



K J's EDUCATIONAL INSTITUTES

TRINITY COLLEGE OF ENGINEERING & RESEARCH

Approved by AICTE, Government of Maharashtra & Affiliated to Savitribai Phule Pune

University



Accredited NAAC Grade 'A+' (2nd Cycle)

DEPARTMENT OF MECHANICAL ENGINEERING

FACULTY ACHIEVEMENTS

**FACULTY ACHIEVEMENTS: FACULTY DEVELOPMENT PROGRAM
ATTENDED**

Sr No	Name of Faculty	Title of Program	Date/Duration
1	Prof Sharad K Bhosale	FDP on "Effective Research Paper Writing: Principle & Practices"	27 th to 31 th January 2026
2	Prof Mitali B Deshmukh	FDP on "Effective Research Paper Writing: Principle & Practices"	27 th to 31 th January 2026
3	Prof Sharad K Bhosale	ISTE approved FDP on "Automation, Robotics and Mechatronics for Manufacturing in Mechanical Engineering"	19 th to 23 th January 2026
4	Prof Mitali B Deshmukh	ISTE approved FDP on "Automation, Robotics and Mechatronics for Manufacturing in Mechanical Engineering"	19 th to 23 th January 2026
5	Prof Prabhakar Shinde	FDP on "Composites & Nanomaterial in Mechanical Engineering"	5 th to 9 th January 2026
6	Dr Pramod B Magade	FDP on "Research Advances in Solar and Wind Energy"	24 th to 29 th November 2025
7	Prof Swanand R Kulkarni	FDP on "Research Advances in Solar and Wind Energy"	24 th to 29 th November 2025
8	Prof Sharad K Bhosale	FDP on "Research Advances in Solar and Wind Energy"	24 th to 29 th November 2025
9	Prof Mitali B Deshmukh	FDP on "Research Advances in Solar and Wind Energy"	24 th to 29 th November 2025
10	Prof Sharad K Bhosale	FDP on "Recent Advancements in Artificial Intelligence for Thermal Systems and Energy Management"	12 th to 18 th December 2025
11	Prof Mitali B Deshmukh	FDP on "Recent Advancements in Artificial Intelligence for Thermal Systems and Energy Management"	12 th to 18 th December 2025
12	Prof Mitali B Deshmukh	FDP on "Engineering Excellence Integrating Thermal, Design, and Material Innovations"	10 th to 14 th March 2025
13	Prof Mitali B Deshmukh	FDP on Advanced Manufacturing Technologies	13 th to 17 th May 2025
14	Prof Sharad K Bhosale	FDP on Advanced Manufacturing Technologies	13 th to 17 th May 2025
15	Prof Pratik P Akarte	FDP on Advanced Manufacturing Technologies	13 th to 17 th May 2025
16	Prof Mitali B Deshmukh	ATAL FDP on Electric Vehicles: Technology, Power System, Energy Management, Testing and Certification	23 th to 28 th December 2024

17	Prof Pratik P Akarte	ATAL FDP on Electric Vehicles: Technology, Power System, Energy Management, Testing and Certification	23th to 28th December 2024
18	Prof Sharad K Bhosale	ATAL FDP on Electric Vehicles: Technology, Power System, Energy Management, Testing and Certification	23th to 28th December 2024
19	Prof Mitali B Deshmukh	ATAL FDP on Sustainable Practices in Energy and Environment Sector	16th to 21st December 2024
20	Prof Pratik P Akarte	ATAL FDP on Sustainable Practices in Energy and Environment Sector	16th to 21st December 2024
21	Prof Sharad K Bhosale	ATAL FDP on Sustainable Practices in Energy and Environment Sector	16th to 21st December 2024
22	Prof Mitali B Deshmukh	ATAL FDP on INDUSTRY-4.0 in ENERGY,SUSTAINABILTY AND CLIMATE CHANGE	09th to 14th December 2024
23	Prof Sharad K Bhosale	ATAL FDP on INDUSTRY-4.0 in ENERGY,SUSTAINABILTY AND CLIMATE CHANGE	09th to 14th December 2024
24	Prof Pratik P Akarte	ATAL FDP on INDUSTRY-4.0 in ENERGY,SUSTAINABILTY AND CLIMATE CHANGE	09th to 14th December 2024
25	Prof Mitali B Deshmukh	FDP on “ADVANCED ARTIFICIAL INTELLIGENCE(AI) TECHNIQUES & MATLAB INTEGRATION”	21st -26th October 2024
26	Prof Pratik P Akarte	Short Term Training Course on “Incorporating Universal Human Values in Technical Education”	07th–11th October 2024.
27	Prof Sharad K Bhosale	Short Term Training Course on “Incorporating Universal Human Values in Technical Education”	07th–11th October 2024.
28	Prof Mitali B Deshmukh	Short Term Training Course on “Incorporating Universal Human Values in Technical Education”	07th–11th October 2024.

FACULTY ACHIEVEMENTS: PATENTS FILED

Sr. No.	Title of the Invention	Patent Application Number
1	Innovative wind turbine	2475/MUM/2012
2	Simple unidirectional series rotors wind turbine	409/MUM/2013
3	Direct Injection System for Small Two Stroke SI Engine	410/MUM/2013A
4	Solar energy assisted container to keep cooked food warm	384/MUM/2014
5	A portable electricity producing device	2034/MUM/2015
6	Mist nozzle and method of making the same	2035/MUM/2015
7	Air foil for small wind turbine blade	201621021003
8	Dual flush for water tank in a toilet system	201621021009

9	Diffuser augmented wind turbine	201621021010
10	Rotor assembly arrangement for small wind turbine	201621021011
11	Yawing systems for small wind turbine	201621021013
12	Constructions of small wind turbine blade	201621021015

RESEARCH GRANTS – PROJECTS

Sr No.	Title	Name of Investigator	Duration	Cost of Project (Rs)	Funding Agency / Scheme
1	Design and Development of Low Pressure Direct Injection Type Fuel Injection System for Small Two Stroke Engine	Dr. Kumar D. Sapate	3 Years 2013 - 2016	11.26 Lakhs	AICTE – RPS
2	Project: Performance Evaluation of solar Powered Peltier Condenser to Extract Water from Air	Prof. V. S. Shinde	2 Years 2016 - 2018	1.8 Lakhs	BCUD, SPPU
3	Data Acquisition System (NI USB-6210) and Accessories of Wheel Balancing Machine	Prof. V. B. Ghagare	1 Year 2016 - 2017	1 Lakh	BCUD, SPPU

FACULTY ACHIEVEMENTS: PAPER PUBLICATION IN CONFERENCES

Sr No	Name of Faculty	Title of Paper	Name of the conference	Year of Publication
1	Prof Swanand R Kulkarni	Hybrid Vacuum Assisted Auger Screw System With Variable Screw Pitch for Enhanced Accuracy, Dust Reduction, And Filling Speed Increment in Powder Dosing Technology	6th International Conference on Engineering & Technology (ICET-2025)	2025
2	Prof Pratik P Akarte	Parameter optimization of FDM based Additive manufacturing using PLA,ABS & PETG	International Journal of Modernization in Engineering Technology & Science	2025
3	Prof Sharad K Bhosale	Design & Development of Poultry Litter Raking Machine	International Journal of Modernization in Engineering Technology & Science	2025
4	Prof Vishnu B Ghagare	Noise Attenuation of Tractor Silencer	2nd International Conference Innovative Trends in Engineering & Technology 2024	2024