing documentation.
- Market studies for potential suppliers and their capabilities.
- Analyses and assessments of manufacturing and test reports.

#### **Your qualifications**

• Bachelor's degree in Materials Science, Engineering, or equivalent.

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.
- Analytical skills and critical thinking, that help to identify and solve complex problems.

### Profile 7 - Vacuum Vessel

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Vacuum Vessel	Barcelona (Spain)	18 months	1

#### **Description of tasks**

- IT Treatment of Vacuum Vessel factory and project data in order to create updated reporting:
  - Welding progress data
  - Welding inspection data
  - Schedules data
  - Manufacturing data
  - Quality data
  - Documentation
- Visiting Vacuum Vessel manufacturer premises to collect data.

#### Your qualifications

Essential:

• Bachelor's or Master's degree in Engineering, Computer Science, Mathematics, Physics or equivalent.

Advantageous:

- Programming skills: python, VBA (power BI), C+, Matlab or similar.
- Basics of Mechanical Engineering.

- Proactive approach to initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills both verbal and writen.

## **Profile 8 - Cryoplant and Fuel Cycle Programme (CPFC)**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Vacuum Vessel	Cadarache (France)	12 months	1

#### **Description of tasks**

- Development of test bench for testing hydrogen circulation pumps.
- Testing of pumping efficiency for different configuration of equipment (scroll and bellows pumps of various capacity).
- Analysis of data and recommendations on pumping configuration.

#### **Your qualifications**

#### Essential:

• Bachelor's degree in Industrial, Nuclear Engineering or equivalent.

#### Advantageous:

- Knowing basic principles of hydro- and thermodynamics, rotating machinery, piping and fittings, instrumentation, and process control.
- Ability and willingness to work hands-on with laboratory equipment, choosing different configuration and assembling and testing small machinery equipment and piping.

- Ability to work independently and proactively under the guidance of senior team members.
- Good reporting skills, collecting, analysing, and presenting data and testing results in clear and concise way.
- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

### **Profile 9 - Test Blanket Modules and Materials Development**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Test Blanket Modules and Materials Development	Cadarache (France) or Garching (Germany)	12 months	1

### **Description of tasks**

This traineeship will focus on the analysis of tritium transport in the Test Blanket System by using available codes, post-processing scripts, collaborating with the model developers. The tasks will focus on:

- Review of the literature available on the physical properties and correlations for the Tritium Transport in different materials.
- Contribution to develop a material property database.
- Contribution to the Test Blanket System design development for the part related to the Tritium Transport modelling.

#### **Your qualifications**

Essential:

• Bachelor's degree in Engineering, Physics or Chemistry.

#### Advantageous:

- Knowledge in:
  - Analytical modelling.
  - Mass and heat transport phenomena.
  - Thermodynamics.
  - Fluid-dynamics.

- Proactive approach to problem-solving.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Nuclear Safety/ Test Blanket Modules and Materials Development	Barcelona (Spain)	12 months	1

### Description of task

We are seeking a motivated individual to join our Nuclear Safety Team as a Trainee, focusing on the Water-Cooled Lithium-Lead (WCLL) Test Blanket Module (TBM). The trainee will work closely with our experienced engineers to assist in the preparation of documentation for the Nuclear Licensing process. This role involves reviewing supplier quality plans, ensuring the correct documentation of technical control for protection important activities, and collaborating on various assessments related to nuclear safety.

- Assist the Nuclear Safety Team in preparing documentation for the Nuclear Licensing process.
- Review supplier quality plans and ensure the accurate documentation of technical control for protection important activities.
- Collaborate with engineers to review Failure Mode and Effects Analysis (FMEA) and Reliability, Availability, Maintainability, and Inspectability (RAMI) assessments conducted by suppliers.
- Participate in analysing severe accident scenarios using MELCOR software.

### **Your Qualifications**

### Essential:

• Bachelor's degree in Nuclear Engineering or Mechanical Engineering.

#### Advantageous:

- Master's degree in Nuclear Engineering or Mechanical Engineering.
- Demonstrated understanding of nuclear engineering principles.
- Experience with MELCOR/RELAP or RAMI/FMEA.
- Thesis experience in a nuclear engineering topic.

- Analytical Skills: Ability to critically review documentation and assessments, identifying potential issues or areas for improvement.
- Atention to Detail: Meticulous approach to ensuring accuracy and completeness in documentation and technical control.
- Teamwork and Communication: Strong interpersonal skills, with the ability to collaborate effectively with team members and communicate findings clearly.

## **Profile 10 - Heating and Current Drive**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-Delivery	Heating and Current Drive/EC Gyrotrons, Control System and EC Launcher	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Offer suggestions for improvement and travel to premises for testing EC components.
- Support in the assessment of existing models for the Control System of the Electron Cyclotron (EC) Radiofrequency Sources (RF Gyrotrons).
- Comparison with the requirements relevant to the EC RF Gyrotrons.
- Analysis of alignment of waveguides required for the EC Launchers.
- Collaborate in the stack-up analysis of the tolerances of the ex-vessel system of the EC Launchers.
- Support in the development of a Control System model (in collaboration with the ITER EC team).
- Test the developed System in the FALCON Test facility (ITER like EC System).
- Contribute to the development of the Control System at FALCON (ITER relevant).

