

IO1540 Structural Analysis Civil Engineer CIO-010

General information

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| Job category | Standard |
| Status | Published |
| Department | CIO/ Central Integration Office |
| Division | CIO / Analysis Section/Division |

Job description

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| Main job | Engineering - Civil engineering |
| Title of the position | Structural Analysis Civil Engineer CIO-010 |
| Job family | Engineer - 1 |
| Grade | P2 |
| Direct employment | Not required |
| Purpose | <p>To perform structural analyses and develop solution for the structural verification of civil structures and mechanical components following requirements and priorities defined by the Analysis Section / Division Head.</p> <p>The activity will include the creation of geometric and computational models derived from Computer Aided Design (CAD) models or drawings, to present the results, to demonstrate their accuracy and to write reports of the analyses to the standard required for structures and equipment in Nuclear Power Plants.</p> <p>The analyses will be in support of the demonstration of the structural reliability of civil constructions and components in normal and extreme conditions including beyond design basis events.</p> |
| Main duties / Responsibilities | <p>Prepares finite element (FE) or computational models;</p> <p>Performs structural analyses for the structural verification of ITER civil constructions and mechanical components following methodologies and procedures applied in Nuclear Installations;</p> <p>Proposes solutions for the demonstration of compliance of components with the design criteria for Nuclear Installations;</p> <p>Prepares detailed and summary analysis reports;</p> <p>Develops programs, macros and software routines to interface programs for common use across the project;</p> <p>Develops and improves the interface of FE programs with CAD system;</p> <p>Contributes to the update and record of the FE model developed inside the ITER Organization and by the DA's;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan & upon management request;</p> <p>May be requested to belong to any project team dealing with above activities and perform other duties upon management request;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> |
| Measures of effectiveness | <p>Reports to the Analysis Section / Division Head;</p> <p>Acts as an interface between with all other ITER Departments;</p> <p>In response to requests from the Director-General and/or Head of Central Integration Office (CIO), Head of CIO or proactively, informs the DG/ 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> <p>Provides accurate calculations according to the defined schedule;</p> <p>Provides comprehensive reports and summaries of the performed and revised analyses;</p> <p>Contributes to cost saving and improvement of work efficiency;</p> <p>Generates and maintains trustworthy, up to date information related to the machine technical scope.</p> |
| | Project Construction Phase |

Applicant criteria

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| Level of study | Master or equivalent degree |
| Diploma | Civil Engineering or other related discipline |
| Level of experience | At least 5 years |
| Technical experience/knowledge | <ul style="list-style-type: none"> - At least 5 years of experience in structural mechanical calculations and related activities; - Experience in the preparation of stress test report for Nuclear Installations; - Experience in the use of finite elements analysis software; - Basic Project Management experience is required. <ul style="list-style-type: none"> - Knowledge of design criteria for nuclear and non-nuclear civil constructions and mechanical components; - Knowledge of analysis methodologies for normal and extreme events including those that are considered beyond design basis for Nuclear Installations. |
| Social skills | Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit |
| Languages | English (Fluent) |
| Specific skills | MS Office standard (Word, Excel, PowerPoint, Outlook) |
| Others | Experience using computer usage (super computer, cluster machines, stand-alone work station); Experience in the use of finite element software; Experience working with Microsoft Office suite of programs. |