

## ABOUT THE INSTITUTE

Government Engineering College, Gandhinagar since its inception in 2004 is a front runner into academics. GEC-Gn has a very good industrial tie-up and consistent placement record. GEC-Gn is an active participant in various government schemes and projects like SSIP, Hackathon, etc.

### Vision:

To be a premier engineering institution, imparting quality education for innovative solutions relevant to society and environment.

## ABOUT THE DEPARTMENT

The Metallurgy Department since its inception in 2008 is a backbone of GEC-Gandhinagar's events, research activities and initiatives. It is a unique department in Gujarat under government umbrella. Faculty members are good blend of industrial/ academic research experienced, studied from national and state reputed institutes. Department has developed CoE NDT (Centre of Excellence) along with various equipped metallurgical laboratories. Students are encouraged and supported to actively participate in various curricular and extra-curricular activities at different level.

### Vision:

Developing excellence in Metallurgy Engineering education through research, development innovation and team work for the benefit of society and environment.

### Mission:

1. To prepare competent metallurgy engineers who can apply metallurgical fundamentals to control and manage different metallurgical and materials processing operations to

produce quality metals products in industries.

2. To deliver information about current trends in the field of metallurgy and materials to the students.
3. To encourage students to work on innovative projects related to metallurgy engineering for managing defects free, economical, energy efficient products, processes or devices to best serve the nation to fulfill the socio-economic, techno-commercial and environmental needs.

## ABOUT THE NITTTR, BHOPAL

### Ahmedabad, Extension Centre

NITTTR Regional Center Ahmedabad was established in 1974 and for last forty five years it is catering for the needs of the Gujarat State. It helps the Gujarat Technology University, Directorate of Technical Education State of Gujarat and other self-financed universities and institutes in improving quality of engineering and technical education by working as link between these organization and NITTTR Bhopal.

## OBJECTIVE OF THE PROGRAM

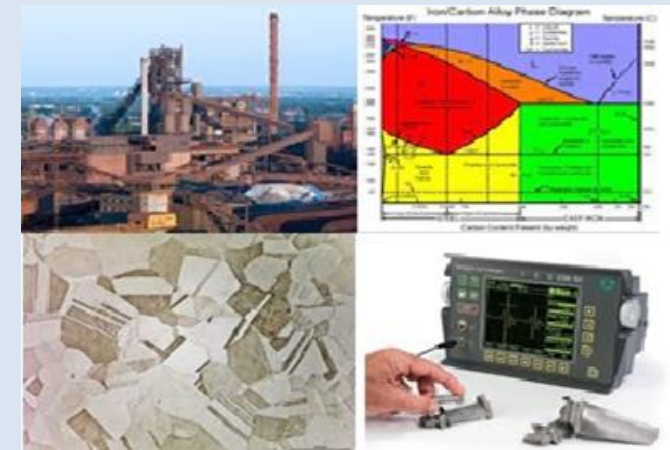
This FDP is intended to provide knowledge about various aspects of Metallurgy for all Engineering discipline. This FDP is organized to provide a platform for the participants to learn and understand concepts and fundamentals to integrate other disciplines in Metallurgy.



**NITTTR sponsored**

**DTE Approved**

*(As a part of celebration of 75 years of Azadi Ka Amrit Mahotsav)*



**One Week FDP On  
METALLURGY FOR ENGINEERS**

**16-20 October, 2023**

**Organized by**  
NITTTR, Bhopal Extension Center:  
Ahmedabad  
in collaboration with  
Metallurgy Department  
GEC, Gandhinagar

**Website:** [www.gecg28.ac.in](http://www.gecg28.ac.in)

## OUTLINE OF CONTENT

- Introduction to Metallurgy & Properties of Materials
- Research Trends in Metallurgy and Material Processing
- Phase Diagrams
- Application of Gibb's Phase Rule and Lever Rule for Iron-Iron Carbide Diagram
- Production of Iron and Steel
- Extraction of Non Ferrous Metals
- Heat Treatment Processes
- Welding Processes and Metallurgy
- Friction Stir Welding
- Metal Working Processes
- Foundry: Basics and Casting Processes
- Fundamentals of Corrosion
- Composite and Nano Materials
- Application of various NDTs
- Failure Analysis
- Hands on Experience/Visit at GEC Gandhinagar

## RESOURCE PERSONS

Course faculties consist of eminent experts from premier institutes and industries.

## FOR WHOM

All interested faculty members from technical institutions are requested to apply on TNA portal. SFI/Private/Industry participants should apply through NITTTR, Bhopal.

## REGISTRATION FEES

### For further details, contact:

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## ORGANIZING COMMITTEE

### Patron

Prof. (Dr.) Sweta Dave  
Principal-GEC, Gandhinagar

### Head of Department

Dr. I. B. Dave  
Head and Professor,  
Metallurgy Department

### Coordinator

Prof. Nishith Dubey (Coordinator and Professor)

### Co - Coordinator

Prof. (Dr.) H. H. Jadav (Asst. Prof.)

### Committee Members

Prof. S. I. Patel	Dr. D. G. Sharma
Dr. P. K. Nanavati	Prof. D. V. Mahant
Prof. B. R. Rana	Prof. H. H. Thakar
Dr. M. S. Dani	Prof. R. C. Ghanghas