### **Your qualifications**

Essential:

• Bachelor's degree in Mechanical Engineering, Electrical Engineer, Physics or similar.

Advantageous:

• Engineering assessment or Structural Analysis, with good Control System abilities.

- Proactive approach to problem-solving, taking initiatives with good team spirit.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and contributing to achievement of common goals.
- Excellent communication skills (oral and writen), fostering open and efficient dialogue skills.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER-D	Heating and Current Drive	Barcelona (Spain)	12 months	1

#### **Description of tasks**

- Support in the drafting/reviewing of technical documentation related to the procurement and R&D of the components of the Heating Neutral Beam injectors of ITER.
- Provide support to and follow-up of procurement and R&D activities.
- Provide Project Management support in the management of Neutral Beam system related projects.
- Organizing/coordinating Knowledge Management in the area of Neutral Beam physics.

### **Your qualifications**

### Essential:

• Bachelor's degree in Engineering (Mechanical, Electrical or Nuclear), Physics or equivalent.

#### Advantageous:

- Knowledge of technical specification of electromechanical components.
- Knowledge of Quality Assurance principles.

- Proactive approach to problem-solving, taking initiatives with good team spirit.
- Excellent communication skills (oral and writen), fostering open and efficient dialogues.

## **Profile 11 - Engineering Management**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
ITER Programme	Engineering Management	Barcelona or Cadarache	12 months	1

#### **Description of tasks**

- Support the Systems Integration and Performance service in analyses, studies, assessments of systemlevel interactions in complex, highly integrated projects with high level of uncertainty.
- Support the Projects Department management team in the analysis, benchmarking of organisational models for high performance project management in large first-of-a-kind projects, in a scientific and/or nuclear environment.

#### Your qualifications

#### Essential:

• Bachelor's degree in Engineering, Management, Physics, Mathematics, Social Sciences, Psychology, Business Administration.

#### Advantageous:

• Technical competences in Systems Engineering, Project Management, Industrial Organisation, Modelling and Data Analysis.

- Open to adoption of new, multi-disciplinary tools and methods, explorative and self-started.
- Proactive approach to problem-solving and initiative-taking.
- Able to communicate effectively across different fields of practice, quick to adapt to interlocutors.
- Good verbal and writen communication skills, fostering open dialogue and ensuring information is effectively conveyed among team members.

# **OFFICE OF DIRECTOR**

## **Profile 12 - Internal Audit Capability**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Office of the Director	Internal Audit Capability	Barcelona (Spain)	12 months	1

#### **Description of tasks**

Reporting to the Director of F4E, the Internal Audit Capability (IAC) provides independent assurance and advice about the efficiency and effectiveness of governance, risk management and internal control guidelines and practices. It enjoys full independence and access to all personnel and documents required for its work.

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

- To gain understanding of the audited activity by researching background information.
- To develop and apply technical knowledge gained from studies and previous experience.
- To assist with the preparation of internal audit work programmes.
- To perform internal audit fieldwork.
- To communicate with the internal audit team on any issues or findings.
- To collect information, document audit work and perform archiving tasks.
- To assist with preparation of internal audit reports.
- To assist on other special assignments.
- To maintain good working relationships with colleagues in the organisation.

#### **Your qualifications**

Essential:

• Bachelor's degree in Economics, Finance, Business or Public Administration, Law, Engineering, or related areas of relevance to F4E.

#### Advantageous:

- Master's degree in Economics, Finance, Business or Public Administration, Law, Engineering, or related areas of relevance to F4E is an asset.
- Fluent in the use of spreadsheets, databases, and data analytics.

- Communication skills, verbal and written.
- Thorough and interested in detail analyses.
- Willingness and ability to interact with colleagues at all levels of the organisation.

## **Profile 13 – Governance & Commitees**

Department	Domain/Activity area	Location	Duration	Position available
Office of Director	Strategy & Governance	Barcelona (Spain)	12 months	1

### **Description of tasks**

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

- Supporting the preparation of a regular report on fusion activities in the EU (public and private) for internal and eventually external dissemination.
- Supporting an internal coordination group on the implementation of F4E's longer-term strategy for the development of fusion.
- Supporting the GB secretariat in the preparation and follow-up of Commitee meetings including the uploading of documents, the preparation of draft documents such as meeting agendas, record of decisions, meeting minutes, correspondence to Commitee Members (e.g. meeting invitations...), executive summaries, Governing Board (GB) decisions, presentations, and other legal /administrative documents.
- Verification of meeting documentation and presentations of the Director and Senior and Middle Management by ensuring that they meet the expectations of F4E's shareholders.
- Liaising with other Services (in particular, the Legal Service Unit) to ensure legal and regulatory compliance (including data protection) of relevant documents and processes.
- Support in providing sound and comprehensive analyses on governance, administrative and compliance maters.
- Monitoring of recommendations and action plans stemming from decisions of the governance bodies.
- Supporting the continuous improvement of F4E's governance processes, policies, and structures.
- Supporting the Governing Board's secretariat with F4E's annual assessment.
- Supporting the Governing Board's secretariat with the selection procedures for experts for the different commitees including with the preparation of contract signature and implementation.
- Any other task requested in the interest of the service.

