

Proforma

Companies open to your department

Company :	Caterpillar India Private Limited
Company Name :	Caterpillar India Private Limited
Nature Of Business :	Core/ Engineering/ Manufacturing
Designation :	Associate Engineer - Controls development of Engines, Gensets and Advance systems
Tentative Job Location :	Banglore/ Chennai

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.

**Controls development for Engines, Gensets and Advanced systems**

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. 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.

**Responsibilities:**

In this role, you will also deepen your knowledge base of Caterpillar’s products, technologies, processes, services and systems, which you will use to:

- Work on Controller development and selection
- i. Evaluate Controller requirements, identify subsystems and develop strategies
- i. Model in Loop (MIL) Simulation & Hardware in Loop (HiL) validation
- i. Communicate results to customers, suppliers, team members, and other business units
- i. Perform product and process maintenance

Description :

**Requirements:**

**For Engine Controls (Mechanical):**

- i. Sound understanding of IC Engine fundamentals and working principle.
- i. Understanding of open & closed loop control system, controller requirements and calibration.
- i. Sound understanding of Engine Mechanical system components design like Air systems, Fuels systems, Exhaust
- Systems, etc
- i. Working knowledge of MATLAB/Simulink
- i. Excellent Verbal and Written Communication Skills
- i. Ability to work in teams as well as independently

**For Gensets and Advanced systems Controls (Electrical/ Electronics):**

- i. Good background in power electronics
- i. Understanding of open & closed loop control system, controller requirements and calibration.
- i. Understanding of power, Alternate energy systems, power distribution systems and microgrids
- i. Understanding of AC motor drives and inverter controls.
- i. Working knowledge of MATLAB/Simulink
- i. Excellent Verbal and Written Communication Skills
- i. Ability to work in teams as well as independently

**Desirable:**

- i. Working knowledge of PSCAD for grid simulations.

	Department	BT	BS	MT	Double	Major	dual	dual	B	dual	C	Mdes	MBA	Phd	MSc	MSR
Eligibility :	AE	N	-	Y	N		Y	Y	Y	-	-	N	-	Y		
	BSBE	N	-	N	N		N	N	N	-	-	N	-	N		
	CE	N	-	N	N		N	N	N	-	-	N	-	N		
	CHE	N	-	N	N		N	N	N	-	-	N	-	N		
	CSE	N	-	N	N		N	N	N	-	-	N	-	N		
	EE	N	-	Y	N		Y	Y	Y	-	-	N	-	Y		
	ES	-	N	N	-		N	-	N	-	-	N	-	-		
	ME	N	-	Y	N		Y	Y	Y	-	-	N	-	Y		
	MSE	N	-	N	N		N	N	N	-	-	N	-	N		
	PHY	-	N	-	N		N	N	N	-	-	N	N	-		
	CHM	-	N	-	N		N	N	N	-	-	N	N	-		
	MTH	-	N	-	N		N	N	N	-	-	N	N	-		
	ECO	-	N	-	N		N	N	N	-	-	N	-	-		
	DES	-	-	-	-		-	-	N	N	-	N	-	-		
	IME	-	-	N	-		-	N	N	-	N	N	-	-		
	CGS	-	-	-	-		-	-	-	-	-	N	-	N		
	HSS	-	-	-	-		-	-	-	-	-	N	-	-		
	EEM	-	-	N	-		-	N	-	-	-	N	-	-		
	MSP	-	-	N	-		-	-	-	-	-	N	-	-		
	NET	-	-	N	-		-	N	-	-	-	N	-	-		
	PSE	-	-	N	-		-	N	-	-	-	N	-	N		
	Stats	-	-	-	-		-	-	-	-	-	N	N	-		

Cost to Company :	INR 11,64,282 p.a.
Package Details :	Fixed payments - INR 10, 52,739 p.a.
Bond :	True
Bond Details :	2 years; delinking with bond - 2 lakhs
Medical Requirements :	Will be shared with selected students
Resume Shortlist :	True
Resume Shortlist Criteria:	GPA and projects
Aptitude Test:	True
Aptitude Test Duration:	35 minutes
Group Discussion:	True
Group Discussion Duration:	30 mins
Group Discussion Strengtd:	
Technical Test:	True
Technical Test Duration:	60 minutes
Technical Interview:	True
Technical Interview Duration:	30 minutes
Number of Techincal Interview	2

Rounds:  
HR  
Interview: False

---