

# IO1964 Electro-mechanical Engineer - PED-146

## General information

Job category	Standard
Status	Published
Department	PED / Plant Engineering Department
Division	PED / Electrical Engineering Division
Section	PED / EED / Cable Management Sub-Section

## Job description

Main job	Engineering - Mechanics
Title of the position	Electro-mechanical Engineer - PED-146
Job family	Engineer - 1
Grade	P2
Direct employment	Not required
Purpose	<p>Responsible for the execution of civil, mechanical, hydraulic and seismic engineering analyses and design activities which are required to implement construction adaptation for electrical components, enclosures, control cubicles, and cable trays of the ITER plant systems.</p> <p>The area of responsibility includes both safety and non-safety related components.</p> <ul style="list-style-type: none"><li>-Produces engineering design documentation, including execution drawings and installation instructions;</li><li>-Performs engineering analyses for components and structures required to support or anchor electrical components, including design of post-drill plates and secondary beams to anchor the systems;</li><li>-Executes the mechanical, thermal and hydraulic design and analysis of electrical components, including their supports, penetrations and feedthroughs for busbars, cables and cable trays;</li><li>-Follow-up the design, manufacturing and testing of mechanical and hydraulic parts of electrical components, including supports, penetrations and feedthroughs;</li><li>-Responsible Officer in charge to monitor and follow up the work performed by contractors;</li><li>-Witnesses qualification tests and factory acceptance tests;</li><li>-Checks the on-site contractor for installation, testing and commissioning activities;</li><li>-Support the Electrical Division in the resolution of Field Change Requests, Deviation Requests and non-conformities triggered during the site installation of Electrical components;</li><li>-May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays;</li><li>-May be requested to be part of any of the project/construction teams and to perform other duties in support of the project schedule;</li><li>-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</li></ul> <p>-Under the supervision of the Cable Engineering Sub-section Leader, reports to the Division Head;</p> <p>-Acts as an interface between all members of the Electrical Engineering Division, ITER Design Office, Engineering Support Companies contracted by the ITER Organization and the ITER domestic Agencies;</p> <p>-In response to requests from the Director-General and/or Plant Engineering Department (PED) Head or proactively, informs the DG/ PED Department Head of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.</p>
Main duties / Responsibilities	
Measures of effectiveness	<ul style="list-style-type: none"><li>-Performs effectively the design and construction activities of the Electrical Engineering Division for the scope of activities;</li><li>-Ensures proper execution of Mechanical Engineering design and analyses required to support the design and installation of electrical components;</li><li>-Contributes effectively the activities related to resolution of interfaces issues between electrical components, tokamak machine, plant systems and buildings;</li><li>-Contributes effectively the activities related to resolution of design integration issues between</li></ul>

electrical components, tokamak machine, plant systems and buildings for the scope of activities;  
 -Manages interface between ITER divisions and Domestic Agencies by maintaining an effective communication with all parties delivering subsystems.

Project Construction Phase

## Applicant criteria

Level of study	Master or equivalent degree
Diploma	Electro-mechanical engineering or equivalent
Level of experience	At least 5 years
Technical experience/knowledge	<p>-Strong competences in design and analyses of civil, mechanical and hydraulic engineering, with basic knowledge of electrical systems.</p> <p>-At least 5 years' experience in design and/or installation of large Electrical and/or Mechanical components including cable trays and associated mechanical supports, comparable with those of the ITER electrical systems;</p> <p>-Good knowledge in structural analysis codes, mainly Eurocode3 and/or ANSI N690;</p> <p>-Experience in welding and seismic analyses;</p> <p>-Experience in nuclear projects is considered an advantage;</p> <p>-Extensive experience in similar jobs (involving similar work responsibilities) and/or additional training certificates in relevant domains may be considered a reasonable substitute for the required educational degree.</p>
Social skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit</p> <p>-Collaborative and positive personality;</p> <p>-Ability to facilitate dialogue with a wide variety of contributors and stakeholders;</p>
General skills	<p>-Ability to analyze multiple and diverse sources of information to define problems accurately within the defined schedule;</p> <p>-Ability to work under deadline pressures;</p> <p>-Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.</p>
Languages	English (Fluent)
Specific skills	<p>Ansys, CATIA, Computer Aided Design, ENOVIA</p> <p>-Experience in using tools for Mechanical Engineering analyses, both structural and process analyses;</p>
Others	<p>-Experience in using 2D tools for production of diagrams for Electrical and P&amp;ID;</p> <p>-Experience in using 2D 3D CAD Mechanical tools;</p> <p>-Good knowledge of some of the following software tools is an advantage: ANSYS, AFT Fathom, GT strudl, ENOVIA, CATIA and AVEVA PDMS.</p>