### **Your qualifications**

Essential:

• Bachelor's degree in International Relations, European affairs, Law, Economics, Business Studies (MBA) or equivalent.

Advantageous:

• Master's degree in International Relations, European affairs, Law, Economics, Business Studies (MBA) or equivalent is an asset.

- High level of discretion for confidential work and information.
- Good interpersonal skills and ability to integrate into an international and multicultural environment.
- Very good analytical and problem-solving capabilities.
- Strong organisational skills and ability to work under pressure and keep to tight deadlines.

# **PROJECT MANAGEMENT**

### **Profile 14 - Project Performance Management**

The first position will be based in Barcelona (Spain), while the second offers potential placement in Cadarache (France).

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Projects Management	Project Performance Management	Barcelona (Spain) and Cadarache (France)	12 months	2

### **Description of tasks**

#### **General tasks**

- Provide project management support in terms of schedule, cost, risk, etc. to the relevant Project Teams.
- Monitor Project Teams performance and report to Senior Management.
- Liaise with ITER International Organization all the schedule related issues.
- Liaise with suppliers on all project management related topics.
- Ascertain that project management culture is disseminated within the organization.

#### Specific tasks the trainee will be required to carry out

- Support teams by keeping track of schedules, costs and risks for different projects and helping teams in their accountability to achieve performance objectives.
  - Take planning responsibility for a contract and follow its schedule.
  - Prepare associated project management status reports dashboards, Key Performance Indicators.
  - Interaction with various stakeholders, reporting the progress of the projects.

#### **Your qualifications**

#### Essential:

• Bachelor's degree in STEM or business-related subject is preferred, but any degree can be a fit.

Advantageous:

- Good knowledge of MS Office is preferred, but not a hard criterion.
- Knowledge of project management tools, such as Primavera or MS Project is an asset.

- Good organizational and problem-solving skills.
- Good interpersonal and communication skills.
- Initiative-taking and proactive.
- Prosocial, empathy, flexibility, teamwork, disciplined, determined.

### **Profile 15 - Risk Management**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Project Management	Risk Management	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Support the risk function in the development of uncertainty analysis of the projects, both on cost and schedule uncertainty. Including the performance of statistical simulations (Montecarlo) to support such estimations and scenarios.
- Collaborate with cross-functional teams to integrate scheduling solutions and risk management.
- Analyze simulation results and provide recommendations for optimization and improvement.
- Develop tools and software solutions to support Monte Carlo schedule analysis.
- Support on the Risk function integration process between ITER International Organization and Fusion for Energy.
- Support on the Risk Culture change program within Fusion for Energy.

#### **Your qualifications**

Essentials:

• Bachelor's degree in Engineering, Computer Science, Mathematics, Project Management, or related field.

#### Advantageous:

- Master's degree in Engineering, Computer Science, Mathematics, Project Management, or related field.
- Familiarity with simulation tools and techniques, preferably experience with Monte Carlo simulation.
- Advanced Excel skills for data analysis, PowerPoint, and programming.

- Ability to work independently, in a team environment and to present complex data to project management.
- Proactive approach to work in problem-solving and initiative-taking.

## **Profile 16 - Programme Planning & Controlling/Cost Management**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Project Management	Programme Planning & Controlling/Cost Management	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Provide support in the development and maintenance of specific reports to summarize cost estimates and forecasted cost data.
- Provide support in managing the cost variances from one reporting period to another.
- Provide support in the review of cost estimates.
- Provide support in maintaining the cost database.
- Provide support in the management of project budget.

#### Your qualifications

Essential:

• Bachelor's degree in Engineering, Science, Economics or Business Administration.

#### Adventurous:

- Training or certification in Cost Management.
- Knowledge of cost estimation methods.
- Knowledge of project management principles and practices.
- Good knowledge of MS Office.

- Good interpersonal skills and ability to integrate into an international and multicultural environment.
- Strong communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.
- Proactive approach to problem-solving and initiative-taking.
- Strong teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.

## **Profile 17 - Nuclear Safety/Engineering Management**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Project Management	Nuclear Safety/ Engineering Management	Cadarache (France)	12 months	1

### **Description of tasks**

- Support the management of Nuclear Safety trainings (presentations, preparation, organisation, training material).
- Support the management of Nuclear Safety data and reporting (dashboards, SharePoint).
- Support the deployment of Nuclear Safety supervision plans.
- Participate in and follow supervision of activities classified for safety and environmental protection on ITER worksite.
- Support the management of multi-technical Nuclear Safety requirements (mechanical, Instrumentation & Control (I&C), vacuum, fire, etc.).
- Support the organization of Nuclear Safety culture activities.

#### **Your qualifications**

Essential:

• Bachelor's degree in Engineering, Nuclear Engineering, or equivalent.

#### Advantageous:

- Master's degree in Engineering, Nuclear Engineering, or equivalent is an asset.
- Basic knowledge in technical domains of Nuclear Safety: mechanical, electrical, thermodynamic, Instrumentation & Control (I&C), etc.

