

# Job Notification Form, IIT Delhi

## Company Overview

**Name:** Caterpillar India Private Limited

**Website:** <https://www.caterpillar.com/>

**Company Type:** Core (Technical)

**Description:** For nearly 90 years, Caterpillar Inc. has been making sustainable progress possible and driving positive change on every continent. Customers turn to Caterpillar to help them develop infrastructure, energy and natural resource assets. Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. A lasting legacy of talented and committed employees give Caterpillar its competitive edge. It is our team that has allowed this company to accomplish great things. From the construction of the Hoover Dam, to facilitating communication for the Apollo moon-landing mission, to earthquake relief in Indonesia, our employees have never failed to give customers enduring results through superior service and innovation.

## Job Details

**Designation:** Associate Engineer - Fire System Safety Design

**Type:** Core (Technical)

**Place of Posting:** Chennai, Bangalore

**Job Details:** As an Associate Engineer, you will have the opportunity to learn from and contribute in a collaborative team environment in the area of design of new global products and processes. This group enables electrification of Caterpillar products by working on identifying power sources (Battery, fuel cells, PV) to integrating with applications. This position will involve Fire System Safety design and development of Battery Systems, Energy Storage Containers, Bi-Directional Power Inverters, Chargers. In this entry-level engineering position, you will build your technical expertise while learning product development through practical application and staying abreast of innovative technology. You will also build your professional network, engage with peers and receive guidance from mentors in the field.

In this role, you will also deepen your knowledge base of Caterpillar's products, technologies,

processes, services, and systems, which you will use to:

- Design and development of components and Systems related to Fire Suppression Systems and configurations for Battery Energy Storage Systems to meet functional, reliability and durability & cost goals
- Identify Equipment related to Fire Detection & Suppression (Fire Alarm, Smoke Aspiration, Gas Suppression etc.), Lead / Perform design & development tasks such as technology selection, component and system integration involving Mechanical, Electrical and Control modules

- Develop Piping/Hydraulic layout to carry extinguishing fluid/medium and Selection of Hydraulic
- Control components such as Solenoid Valves, Section Valves etc.
- Validation - FEA Analysis, Test Data Analysis, Validation test planning
- Evaluate new products, processes, or systems
- Communicate results to customers, suppliers, team members, and other business units
- Contribute to the design of new products and processes
- Perform product and process maintenance

Requirements:

- Strong Knowledge of Fire Detection (Fire Alarms, Smoke Aspirators etc.) and Suppression Systems (Fire Extinguishing modules such as Water based systems like Sprinkler, Deluge System and Foam System)
- Understanding of power systems, Alternate energy systems and AC motor drives.
- Tools: Pro/E Creo, ANSYS, ABQUS, HyperMesh, SolidWorks.

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- Fire systems design concepts related to various components and systems
- Basic knowledge of any Dynamic / Vibration Simulation software.
- Demonstrated excellent judgement and decision-making ability, demonstrated ability to independently solve problems
- Ability to communicate technical information effectively with team members and others in the work groups

Desirable:

- Knowledge of Power Electronics, Generator, Wiring harness, motor and inverter controls, distribution systems and microgrids

**Joining By:** 1 June 2022

## Salary Details

<b>CTC:</b>	1,164,277 INR Per Annum
<b>Gross:</b>	983,076 INR Per Annum
<b>CTC Breakup:</b>	Fixed - 10,52,737 Variable - 1,11,540 Total CTC - 11,64,277
<b>Perks / Bonus:</b>	Group hospitalization (self & dependents) - 5,00,000 Group personal accident coverage (self) - 27,62,748 Term Life Insurance coverage (self) - 27,62,748
<b>Bond:</b>	Yes

## Selection Process

<b>Resume Shortlist:</b>	Yes
<b>Written Test:</b>	No

<b>Online Test:</b>	No
<b>Group Discussion:</b>	No
<b>Medical Test:</b>	No
<b>Personal Interview:</b>	Yes
<b>No. of Rounds:</b>	1
<b>No. of Offers:</b>	2
<b>Minimum CGPA:</b>	6.5 and Above with no current arrears

## Eligibility

<b>Recruiting PHDs:</b>	Yes
<b>Eligible Departments:</b>	M.Tech in Engineering Analysis & Design, M.Tech in Industrial Engineering, M.Tech in Mechanical Design, M.Tech in Thermal Engineering, M.S.(R) in Mechanical Engineering, B.Tech in Mechanical Engineering and M.Tech in Thermal Engineering