VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE, MUMBAI-400019

Ph.D Supervisors details with Research Area

Department Name: Civil Engineering

Sr.No	Name of Supervisors	Vacant seats	Research Area
1	Dr. Abhay Bambole <u>View Profile</u>	1	Finite Element Method, Mechanics of Composites and Functionally Graded materials, FRP composites in Structural Strengthening and Retrofitting, Structural Health Monitoring, (UHFRPC), Structural Rehabilitation, Low Cost and Affordable Housing using low carbon and sustainable materials, Rehabilitation of Bridges, Tunnel Construction.
2	Dr. K. K. Sangle <u>View Profile</u>	5	Performance Based Design, Structural Health Monitoring, Stability and Seismic Analysis of Structures, Sustainable and Eco-friendly Infrastructure Development.
3	Dr.Sumedh Mhaske <u>View Profile</u>	2	Geographical Information System, Global Positioning System, Construction Management, Surveying and Mapping, Geotechnical Engineering, Geotechnical Earthquake Engineering, Transportation Engineering, Pavement Materials, Building and Town Planning, Construction Techniques
4	Dr A.S.Wayal <u>View Profile</u>	4	Water Resources Engineering, Surface and Subsurface Hydrology, Ground Improvements, Water Harvesting Techniques, Watershed Management, Rainfall Runoff Modeling, Construction Techniques
5	Dr. S. S. Pendhari <u>View Profile</u>	2	Computational Mechanics and Modelling, Finite Element Method, Smart Material Modelling, Application of FRPC in Civil Engineering, Concrete Technology
6	Dr. V. B. Deshmukh <u>View Profile</u>	4	Geotechnical Engineering, Earth Anchors, Retaining Structures, Subgrade Foundations, Ground Improvement Techniques
7	Dr. V.B.Varekar <u>View Profile</u>	0	Environmental System Modeling and Optimization, Environmental Monitoring, Water Quality Management, Water and Waste Water Treatment, Solid Waste Management, GIS and Remote Sensing Applications in Environmental Engineering, Environmental Laws and Policies
8	Dr. J.G. Solanki <u>View Profile</u>	3	structural Health monitoring, Seismic Analysis of Structures, Dampers and Base Isolation of structurers, Performarmance base analysis/design
9	Dr.Sreyashrao Surapreddi <u>View Profile</u>	4	Underground Structures and Tunnels, Transportation Engineering, Soil Dynamics and Geotechnical Earthquake Engineering, Ground Improvement Techniques, Finite Element Analysis (with Plaxis and Abaqus), Disaster Management (Landslides), Applications of GIS, Drone-Based Solutions to Solve Geotechnical Problems
10	Dr. Ninad Oke <u>View Profile</u>	4	Resource Recovery from Waste Streams, Water and Wastewater Management, Advanced Oxidation Processes, Circular Economy, Life Cycle Assessment, Sustainable Construction Practices
11	Dr. Kavita Ganorkar <u>View Profile</u>	3	Dynamic analysis of structure, blast resistant design of structure, fibre reinforced concrete characterization, retrofitting of structures
12	Dr. Sameer Sayyad <u>View Profile</u>	3	Membrane Based Separation Processes for Water and Energy Production, Energy Efficient Desalination, Wastewater Reuse, Low- Cost Wastewater Treatment, Adsorption and Ion Exchange,

13	Dr. Chandrashekhar	4	Life Cycle Assessment of Construction Materials, Operational
	Wagh		Energy Analysis of Buildings, Phase Change Materials (PCM),
	<u>View Profile</u>		Lightweight Aggregate Concrete, Aerated Concrete, Foam Concrete,
			High-Performance Concrete, Impact and Energy Absorption Analysis
			of Concrete, Sustainable Construction Materials and Techniques,
			Thermal Performance Evaluation of Construction Materials