- Ability to work effectively in a team in a multi-cultural environment.
- Ability to dialogue with a wide variety of contributors and stakeholders.
- Analyse multiple and diverse sources of information to define problems and issue analyses accurately.
- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

# **BROADER APPROACH**

## Profile 18 - Beam Physics (International Fusion Materials Irradiation Facility - IFMIF)

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Broader Approach	Modelling with beam physics codes/Beam physics	Garching (Germany)	6 months	1

### **Description of tasks**

In the Beam dynamics for LIPAC accelerator configuration phase C/D: Study of degraded cases, the tasks will be:

- Perform beam dynamic simulation using the code TraceWin for the LIPAc (Linear IFMIF Prototype Accelerator accelerator) in its configuration for the phases C and D (beam operation with LIPAc fully assembled).
- Learning of LIPAc accelerator, its configurations and with Trace Win beam particle simulation code.
- Learning of Trace Win and the definition of a number of benchmark studies (to reproduce results already known for LIPAc configuration of Phase B and B+).
- Assistance in the simulation and study of a number of case studies, including degraded cases compared to the nominal configuration of LIPAc in Phase C and D.
- Carry out the post processing and critical understanding of Trace Win results and be proactive in the identification of new case studies, optimized configurations etc.

#### **Your qualifications**

Essential:

• Bachelor's degree in Physics, Particle Physics, Nuclear Physics, or equivalent.

#### Advantageous:

- Master's degree in Nuclear Physics.
- Internship/stage experience acquired in a large research facility (e.g. CERN, ALBA, etc.)
- Skilled and passionate by computer simulation codes.
- Interest in beam dynamics.

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

## Profile 19 - System Engineering (International Fusion Materials Irradiation Facility - IFMIF)

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Broader Approach	Quality management/Systems Engineering	Garching (Germany)	6 months	1

#### **Description of tasks**

In the IFMIF/EVEDA Experiments Configuration Management:

- Perform systematic search, analyses and organization of data collected during LIPAc experimental campaigns.
- Learning on LIPAc accelerator, its configurations, and the organization/collection of data during the experimental campaigns.
- Support in the systematic categorization and organization of the data following best system engineering and quality management principles.
- Carry out critical understanding of the collected experimental data and be proactive in the identification of categorization and documentation management solutions.

#### Your qualifications

#### Essential:

• Bachelor's degree in Engineering, System Engineering, Quality Management.

#### Advantageous:

- Experience in documentation and management of large databases.
- Skilled and passionate by configuration managements and documentation managements.

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Strong communication skills, both verbal and writen, fostering open dialogue, and ensuring information
  is effectively conveyed among team members. The selected candidate will need to interactand discuss
  openly with Japanese colleagues (working on experiential campaigns in Rokkasho, where LIPAc is
  based).

## Profile 20 - Power Supplies (Japan Torus-60 – JT60sa)

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Broader Approach	JT-60SA Power Supply	Garching (Germany)	12 months	1

### **Description of tasks**

- Support in the analysis of the documentation of all the power supplies of the superconducting coils, in order to develop a knowledge of the main aspects related to the power and control sections, the transducers and the measurement chain.
- Assistance in the development of models of the power supplies system, both for each component (Base Power Supplies, Quench Protection Circuits, Switching Network Unit) and for the complete circuit supplying the magnets, in order to support the operation of the power supplies for the commissioning verifying both the correct operation and predicting the behaviour/identifying the exceeding of the safe operational area.
- Validation of the models by comparison with the measurements acquired during the operation of the system.
- Support the operation of JT-60SA power supplies with the results of the model, for example in the troubleshooting during the plant operation, in the modification of possibly risky test conditions or in the optimization of some control systems.

#### **Your qualifications**

#### Essential:

• Bachelor's degree in Electrical or Electronic Engineering or equivalent.

#### Advantageous:

• Knowledge of electrical circuit simulation tools (not mandatory but preferable).

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

## Profile 21 - Divertor (Japan Torus-60 – JT60sa)

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Broader Approach	JT-60SA Magnets and Plasma Facing Components	Garching (Germany)	12 months	1

### **Description of tasks**

- Engineering analysis and Configuration Control in support of the development of a Tungsten Divertor for JT-60SA. Including thermal, mechanical and CFD analyses of the plasma facing components and diagnostics of the Tungsten Divertor.
- Follow-up of the manufacturing and integration contracts of the Tungsten Divertor of JT-60SA.
- Engineering analysis in support of JT-60SA vacuum monitoring system. Including the development of optimized pressure sensors and acquisition systems, and the testing, manufacturing and installation follow up.
- Engineering analysis in support of the cold testing of the ITER TF magnets. Including the maintenance and usage of the existing ANSYS models, and the benchmarking against the experiments in Cadarache.

### **Your qualifications**

Essential:

• Bachelor's degree in Engineering or Physics or equivalent.

#### Advantageous:

• Knowledge of ANSYS (thermal, EM, CFD) simulation tools (not mandatory but preferable).

