

BIM Engineer

Within Edvance, the Civil Engineering (CE) Department (290 people) is the technical skills centre for the areas of Civil Engineering and the Technical Coordination of buildings. It is involved in all new nuclear projects in France and abroad. It has multiple roles:

- Overall design of NI (nuclear island) buildings: Building architecture, functional specification, multi-trade technical coordination and technical installation
- Cross-functional and dimensioning studies: Licensing, safety studies, structural dimensioning calculations, seismic studies, impact and explosion studies, etc.
- Specification and management of civil and structural engineering contracts
- Specification and management of main CE works contracts and sub-trades contracts.
- CE maintenance activities and analysis of the harmful effects of pathologies.

Within the CE department, the BIM group is responsible for defining the BIM processes required for all projects (HPC, SZC, EPR2, JNPP, etc.) and for implementing effective tools. Its main areas of activity are:

- **Technical specifications:** It defines technical specifications of tools/applications that will be developed by other entities within Edvance and EDF.
- **Development:** It develops tools or applications for which the BIM group is responsible in order to meet the needs of the engineers/designers in the production teams. These are developed using C# and Python and implemented in production tools such as TEKLA, PDMS, etc.
- **Tests:** It carries out tests on applications developed by other entities or internally within the EDF group. It notifies these entities of the results of these tests and the updates to be made.
- **Data management:** It puts in place data management tools required by the production teams.

A BIM engineer contributes to the design and construction of nuclear power plants by bringing his/her skills to the production and implementation of efficient tools for civil engineering activities.

He/she works with all Edvance engineering departments and collaborates with partners in the field of Civil Engineering such as Design Offices and Manufacturers.

Programming in C#, Python or SQL is also part of his/her daily work.

Structural Design Engineer

Within Edvance, the Civil Engineering (CE) Department (290 people) is the technical skills centre for the areas of Civil Engineering and the Technical Coordination of buildings. It is involved in all new nuclear projects in France and abroad. It has multiple roles:

- Overall design of NI (nuclear island) buildings: Building architecture, functional specification, multi-trade technical coordination and technical installation
- Cross-functional and dimensioning studies: Licensing, safety studies, structural dimensioning calculations, seismic studies, impact and explosion studies, etc.
- Specification and management of CE construction design contracts
- Specification and management of main CE works contracts and sub-trade works contracts.
- CE maintenance activities and analysis of the harmful effects of pathologies.

Within the CE department, and more specifically within the dedicated expertise group for all projects (HPC, SZC, EPR2, JNPP, etc.), the engineer is responsible for the technical expertise and management of structural studies for all projects. His/her main areas of activity are:

- Carrying out and/or managing **civil engineering design studies** (reinforced concrete, steel structures).
- Carrying out and/or managing **structural dynamics studies** (seismic, impacts).
- **Drawing up methodology notes** for structural analysis.
- Helping to **determine the requirements and design methods for the nuclear island installations** (definition and application of safety requirements, application of codes, installation interfaces, etc.).
- Contributing to the development of the **technical guidelines and civil engineering principles** (codes, tools, methodologies).
- **Resolving design difficulties** and leading technical meetings with internal and external stakeholders.

A Structural Design Engineer assists in the design and construction of nuclear power plants by contributing his/her skills to the design and the carrying out of civil engineering activities.

He/she works with all Edvance engineering departments and collaborates with partners in the field of Civil Engineering such as Design Offices and Manufacturers.

Civil Engineering Design Engineer

Within Edvance, the Civil Engineering (CE) department (290 people) is the technical skills centre for the areas of Civil Engineering and the Technical Coordination of buildings. It is involved in all new nuclear projects in France and abroad. It has multiple roles:

- Overall design of NI (nuclear island) buildings: Building architecture, functional specification, multi-trade technical coordination and technical installation
- Cross-functional and dimensioning studies: Licensing, safety studies, structural dimensioning calculations, seismic studies, impact and explosion studies, etc.
- Specification and management of CE construction design contracts
- Specification and management of main CE works contracts and sub-trade contracts.
- CE maintenance activities and analysis of the harmful effects of pathologies.

Within the CE department, and assigned to an in-house team working on a project (HPC, SZC, EPR2, JNPP, etc.), the engineer is responsible for managing the design and construction studies for the buildings entrusted to him/her. His/her main areas of activity are:

- **Point of contact** for all CE issues affecting the buildings, either to deal with them directly or to pass them on to the correct department and the appropriate entity,
- **Coordination of other engineering personnel involved in the civil engineering of his/her buildings**, such as CE batch managers, model and installation designers and specialised design engineers (e.g. anchoring materials, licensing, finishes, structural calculations, etc.),
- **Overall management of civil engineering design and construction studies**, in conjunction with the design and construction contract managers, and participation in monthly contract management meetings if necessary,
- **Providing support to the EPR site** in the event of a request for clarification of the design package provided to the client or a request for design adaptation.

A Civil Engineering Design Engineer assists in the design and construction of nuclear power plants by providing expertise in the design and carrying out of civil engineering activities.

He/she works with all Edvance engineering departments and collaborates with partners in the field of Civil Engineering such as Design Offices and Manufacturers.

Sub-trade Design and Construction Engineer

Within Edvance, the Civil Engineering (CE) department (290 people) is the technical skills centre for the areas of Civil Engineering and the Technical Coordination of buildings. It is involved in all new nuclear projects in France and abroad. It has multiple roles:

- Overall design of NI (nuclear island) buildings: Building architecture, functional specification, multi-trade technical coordination and technical installation
- Cross-functional and dimensioning studies: Licensing, safety studies, structural dimensioning calculations, seismic studies, impact and explosion studies, etc.
- Specification and management of CE construction design contracts
- Specification and management of main CE works contracts and sub-trade works contracts.
- CE maintenance activities and analysis of the harmful effects of pathologies.

Within the CE department, and more specifically within the dedicated expertise group, for all projects (HPC, SZC, EPR2, JNPP...), the engineer provides expertise and support to the various projects, and responds to technical requests at all stages of engineering. His/her main areas of activity are:

- **Project and Engineering phase:** You will participate in the preparation of bids for upcoming projects, and assist with the specification of studies and works.
- **Procurement phase:** You will participate in the contractualisation of supply contracts, checking specifications, assisting in the writing of acceptability documents and holding technical meetings with suppliers.
You will monitor the compliance of the suppliers' technical documentation with the requirements.
- **Construction Phases:** You will conduct and manage the development of technical solutions in response to project requests related to adaptations, non-conformities, construction discrepancies and operating or manufacturing constraints.

A Sub-trade Design and Construction Engineer contributes to the design and construction of nuclear power plants by providing expertise in the design and carrying out of civil engineering activities.

He/she works with all Edvance engineering departments and collaborates with partners in the field of Civil Engineering such as Design Offices and Manufacturers.