

Centre for Industrial Solution and Advanced Training

**3 DAYS TRAINING PROGRAM ON  
SUBSTATION ENGINEERING, DESIGN,  
HV/MV TESTING OF ELECTRICAL  
EQUIPMENT'S, COMMISSIONING &  
MAINTENANCE  
(765KV/400KV/220/132/66KV)**

**21-23 Nov 2017, Nagpur, India**





(Technical- Electrical/Mechanical/Automation/Chemical, Behavioral & Soft Skill, Safety, Business Excellence, Safety & Energy Audit)

# Centre For Industrial Solution and Advanced Training

AN ISO 9001:2008 CERTIFIED

“A complete Training Solution Under One roof”

## 3 Days Training Program on

### **3 DAYS TRAINING PROGRAM ON SUBSTATION ENGINEERING, DESIGN, HV/MV TESTING OF ELECTRICAL EQUIPMENT'S, COMMISSIONING & MAINTENANCE (765KV/400KV/220/132/66KV)**

Applicable International standards (IEC, IEEE, IS) & specifications only for Electrical Engineers 21-23 Nov 2017 at Nagpur

#### Who should attend:

Electrical practicing Engineer/ Manager / Substation Supervisor, Application Engineer, Design Engineer, Maintenance Engineer.

**Prerequisite:** Basic knowledge of Electrical Engineering and substation.

**Objective:** Why you should attend the program? Check below. If you feel the answer is no, you must do attend. It's our objective to make you knowledgeable.

- ❖ I can design substation by my own?
- ❖ I can do wiring and connections for every element of substation.
- ❖ I can do set relay and make coordination by own.
- ❖ I knew the Engineering and engineering concepts behind substation and equipment's used.
- ❖ I can do selection & testing of all equipment's, can check polarities of all.
- ❖ I knew the steps taken on operation of BUS Bar and LBB protection.
- ❖ I am certain about reactive power compensation requirements.
- ❖ I knew the engineering significance for Vector group.
- ❖ I can do make parallel connections by own.
- ❖ I knew about tertiary windings.
- ❖ I can do carry out troubleshooting work of CB by own.

#### Course Content & Delivery Schedule:

Day	Sr no	Contents
1	1	Introduction to substation & Overview
	2	Design Criteria and Consideration for 765/400/220 KV substation
	3	Parameter Calculation
	4	Selection of Equipment
	5	Position, Layout and SLD

Branch Office: A-306, Creative Homes Apartments, Anupam Society, Katol Road, Nagpur-440013, MS, India.

Web: [www.cisat.co.in](http://www.cisat.co.in); Email: [vikas@cisat.co.in](mailto:vikas@cisat.co.in); Contact: +91- 7709012815 (Branches: Thane/Pune/Nagpur/Bhilai/Wardha)

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	6	Sectional Views, Clearances, BUS arrangement and Applicable standards
	7	AIS & GIS Substation
	8	Earth Mat design
2	1	Transformer
	2	Introduction to switchgear- Design & Selection (CT, PT, CVT, Isolator)
	3	Reactor, LA, Insulation Coordination
	4	Battery and Battery Charger
	5	Control room requirement
	6	Bay Control room concepts
	7	DG sets
3	1	Site Testing, Pre commissioning Testing of SS equipment' s
	2	Commissioning of Substation
	3	Overview of Protection (Line, transformer, LBB, Reactor & BUS)
	4	Control and Relay panels, Relay setting & coordination
	5	SCADA for substation
	6	Communication (Data, OPGW)
	7	Multiplexer/PLCC
	8	Q&A, Case studies

## Delivery Methodology:

- Introduction and Objective Setting
- Pre and Post Test,
- Knowledge Presentations,
- Assignments & Exercise,
- Case Study,
- Feedback and Assessment

## About CISAT:

Centre For Industrial Solution and Advanced Training is an ISO 9002:2015 certified Training Provider Company managed by professionals with rich Industry and teaching experience. Company involves in professional trainings and been providing training on various topics of Industry interest through various experts associated. More details are available on [www.cisat.co.in](http://www.cisat.co.in).

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## Training Facility:

CISAT has International level Training Centre Located in a learning atmosphere at Butibori, Nagpur (Maharashtra Region), India. It is equipped with training facility for up to 40 participants fully air conditioned, LCD Projector, Audio-video, White Board and all facility required for natural activities. It also has facility for Lodging and Boarding in a campus.

CISAT have facilities for practical' s on various topics such as,

1. Testing of Electrical Equipment' s
2. Electrical Drives
3. PLC (Allen Bradley/Siemens)
4. SCADA (Allen Bradley/Siemens)
5. Instrumentation (Sensors, Transducers, Meters etc)
6. Computer Lab with required software support
7. Electronics KITS for Experiments' .

We have support for various Industries for onsite Training as well Industrial visits as required.

**Trainer:** Trainer` s having Industrial work experience of more than 30+ Years and conducted many programs. They are internationally recognized.

## Registration Details:

**Dates of the program:** 21-23 Nov 2017 (3 Days).

**Participation fees:** INR 27000/- per delegate + GST@18% (Including Tea, Lunch, Snacks and Course Material only).

**Payment:** ECS/NEFT/DD in favor of “Centre for Industrial Solution and Advanced Training”

Payable at Nagpur, Maharashtra, India (For NEFT/ECS).

Account No: 0509102000003353 Bank: IDBI, Wardha- 442001, MS, India; IFSC Code:

IBKL0000509; Swift Code IBKLINBB007; MICR Code 000259000.

GST Code: 27ABBPW5589J1ZV; SAC Code 99-9293; State Code 27; PAN No: ABBPW5589J

**Venue:** *KEC, International Training Centre, Butibori, Nagpur, Maharashtra, India ( Butibori Industrial area, 18 KM from Nagpur Airport towards Hyderabad highway (Wardha Road))*

**For Registration, please do contact to,**

*We prefer on line Registration through our web [www.cisat.co.in](http://www.cisat.co.in).*

Vikas - 00-91-8669546332; 7709012815; [vikas@cisat.co.in](mailto:vikas@cisat.co.in); [cisat.nagpur@gmail.com](mailto:cisat.nagpur@gmail.com);

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With Best Regards & Thanks,

Mrs. Rupali, Director - Business Development.

**Centre For Industrial Solution and Advanced Training**

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*“Your Business Partner for Employee Development- Knowledge Always Leads”*

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CISAT CONFIDENTIAL

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