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

## Profile 22 - Magnets and Cryogenics (Japan Torus-60 – JT60sa)

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Broader Approach	JT-60SA Magnets and Cryogeny	Garching (Germany)	12 months	1

### **Description of tasks**

- Support in the analysis of JT-60SA (possibly ITER) superconducting magnet system safety margins (electromagnetics, thermo-hydraulics) in operation conditions.
- Development of associated simulation tools and methods (magnets and cryoplant).
- Support in the post-treatment of JT-60SA superconducting magnets commissioning experimental database and comparison with models.
- Contribute in the addressing of JT-60SA singular problematics faced during commissioning (quench detection system, TF feeders' joint resistance...).
- Support in conducting predictive simulations of JT-60SA magnet system scenarios (possibly ITER TF coils acceptance tests).
- Possible atendance to experimental tests (conductors and strands AC losses).

#### **Your qualifications**

Essential:

• Bachelor's degree in Engineering or Physics or equivalent.

#### Advantageous:

- Minimum knowledge in electrical and/or electromagnetic disciplines.
- Minimum experience in scientific simulation with software.
- Minimum skills in software programming (e.g. Excel macros, Matlab...).

- Motivation in addressing academic / experimental challenges and to work in team environment.
- Initiative-taking.
- Adaptive and creative spirit.

# COMMERCIAL

## **Profile 23 - Market Analysis & Business Intelligence**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Commercial	Market Analysis and Intellectual Property	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Support to Market Analysis investigations in the area of Fusion.
- Support to Intellectual Property activities.
- Improvement of Data quality in the Market Analysis platform.

#### **Your qualifications**

Essential:

• Bachelor's degree in Management, Business Administration, Finance, Marketing, Procurement or Law.

#### Advantageous:

• Comfortable with IT tools: from standard MS suites to databases and AI.

- Strong sense of commitment, autonomy, and spirit of initiative.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas.
- Communication skills, both verbal and writen.

## **Profile 24 - Programming, Reporting & IT tools**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Commercial	Data Management/Analysis & Reporting	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Help define and make reports related to the broader European impact of F4E's activities.
- Provide quantitative reports and statistics related to the Commercial Department activities and responsibilities, as needed by F4E's management and services.
- Perform quantitative reports and statistics as needed by F4E's stakeholders.
- Establish and maintain guidelines for the different periodic reports.
- Improve and manage the CAPS database and system, which aims at supporting the associated contract management and procurement activities.
- Support the Commercial Department Reporting officer in training the external service providers for the Commercial Department Reporting and IT Tools cell (CRIT).
- Support the Commercial Department Reporting officer in project management tasks in relation to the development of Contract Management IT tools.

### Your qualifications

### Essential:

• Bachelor's degree in the areas of Engineering, Mathematics, Economics, or related fields.

#### Advantageous:

• Good knowledge and experience of MS Office, with particular focus on MS Excel (other: MS Word, and MS PowerPoint). A knowledge of IT tools for statistics, Power BI or SAP Business Objects will be an advantage.

- Numerical and analytical mindset with atention to detail.
- Proactive problem solver and able to perform duties autonomously with speed and accuracy, according to set schedules.
- Ability to build and maintain good working relationships as part of a team, supporting each other to achieve common goals.
- Good communication skills, both verbal and writen, fostering open dialogue and effective transmission of information will be an advantage.

### **Profile 25 - Budget Management**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Budget Group	Budget Management/Finance	Barcelona (Spain)	12 months	1

#### **Description of tasks**

You will be part of the Budget Group. We are a small group of 7 colleagues managing the European Union financial participation at ITER project. We are preparing the annual budget requests to the European Commission and France, deal with the calls for funding, follow up the forecast evolution and budget implementation. We also collaborate closely with other teams across F4E, collect and analyze all requests for financing and produce budgetary documents and reports to F4E commitees including F4E Governing Board. We liaise with the Directorate for Energy at the European Commission for ITER financing for the next few years. We have regular contacts with the budget team of ITER Organization in relation to the direct EU cash payments to ITER Organization and regarding the assigned revenue received mainly from ITER Reserve fund. Inside F4E, we provide daily support with financial operations in ABAC accounting system, help with the interpretation of F4E Financial regulation and other budget related issues.

As a trainee in the Budget Group, you will work as part of the team on a wide spectrum of administrative and operational tasks linked to the F4E's budget and related financial activities. Your tasks will include:

- Support the financial planning and monitoring of revenue and expenditure.
- Carry out budgetary reporting and monitor the monthly forecasting of ITER project activities.
- Support regular and specific financial data analysis of large and complex information.
- Carry out financial dashboard activities and related to the IT systems for forecasting and reporting.
- Support the optimisation of organisational compliance frameworks and rules relating to budget.

#### **Your qualifications**

Essential:

• Bachelor's degree in Accounting, Finance, Business Administration, Information Technology, or another relevant field.

#### Advantageous:

• Knowledge of data analysis and visualisaton tools, financial dashboards, development of resource planning software.

- Curious and eager to learn and want to further develop your ability to analyse complex information.
- Keen to collaborate with others, pursue team goals and proactive to problem-solving.