Department Name: Mechanical Engineering

Sr.No	Name of Supervisors	Vacant	Research Area
		seats	
1	Dr. N. P. Gulhane <u>View Profile</u>	4	Heat Transfer, CFD, Solar Energy, Microfluidics, Fluid Mechanics, Automotive & EV
2	Dr. P.M.Karande <u>View Profile</u>	3	Industrial Engineering, Decision Sciences, Supply Chain Management
3	Dr. Vikas M. Phalle <u>View Profile</u>	2	Machine Design and AI ML, Tribology, Bearing Design, Vibration and Condition monitoring, AI, ML, CFD, Drone Design, Robot Design, EV, Design of Compressor, Rotor dynamics
4	Dr S A Mastud <u>View Profile</u>	5	Manufacturing Science, Additive Manufacturing, Robotics, Machining, Operations Management, AI ML in Manufacturing
5	Dr. Sachin S Naik <u>View Profile</u>	3	Mechanical Vibration, Vibration based structural health monitoring, Fracture Mechanics & Finite Element Analysis.
6	Dr. W.S.Rathod <u>View Profile</u>	5	Surface Engineering, Nano-Coating, Physical Metallurgy, Manufacturing, Production and Tribology
7	Dr. R. M. Tayade <u>View Profile</u>	4	Experimental Investigation on additive manufacturing of carbon fibre/PLA composite. Additive manufacturing of continuous glass fibre reinforced PLA/composite.
8	Dr. A. V. Deshpande <u>View Profile</u>	3	Fluid Dynamics, Computational Fluid Dynamics, Gas Dynamics, Thermal Engineering
9	Dr. H. P. Khairnar View Profile	2	Tribology, Automobile Engg
10	Dr. M. V. Tendolkar <u>View Profile</u>	3	Cryogenics, Refrigeration, Air Conditioning, Heat Exchangers, Thermal Engineering
11	Dr.V.B. Suryawanshi <u>View Profile</u>	2	Polymeric Composites, Additive Manufacturing, AI in Manufacturing, Finite Element Modeling of Material Behavior
12	Dr S G Jadhav <u>View Profile</u>	0	Tribology ,Machine Learning and Soft Computing Methods ,Fault Diagnosis of Roller Bearings
13	Dr. P.A. Wankhade <u>View Profile</u>	3	Automotive Engineering, Vehicle Dynamics, Vehicle Body Engineering, I.C. Engines, Electric and Hybrid Electric Vehicles, BMS, BTMS, Advance Heat transfer
14	Dr. G.U. Tembhare <u>View Profile</u> ment Name: Computer	4	Guided wave propagation ,NDE, Solid mechanics

Department Name: Computer Applications

Sr.No	Name of Supervisors	Vacant seats	Research Area
1	Dr. Swati Chopade <u>View Profile</u>	4	Wireless Sensor Networks, Machine Learning, Deep Learning, Cloud Computing, IoT, Quantum Computing

Department Name: Electrical & Electronics Engineering

Sr.No	Name of	Vacant	Research Area
	Supervisors	seats	
1	Dr. Faruk Kazi <u>View Profile</u>	5	Cyber-physical systems, Critical Infrastructure security
2	Dr. S. R. Wagh <u>View Profile</u>	3	Domains available in E-MC2: Large power system analysis, renewable integrated grid, electricity market, power system stability, RT-HIL, AI/ ML application in power system, optimization techniques, Control System, grid-connected converters, predictive maintenance, health monitoring of equipment's, vector control, Electrical Machines, Power electronics, Data data-driven modeling and control
3	Dr. Pragati Gupta <u>View Profile</u>	4	Power Systems, Markets, DSM, Protection,
4	Dr. Rajesh Patil <u>View Profile</u>	5	Signal and Image Processing, Medical Electronics, AI-ML Applications
5	Dr. Ayush Saxena <u>View Profile</u>	3	Electromagnetics, Control Systems, Antennas, RF and High power Microwaves
6	Dr. Rahul Ingle <u>View Profile</u>	1	Biomedical Signal and Image Processing, Machine Learning, Deep Learning, Artificial Intelligence
7	Dr. Neha Mishra <u>View Profile</u>	3	Micro/Nano fabrication Techniques (MEMS/NEMS), Semiconductor Device simulation & Technology, Sensor Design and Development, Lab- on-a-Chip Systems ,Point-of-Care Diagnostic, Microfluidics ,AI/ML
8	Dr. Gajanan M Galshetwar <u>View Profile</u>	3	Computer Vision, IoT, AI/ML, Image and Video Processing
9	Dr. Niteshkumar S. Agarwal <u>View Profile</u>	3	Sensor Technology, Nanotechnology, Plasmonic, Automation, Device Modelling and Simulations, Micro/Nano-fabrication, Optics, Communication, Space Technology

