DIRECTORATE OF TECHNICAL EDUCATION

Sponsored one week faculty development program on

Emerging Digital Technologies for Technical Education & Industry 5.0

14 – 18 DECEMBER 2026

Registration form

Name: _____

Designation: _____

Department: _____

Institute: _____

Address for correspondence:

_____

Mobile Number: _____

E-mail: _____

Experience in Years: _____

Type of Institute: Govt / Govt.Aided / Private

Registration Fees Paid: Yes / Not Applicable

Details of Registration fees: Online/Demand Draft

Demand Draft Details:

DD No. : Date:

Amount : 1000/-

Name of Bank:

Details of Online transaction:

Transaction ID: Date:

Place: Signature of applicant

Date:

Mr./Ms./Dr._____ is an employee of this institute and is hereby sponsored to attend the course, if selected.

Seal and Signature
Sponsoring authority

APPROVED AND SPONSORED BY

DIRECTORATE OF TECHNICAL EDUCATION, MUMBAI

ORGANISED BY

Department of Information Technology & Computer Engineering

Government Polytechnic, Thane

CHIEF PATRONS

Dr. Pramod Naik

Director, Directorate of Technical Education, Maharashtra

Dr. Dhanpal Kamble **Dr. Sunil Bhamare**

Joint Director

Directorate of Technical Education, Mumbai, Maharashtra

PATRONS

Dr. Maruti Jadhav

I/C Joint Director

Technical Education Regional Office, Mumbai, Maharashtra

Dr. Anil Nandgaonkar

Officer on special Duty

Directorate of Technical Education, Mumbai, Maharashtra

CONVENOR

Dr. Dattatray Mahajan

I/C Principal

Government Polytechnic, Thane

CHIEF COORDINATOR

Dr. Jitendra Nikhade

Head of Department, Information Technology

Government Polytechnic, Thane

PROGRAMME COORDINATOR

Dr. Varsha Khandekar

Ms. Vrushali Patil

ORGANISING COMMITTEE

All Teaching & Non-Teaching Staff Members

ONE WEEK DTE SPONSORED FACULTY DEVELOPMENT TRAINING PROGRAMME

Emerging Digital Technologies for Technical Education & Industry 5.0

14 – 18 DECEMBER 2026



"Empowering Educators, Enabling Industry 5.0."

Approved and Sponsored by

Directorate of Technical Education, Mumbai

Organized by

Department of Information Technology & Computer Engineering

Government Polytechnic, Thane

ABOUT THE INSTITUTE

Government Polytechnic, Thane, established in 1985, is one of Maharashtra's premier autonomous diploma engineering institutes. The institute is committed to delivering quality technical education through modern laboratories, experienced faculty, industry collaboration, research, innovation, and skill development. With an emphasis on outcome-based education and continuous improvement, the institute prepares technically competent professionals capable of contributing to the evolving needs of society and industry

ABOUT THE PROGRAMME

Emerging Digital Technologies such as AI, Cloud Computing, IoT, Digital Twins, Cyber-security, Robotics, and AR/VR are transforming engineering education and Industry 5.0.This FDP aims to enhance faculty competencies through hands-on training, expert sessions, and industry-oriented case studies, focusing on integrating emerging technologies into teaching–learning processes, laboratory practices, curriculum delivery, and student projects.

The programme promotes technological innovation, pedagogical excellence, and industry–academia collaboration while strengthening technology-enabled teaching practices and outcome-based education aligned with the MSBTE K-Scheme, OBE framework, and evolving industrial requirements.

PROGRAMME OBJECTIVES

1. To enhance faculty competency in emerging digital technologies and their applications in Industry 5.0 and modern engineering education.
2. To provide hands-on exposure to Artificial Intelligence, Cloud Computing, Internet of Things (IoT), Digital Twins, Cyber security, Robotics, and immersive technologies.
3. To enable faculty members to integrate emerging technologies into curriculum delivery, laboratory practices, student projects, and Outcome-Based Education (OBE).
4. To strengthen industry-academia collaboration through expert sessions, industrial case studies, and technology demonstrations.
5. To empower faculty members to design innovative classroom activities, laboratory experiments, interdisciplinary mini-projects, and skill-oriented learning resources aligned with MSBTE K-Scheme.