### **Profile 26 - Procurement**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Commercial	Procurement	Barcelona (Spain)	12 months	1

#### **Description of tasks**

- Support Procurement Officers on procurement procedure activities and other associated horizontal tasks (participating to Evaluation Commitees and preparation of the documentation for the Call for Tenders).
- Update and develop training or information material for bidders and, in particular, for small and medium-sized enterprises (SME's).
- Update and develop material to increase the knowledge and applicability of sustainable procurement criteria.
- Collaborate with process owners on the development and maintenance of process maps, policies, guidelines, and templates related to procurement, on the monitoring of compliance and on the improvement of process effectiveness and efficiency.

### **Your qualifications**

#### Essential:

• Bachelor's degree in Business Administration, Economics, Law, Communications. Engineering or Business or equivalent.

#### Advantageous:

- Master's degree in Business Administration, Economics, Law, Communications. Engineering or Business or equivalent is an asset.
- Process orientated with good knowledge and experience in MS Office.

- Excellent analytical, planning, and organisational skills.
- Self-motivated and able to perform duties autonomously.
- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills & collaborating effectively with colleagues.
- Excellent communication skills, both verbal and writen.

## **Profile 27 - Contract Management**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Commercial	Contract Management	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Support the Contract Managers on contract management activities: contractual performance tracking (e.g. incentives, liquidated damages, key performance indicators), preparation of Specific Contracts (under Framework Contracts), coordination of contract modification, application of indexation clauses, Supplier Relationship Management (SRM), payment planning.
- Support document and data management activities in commercial tools.
- Collaborate with Business Process Owners on Business Process Management (BPM) activities: development, maintenance and training on process maps, policies, guidelines, and templates related to contract management activities.

#### **Your qualifications**

Essential:

• Bachelor's degree in Business Administration, Economics, Law, Communications, Engineering, Business, or equivalent.

Advantageous:

- Master's degree in Business Administration, Economics, Law, Communications, Engineering, Business, or equivalent is an asset.
- Process oriented with advanced knowledge and experience of MS Office (MS Word, MS Excel, and MS PowerPoint).

- Excellent analytical, planning, and organisational skills.
- Self-motivated and able to perform duties autonomously.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.

# **ADMINISTRATION**

## Profile 28 - Data Protection, Ethics and Anti-Fraud Law

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Administration	Data Protection, Ethics and Anti- Fraud Law	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Support the Data Protection Officer in the implementation of the Regulation 1725/2018, including development of internal guidelines and processes, preparation of awareness raising sessions and training material.
- Support the Anti-Fraud Officer in the implementation of the Anti-Fraud Strategy, including development of internal guidelines and processes, preparation of awareness raising sessions and training material.
- Ensure that the intranet and external websites are up to date.
- Provide administrative support, as necessary.

#### **Your qualifications**

#### Essential:

• Bachelor's degree in Law or equivalent.

#### Advantageous:

- Knowledge of Data Protection Regulation.
- Interest in Ethics and Anti-Fraud issues.
- Knowledge of EU law.

- Proactive approach to problem-solving and initiative-taking.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.

### Profile 29 - EU Corporate Law

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Administration	EU Corporate Law	Barcelona (Spain)	12 months	1

### **Description of tasks**

- Assist in corporate legal maters arising within the context of the various legislative acts governing Fusion for Energy's (F4E) activities.
- Assist in providing legal advice related to F4E internal rules and processes.
- Assist in providing legal advice related to agreements with other bodies.
- Assist in legal knowledge management (organizing, updating, and maintaining Legal Service Unit knowledge resources).
- The trainee may in particular be required to carry out the following project legal tasks.
- Assist in F4E Project related legal maters regarding public procurement.
- Assist to provide legal support to Project Teams with respect to the procurement strategies and preparation of tender procedures and procurement contracts.

#### **Your qualifications**

Essential:

• Bachelor's degree in Law or equivalent.

#### Advantageous:

- Good understanding of the EU or public international law.
- Good understanding of contracts law.

- Proactive approach to problem-solving and initiative-taking.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.

## Profile 30 - Buildings, Infrastructure and Power Supplies (BIPS) Law

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Administration	Buildings, Infrastructure and Power Supplies (BIPS) Law	Cadarache (France)	12 months	1

### **Description of tasks**

- Provide legal advice in relation to the drafting, procurement and implementation of complex construction contracts based on the concept of traditional (such as FIDIC) and collaborative contracting (such as alliance).
- Provide legal advice over a wide range of maters including contract law, construction law, public procurement law, and/or public or private international law.
- Participate in complex contract and amendment negotiations and their preparation.
- Prepare and revise legal texts and internal documents related to the procurement activities of F4E, in particular under collaborative contracting and in joint procurements with the ITER Organization.
- Provide legal assistance in dispute resolution arising under complex construction contracts (such as mediation, adjudication or litigation before the Court of Justice of the EU).
- Perform international and national regulatory watch regarding the evolution of fusion regulations (main countries: UK, USA, Europe with a focus on France, Germany, and Spain, China, Russia, Korea, Japan, Canada, and activities of intergovernmental bodies: European Commission, IAEA, OECD/NEA, IEA, and possibly Fusion Industry Association).
- Support the organisation of the Fusion for Energy Roundtables and the preparation of the Roundtable Proceedings.
- Contribute proactively to the knowledge management efforts of the ITER Site and Buildings Legal Affairs Group.
- Provide support to the Legal Officers of the ITER Site and Buildings Legal Affairs Group.

