



Institute of Infrastructure, Technology, Research and Management. Ahmedabad.

Ph.D. Admission for Spring Semester (2026-27)

## Potential List of Supervisors and Research Area

### DEPARTMENT OF CIVIL ENGINEERING

| Sr. No. | Name of Faculty Member | Research Area                |
|---------|------------------------|------------------------------|
| 1       | Dr. Anand Mehta        | Remote Sensing Data Analysis |
| 2       | Dr. Jiten Shah         | Transportation Engineering   |
| 3       | Dr. Himanshu Sharma    | Water Resource Engineering   |
| 4       | Dr. Mahesh Mungule     | Structural Engineering       |
| 5       | Dr. Mamta Sharma       | Structural Engineering       |
| 6       | Dr. Manoj Langhi       | Water Resource Engineering   |
| 7       | Dr. Trudeep Dave       | Geotechnical Engineering     |
| 8       | Dr. Veerabhadra Rotte  | Geotechnical Engineering     |
| 9       | Dr. Yogesh U. Shah     | Pavement Materials           |
| 10      | Dr. Rohan Kar          | Water Resource Engineering   |
| 11      | Dr. Nishant Sharma     | Structural Engineering       |
| 12      | Dr. Ayyanna Habal      | Transportation Engineering   |

## **DEPARTMENT OF ELECTRICAL AND COMPUTER SCIENCE ENGINEERING**

### **Discipline: Electrical Engineering**

| Sr. No. | Name of Faculty Member  | Research Area                                                                                                             |
|---------|-------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1       | Dr Abhishek Rawat       | Drone Design, Satellite Communication                                                                                     |
| 2       | Dr. Dharmendra Sadhwani | Wireless Communication, communication systems, 5G/6G communication technology, active reconfigurable intelligent surfaces |
| 3       | Dr. Kshitij Bhargava    | Solar Cells, VLSI, Thin Film Transistors                                                                                  |
| 4       | Dr. Manjunath, K.       | Power & Energy Systems                                                                                                    |
| 5       | Dr. Priyesh Chauhan     | Power Electronics, Power Systems, Electric Transport, Microgrids, Renewable Energy                                        |
| 6       | Dr Rahul Kumar          | VLSI, Electronics Devices, AI in Healthcare                                                                               |

### **Discipline: Computer Science & Engineering**

| Sr. No. | Name of Faculty Member | Research Area                                                                                                            |
|---------|------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 1       | Dr Ravi Bhandari       | Mobile and pervasive Systems, Intelligent Transportation systems, Internet of Things, Computer and Wireless Networks, AI |
| 2       | Dr Ashish Soni         | Deep Learning, Machine Learning, Image Processing, Meta-heuristics Approach                                              |

## DEPARTMENT OF MECHANICAL AND AERO-SPACE ENGINEERING

| Sr. No. | Name of Faculty Member   | Research Area                                                                                                                                                                                                                                                                                 |
|---------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Dr Pramod Bhingole       | Materials and Manufacturing, process parameters optimisations, Advanced Materials and Manufacturing, Magnesium and Aluminium Alloys, Metallic Foams and Lightweight Sandwich Composites, Biomaterials and Bioresorbable Implants, Metal Matrix Composites, Surface Engineering, and Tribology |
| 2       | Dr. Sumit Tripathi       | Fluid Dynamics, Rheology, Emulsions, Multiphase Flow                                                                                                                                                                                                                                          |
| 3       | Dr. Kamlesh Joshi        | Machining of difficult-to-machine materials, ultraprecision machining and thermal modelling                                                                                                                                                                                                   |
| 4       | Dr. Ajit Kumar Parwani   | CFD, heat transfer, IC engines, renewable energy                                                                                                                                                                                                                                              |
| 5       | Dr. P L. Ramkumar        | Materials and Manufacturing process, Polymers and Composites, Design optimization, CAD/CAM, Product Development                                                                                                                                                                               |
| 6       | Dr. Dileep Kumar Gupta   | Refrigeration and Cold Chain, Climate Change, Indoor Air Quality (IAQ), CO <sub>2</sub> - trans-critical system and Eco-friendly Refrigerants, Thermal Engineering with Eco-Friendly and Energy Efficiency Systems                                                                            |
| 7       | Dr. Navneet Khanna       | Additive Manufacturing, Sustainable Manufacturing, Smart Manufacturing, Subtractive Manufacturing                                                                                                                                                                                             |
| 8       | Dr. Mithilesh K. Dikshit | Manufacturing, Metal cutting, Additive manufacturing, Molecular dynamics, Nanocomposites, Design for material and characterization, Sustainable materials, Polymer technology                                                                                                                 |
| 9       | Dr Kumar Abhishek        | Modelling and Optimization of Production Processes, Traditional and Non-traditional Machining of Difficult-to-Cut materials, Composite Machining, Additive Manufacturing                                                                                                                      |
| 10      | Dr. Ganesh Iyer          | 1. Interfacial problems using Molecular Dynamics<br>2. Medical device innovation                                                                                                                                                                                                              |
| 11      | Dr. Ajit Kumar           | Drone Technology, Flight Mechanics and Control, Machine learning-based modelling and Identification, Industrial IoT, Smart Instrumentation, Industry 4.0/5.0                                                                                                                                  |

## DEPARTMENT OF BASIC SCIENCES

| Sr. No. | Name of Faculty Member    | Discipline  | Research Area                                                                                             |
|---------|---------------------------|-------------|-----------------------------------------------------------------------------------------------------------|
| 1       | Dr. Brajesh Tiwari        | Physics     | Computational Material Science and Superconductivity                                                      |
| 2       | Dr. Prakashkumar A. Dabhi | Mathematics | Banach Algebras and Harmonic Analysis                                                                     |
| 3       | Dr. Manoj Choudhuri       | Mathematics | Number Theory, Ergodic Theory, Cryptography, Lie Groups and Topological Groups                            |
| 4       | Dr. Mohit Kumar           | Mathematics | Fuzzy set theory and its Applications, Optimization, Reliability Analysis, Multi-Criteria Decision Making |

## DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

| Sr. No. | Name of Faculty Member | Discipline | Research Area                                                                         |
|---------|------------------------|------------|---------------------------------------------------------------------------------------|
| 1       | Dr. Pravin Jadhav      | Economics  | International Business, Development Economics, Infrastructure Planning & Management   |
| 2       | Dr. Watitula Longkumer | English    | Northeast India Literature, Indigenous Literature                                     |
| 3       | Dr. Meera Vasani       | English    | Indigenous Literature, Eco-criticism, Diaspora Literature                             |
| 4       | Dr. Saurabh Sinha      | Psychology | Organizational Behaviour and HRM                                                      |
| 5       | Dr. Shukkoor T.        | Sociology  | Health & Society, Public Health Policy, Gender & Health Equity, Technology and Ethics |