Department Name: Computer Engineering

Sr.	Name of	Vacant	Research Area
	Supervisors	seats	
1	Dr. M. M. Chandane	2	Wired and Wireless Networks, WSN and adhoc networks, IOT/IOTA,
	<u>View Profile</u>		Cyber Security.
2	Dr. V. B. Nikam	4	AI/Machine Learning/Deep Learning, Geo-AI, Geoinformatics, HPC,
	<u>View Profile</u>		Quantum Computing, IoT &Edge Computing, Spatial Big Data Analytics.
3	Dr. V K Sambhe	1	IoT and wireless networks
	<u>View Profile</u>		
4	Dr. M. R. Shirole	2	Artificial Intelligence and Data Science, Blockchain Technology, Software
	<u>View Profile</u>		Engineering, Augmented Reality and Virtual Reality, Networking, Cyber Security, IOT.
5	Dr. S. S. Udmale <u>View Profile</u>	2	Data Science, Machine Learning, Deep Learning, Optimization, and Pattern Analysis.
6	Dr. S. S. Suratkar <u>View Profile</u>	3	Cyber Security.
7	Dr. Sunil Kale <u>View Profile</u>	4	Machine Learning; Text Analytics.
8	Dr. Sandip Shingade <u>View Profile</u>	4	Parallel Computing and Optimization Techniques.

Department Name: Chemistry

Sr.No	Name of Supervisors	Vacant seats	Research Area
1	Dr. Vitthalrao Kashid <u>View Profile</u>	4	Organic Synthesis, Organometallic Chemistry, Organophosphorus Chemistry, Catalysis, Sustainable Chemistry.

Department Name: Production Engineering

Sr.No	Name of Supervisors	Vacant seats	Research Area
1	Dr. D.K Shinde <u>View Profile</u>	4	Composite Materials and Nanotechnology: Synthesis of nanofibers and Nanomaterials, Low-Cost Composite Manufacturing and Mechanical Characterization of Materials, Finite Element Modeling and analysis of Composites structures, Fatigue and Impact Modeling and Testing of Polymeric Composites, Ceramic Composites, and Textile Composites, 3D Printing-Additive, nano and bio manufacturing, Process Modelling in composites, Product Design and Development, Functional and Smart Material synthesis,
			Electrospinning, Design of Mechanical system, AI and ML modelling for Material design characterization.
2	Dr. P. R. Attar <u>View Profile</u>	2	Sustainable machining, Grinding of harder materials, Sustainable Manufacturing, Additive Manufacturing, Digital Twin in Manufacturing, Surface Engineering, Unconventional manufacturing, Product Lifecycle Management.
3	Dr. Srinath Gudur <u>View Profile</u>	4	Metal Additive Manufacturing (AM), Hybrid approaches in Additive Manufacturing, Electro pulsing applications for AM, Welding and Machining, Surface Engineering, Laser Forming, Online Monitoring and Controlling.
4	Dr. Vishwadeep Handikherkar <u>View Profile</u>	4	Digital Twin, Condition Based Maintenance, Reliability Engineering, Applications of AI & ML

Department Name: Textile

Sr.No	Name of Supervisors	Vacant seats	Research Area
1	Dr. A L Bhongade View Profile	4	Polymer Matrix Composite, Natural Fibre Reinforced Composites, Technical Textiles, Advanced yarn Mfg.
2	Dr. Neha Mehra <u>View Profile</u>	3	Nanotechnology application in textiles, Ecofriendly pretreatment of textiles, Coloration of textiles, Chemical finishing technology, Technical textiles.
3	Dr. Suranjana Gangopadhyay <u>View Profile</u>	1	Electrically Conductive Textiles, Smart Textiles for Persons with disability, Surface modification of Textiles, Value Added Textiles for Water Conservation-Agro-Geo-Industrial applications, Textile Machine Design Modification.