### **Your qualifications**

Essential:

• At least Bachelor's degree in Law, Business Administration, or equivalent (or if the Bachelor's degree is not in these fields but in other fields such as Engineering or Physics, specialization in Law, Public Procurement, Construction Contract Management, or similar will be accepted).

#### Advantageous:

- Good understanding of contracts, and/or EU or public international law.
- Interest in innovative contracting, procurement, and project delivery, and/or in the regulation of novel technologies.

#### Competencies

• Proactive approach to problem-solving and initiative-taking, sharing ideas, and ensuring information is effectively conveyed among team members

### **Profile 31 - Human Resources Management**

This profile encompasses four distinct open positions focused in the following areas:

- 1. Diversity, Equity and Inclusion (DEI)
- 2. Learning & Development
- 3. Talent Acquisition & Mobility
- 4. Project Management

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Administration	Diversity, Equity, and Inclusion (DEI)	Barcelona (Spain)	12 months	1

### **Description of tasks**

The trainee will support Diversity, Equity, and Inclusion (DEI) efforts to create a more inclusive workplace through intentional inclusion with a focus on improving the experience for our staff members and external stakeholders. Responsibilities are varied and include supporting an array of projects related to Fusion for Energy equity and inclusion work, such as:

- Support F4E strategy and actions plans in the area of DEI.
- Collect, analyse, and interpret data to evaluate F4E strategy and inform future improvements.
- Conduct research and analysis, conceptualise new ideas.
- Stay abreast of best practices and recommend relevant initiatives for strategy, activities, and actions.
- Follow up the development of partnerships with external relevant networks to support DEI initiatives.
- Ensure the execution and logistics of DEI activities (workshops, surveys, focus groups, and other initiatives) as well as other administrative duties.
- Support the communication plan on DEI, internally and externally, with content and expert input, working cross functionally.

#### **Your qualifications**

Essential:

• Bachelor's degree Business, Management, or even Social Sciences.

Advantageous:

• Qualifications in Diversity, Equity and Inclusion is a strong asset.

- Analytical: Excellent research skills, combined with a proven analytical aptitude and ability to tap into a vast array of traditional and new knowledge sources.
- Organizational: Strong organizational, time management skills. Sound judgement and ability to work independently and keep track of tasks and deliverables.
- Teamwork: Demonstrates intercultural sensitivity in a multicultural environment.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Administration	Learning & Development	Barcelona (Spain)	12 months	1

### **Description of tasks**

The trainee will support F4E Learning and Development team in different projects such as:

- Supporting the design and implementation of initiatives that facilitate continuous learning.
- Supporting the evaluation of learning initiatives, with an emphasis of impact assessment.
- Contributing to the preparation of communication material (posts, articles, newsleter, emails, etc.).
- Helping to update learning resource and events information on F4E Learning Management System (LMS).
- Responding to various inquiries and information requests concerning learning opportunities.
- Assisting in the organization of learning events (face to face and remotely).
- Assisting in updating F4E learning databases and staff learning records.
- Assisting in tracking, monitoring and reporting on learning activities through learning management systems and other data collection methods.
- Performing tasks as requested by supervisor, as appropriate.

### **Your qualifications**

Essential:

• Bachelor's degree Business, Management, or even Social Sciences.

#### Advantageous:

• Post-graduate or Master's degree in Human Resources Management.

- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, ensuring information is effectively conveyed among team members and towards the organisation.
- Planning and organizational skills: ability to deliver work on time, and organise resources needed to efficiently accomplish own work (time, resources, and information).
- Proactive approach to problem-solving and initiative-taking.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Administration	Talent Acquisition & Mobility	Barcelona (Spain)	12 months	1

#### Description of tasks

As trainee, your responsibilities, while shadowing your mentor, will consist in performing all practical and administrative duties assigned by her/him, participating in learning experiences, assisting on projects, offering suggestions for improvement, and atending meetings and workshops. You should be able to work in a team and be prepared to step outside of your comfort zone.

To be successful as a trainee, you should always be expanding your academic knowledge and sharpening your communication skills. Outstanding candidates learn from their mentors, but also feel confident sharing their own ideas with the team.

Your tasks will be:

- Assistance in the management of the trainees group (induction sessions, absences, meetings, etc.)
- Assistance in the selection and recruitment of new trainees: new Call, management of Applicant Tracking System for trainees, interviews, web updates, etc.
- Preparation of communication material for employer branding actions and participation in job events.
- Assistance in the ellaboration of a PhD/Post-Doc programme/implementation of agreements with new partner associations.
- Organisation of round-table discussions for trainees
- Assistance in the development of an F4E alumni portal site.
- Support to the Talent Acquisition's team in the management of recruitment processes as deemed necessary.
- Run feedback surveys and production of reports.

The list is not exhaustive and ad-hoc tasks might be assigned according to the team's needs as well.

#### **Your qualifications**

Essential:

• Bachelor's degree Business, Management, or even Social Sciences.