DAY-WISE PROGRAMME SCHEDULE

14/12/26 — Industry 5.0 and Digital Transformation

10:00–11:30	• Industry 5.0, Digital Transformation, Emerging Technologies and National Initiatives
11:45-01:15	• Applications of AI, Cloud, IoT, Digital Twin, Robotics and AR/VR in Engineering Education
02:15–03:45	• Hands-on: Digital Collaboration Platforms, AI Productivity and Content Creation Tools
04:00–05:30	• Faculty Activity: Designing Technology-enabled Teaching and Laboratory Activities.

15/12/26 — Artificial Intelligence and Intelligent Digital Tools

10:00–11:30	• Artificial Intelligence, Machine Learning and Generative AI Fundamentals
11:45-01:15	• Prompt Engineering, AI for Teaching, Research and Technical Documentation
02:15–03:45	• Hands-on: ChatGPT, Microsoft Copilot, Google Gemini, AI Image Generation and Presentation Tools
04:00–05:30	• Faculty Activity: AI-assisted Lesson Plans, Laboratory Manuals and Assessments

16/12/26 — Cloud Computing and Smart Connected Systems

10:00–11:30	• Cloud Computing, Virtualization, Service Models and Cloud Platforms
11:45-01:15	• Internet of Things (IoT), Edge Computing and Smart Connected Systems
02:15–03:45	• Hands-on: Cloud Deployment, IoT Dashboards and Data Visualization
04:00–05:30	• Faculty Activity: Developing Cloud and IoT-based Laboratory Experiments and Mini Projects

17/12/26 — Digital Twin, AR/VR and Cyber-security

10:00–11:30	• Digital Twin Technology, Smart Manufacturing and Industrial Automation.
11:45-01:15	• Augmented Reality, Virtual Reality and Extended Reality for Engineering Education
02:15–03:45	• Hands-on: Cyber security, Cloud Security, Data Privacy and Secure Digital Practices
04:00–05:30	• Faculty Activity: Designing Interdisciplinary Projects using Emerging Technologies

18/12/26 — Innovation and Future Technologies

10:00–11:30	• Robotics, Automation, Sustainable Manufacturing and Future Industry 5.0 Trends
11:45-01:15	• Curriculum Integration, Outcome-Based Education and Industry-linked Learning
02:15–03:45	• Department-wise Group Presentations, Technology Integration and Expert Feedback
04:00–05:30	• Valedictory Session, Institutional Action Plan, Participant Feedback and Certificate Distribution

WHO CAN APPLY

Registration is open to regular faculty members of AICTE/DTE-recognized Government, Government-Aided, and Unaided Polytechnics & Engineering Colleges of Maharashtra State.

IMPORTANT GUIDELINES

REGISTRATION FEES

- Faculty members of Government / Government Aided Institute: **NIL**
- For Faculty members of Unaided Polytechnics & Engineering Colleges : **Rs.1000/-**
  - ➢Demand Draft should be drawn in favor of "PRINCIPAL GOVT POLYTECHNIC, THANE" payable at Thane.
  - **OR**
  - ➢Online payment can be done to:
    A/c Name : PRINCIPAL GOVT POLYTECHNIC THN
    A/C No.: 11208816035
    IFSC code: SBIN0004319
    Branch: (04319) Thane Collectorate Campus, Netaji Shubhash Chandra Bose Road, Thane West-400601
- Participants must attach scanned copy of Demand draft/ Online Transaction receipt and duly signed registration form using the provided Google form registration link.
- Mode of training: **OFFLINE**
- Selection will be done by selection committee & selected candidates will be informed by email.

ACCOMODATION & TA/DA

- Outstation participants are requested to make their own arrangements for accommodation & night meal.
- TA/DA will be given as per Government norms.

REGISTRATION DEADLINE
09/12/2026

ACCEPTANCE BY E-MAIL
10/12/2026

REGISTRATION LINK
https://forms.gle/SFVBeytUQTSHL2zM7

CONTACT NUMBER
+91 9960601631
+91 8600661959

E-MAIL FOR CORRESPONDANCE
itacademicgpt@gmail.com