#### Advantageous:

- Post-graduate or Master's degree in Human Resources Management.
- Proficient in drafting clear and compelling communications and knowledge in digital communication.
- Experienced in organising events.
- Advance User Microsoft Office Suite (including Excel/Power BI).

- Strong communication skills, both verbal and writen, fostering open dialogue and ensuring information is effectively conveyed among team members.
- Proactive approach to problem-solving and initiative-taking.
- Strong teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Project Management	Competence Management/ Project Management/ Quality	Barcelona (Spain)	12 months	1

### Description of tasks:

- Provide support to the definition of Quality and Nuclear Safety Unit learning and development plan and monitor it implementation.
- Support the organisation of related domain trainings and their implementation.
- Support the Unit planification and deployment of workshops/events in within F4E organisation or externally (as project management).
- Support the management and deployment of Quality Culture.
- Analysis current Unit repository systems, define and deploy improvements plan (share folders, use of Microsoft Teams, Unit Share Point...).
- Support to the monitoring of the Quality supervision and Control activities.

### Qualifications

Essential:

• Bachelor's degree in Business Administration.

#### Advantageous:

- Postgraduate or Master's degree in Human Resources
- Knowledge in Project Management
- Knowledge of Engineering
- Advance User Microsoft Office Suite (including Excel).

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.
- Willingness to work in an international environment.

### **Profile 32 - Event Management**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Administration	Facility and Event Management	Barcelona (Spain) and Cadarache (France)	12 months	2

### **Description of tasks**

- Assist the management for requests of press, publications and books dealing with suppliers.
- Support the HCS Unit in the day-to-day facilities management including but not limited to supervising repair & maintenance works, equipment, and furniture, ordering of goods and services, distribution of Personal Protective Equipment, evaluation of service quality, and contract administration.
- Help in the organisation of events such as workshops, dinners, away days, end-of-year parties, catering, ITER site visits, team buildings, campaigns, transportation services, etc.
- Assist in the management of office spaces and inventory.
- Conduct routine inspections and ensure all facilities are working in good order to avoid any disturbance.
- Support the implementation of procedures and tools for organising events and proposing improvements.
- Support administrative procedures such as recording invoices, elaborating Order Forms, Purchase Orders, or Imprest account requests.
- Assist in the preparation of Calls for Tenders.
- Support the process to get Eco-Management and Audit Scheme (EMAS) certification for F4E (calculating the impact of online and in-presence meetings etc).
- Contribute to the work of the Working Group's Sustainable Meetings & Events.
- Help the work of the Women's Network in F4E and Gender Sensitivity Working Group.

#### Your qualifications

Essential:

• Bachelor's degree on Facilities Management, Communication, Tourism, Business Administration, or equivalent.

Advantageous:

- Excellent computer literacy. Knowledge of Office tools. Knowledge of other office related software and databases is considered an advantage.
- Customer service orientation.

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

### **Profile 33 - Communication**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Administration	Communication	Barcelona (Spain)	12 months	1

#### **Description of tasks**

• Provide assistance in the development and implementation of the F4E social media presence.

### Your qualifications

• Bachelor's degree in Communication or similar.

- Creativity, content creation.
- Community engagement skills.
- Social media analytic skills.
- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Project Management	Communication in Systems Engineering	Barcelona (Spain)	12 months	1

#### **Description of tasks**

- Give visibility of the Systems Engineering activities within F4E.
- Improve the Systems Engineering culture in F4E.
- Support the events/trainings organised by the Systems Engineering Group.

#### **Your qualifications**

Essential:

• Bachelor's degree in Communication or similar.

#### Advantageous:

• Power BI skills, including underlying technology knowledge.

- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.
- Empathy and listening, taking onboard and simplifying complex topics into clear messages.
- Curiosity in technical domains.

## **Profile 34 - Digital Transformation**

Department	Domain/Activity area	Location	Duration	Nr of position(-s) available
Administration	Digital Transformation	Barcelona (Spain)	12 months	1

### Description of tasks

- Make changes and develop new features for existing applications.
- Troubleshoot problems that the users report on our appevetlications and fix bugs.
- Collaborate in the development of brand-new applications (always in collaboration with the senior members of the team).
- Update the "look&feel" of our applications following the User Interface design already in place (working with CSS and client-side frameworks like angular).
- Other kind of tasks (always related to IT systems) like powershell scripting, build&release pipeline maintenance, data updates and corrections, etc.

All the tasks enumerated above will be carried out in an environment with the following characteristics:

- Applications build using the .Net stack:
  - Angular
  - SASS (CSS extension language)
  - ASPNet Core
  - C#
  - Entity framework
  - o MS SQL Server
- Cloud native applications hosted in Azure.
- Azure Devops repos and pipelines
- CI/CD
- Kanban

#### **Your qualifications**

• Bachelor's degree in Engineering or equivalent.

- Proactive approach to problem-solving and initiative-taking.
- Teamwork skills, collaborating effectively with colleagues, sharing ideas, and supporting each other to achieve common goals.
- Communication skills, both verbal and writen, fostering open dialogue, and ensuring information is effectively conveyed among team members.
- Knowledge on some of the technologies listed in the description of tasks (.Net stack, Azure, Kanban, etc.).