



LTJSS
PRIYADARSHIN COLLEGE OF ENGINEERING, NAGPUR
 (An Autonomous Institution Affiliated to RTM Nagpur University)
 Research & Development Cell



Ph.D. (PART-TIME) SCHOLARS PURSUING Ph.D.(AY 2025-26)

Table A: Ph.D. (Part-Time) Scholars Pursuing Ph.D. in the Academic Year 2025–26

Department	No. of Students Pursuing Ph.D
Mechanical Engineering	22
Electronics(E&T) Engineering	33
Electrical Engineering	18
Computer Science & Engineering	08

Table-B: List of Ph.D.(Part-Time) Scholars – **Mechanical Engineering** (AY 2025–26)

S.N	Department	Subject	Name of research scholar	Title of PhD	Name of supervisor	Registration number	PhD registration date	Status
1	Mechanical Engineering	Mechanical Engineering	Mr. Munindra Matey	Formulation of approximate generalized data based model for heat transfer argumentation employing electro hydro dynamic (EHD) technique	Dr C.N.Sakhale	RTMNU/PHDcel l/RRC/May-2019/441	22-05-2019	Submitted
2	Mechanical Engineering	Mechanical Engineering	Mr. Harshchandra Ramteke	Establishment of Empirical Relationship Between the Design Variables of Newly Evolved Flexible Type Swing Coupling	Dr. Girish Mehta	RTMN U/PHD cell/ RRC/ May-2019/444	22-05-20 19	Ongoing
3	Mechanical Engineering	Mechanical Engineering	Mrs.Perna Borkar	Establishment of Empirical Relationship Between the process parameter of miniature thresher machine	Dr C.N.Sakhale	RTMN U/PHD cell/ RR C/ 2022/R1/ 1583	24/03/2022	Ongoing
4	Mechanical Engineering	Mechanical Engineering	Ruma Sunil Roy	Investigation for the effect of Bellow Shaped Roller Geometry on the performance of Roller Bearing	Dr. G.D.Mehta	Awaited	18/01/2025	Ongoing
5	Mechanical Engineering	Mechanical Engineering	Amit Suresh Rao Bhuyar	An Experimental Investigation for the Selection of Welding Filler for Joining 317L ASS (Austenitic Stainless Steel) and 430 FSS (Ferritic Stainless Steel)	Dr.I.A.Khan	Awaited	18/01/2025	Ongoing
6	Mechanical Engineering	Mechanical Engineering	Anand Vinayak Thengne	Experimental Investigation and Characterization of Polymer Composites.	Dr.S.N.Waghmare	Awaited	18/01/2025	Ongoing
7	Mechanical Engineering	Mechanical Engineering	Abhinav Duragkarr.	The evolution & performance investigation of battery operated cotton picking machine	Dr.C.N.Sak hale	Awaited	18/01/2025	Ongoing
8	Mechanical Engineering	Mechanical Engineering	Bharat Bhanudas Babre	Experimental Investigation of Mechanical Properties of plant extract loaded film for wound healing application	Dr.S.N.Waghmare	Awaited	18/01/2025	Ongoing
9	Mechanical Engineering	Mechanical Engineering	Dhiraj Vijayarao Astonkar	Analysis of FDM process for enhancing the Mechanical & Tribological properties of ABS for 3D printed Automotive Application	Dr.S.D.Shel are	Awaited	18/01/2025	Ongoing
10	Mechanical Engineering	Mechanical Engineering	Prafull Vijay sahare	Experimental Investigation of Diesel Engine Performance with Mxene Modified Waste Plastic Oil	Dr.S.N.Waghmare	Awaited	18/01/2025	Ongoing
11	Mechanical Engineering	Mechanical Engineering	Manish Ajay Warankar	An Experimental Investigation for Weldability of 317L ASS (Austenitic Stainless Steel) and 439 FSS (Ferritic Stainless Steel)	Dr.I.A.Khan	Awaited	18/01/2025	Ongoing
12	Mechanical Engineering	Mechanical Engineering	Rahul Charandas Meshram	Comprehensive Analysis of Mechanical Properties and Microstructure Characteristics of Lightweight Material Aluminum Alloys and Titanium Deposition in WAAM	Dr.I.A.Khan	Awaited	18/01/2025	Ongoing

13	Mechanical Engineering	Mechanical Engineering	Shrikant Vasantrao Bhunte	Performance analysis of the impact of metal oxide nanoparticles as an additive to microalgae-based biofuel in compression ignition engine	Dr.I.A.Khan	Awaited	18/01/2025	Ongoing
14	Mechanical Engineering	Mechanical Engineering	Sandesh Ughade	Experimental Investigation diesel engine performance with M-xene modified Biodiesel	Dr. Sagar shelare	Awaited	Awaited 02/08/2025 (RAC)	Ongoing
15	Mechanical Engineering	Mechanical Engineering	Ram Deshpande	Thermal and Fluid dynamic optimization of cutting ovens for phenolic resi based thin wheels, A study on heat flow	Dr. Sagar shelare	Awaited	Awaited 02/08/2025 (RAC)	Ongoing
16	Mechanical Engineering	Mechanical Engineering	Sourabh Lanjewar	A Comprehensive Performance Study and Empirical Correlation of Design Variables in Newly designed Conically Supported Self-Aligned Flexible Jaw Couplings	Dr. Girish Mehata	Awaited	Awaited 02/08/2025 (RAC)	Ongoing
17	Mechanical Engineering	Mechanical Engineering	Piyush Halde	Integrated Performance Evaluation and Design Feature Analysis of Next-Generation Multilink Mechanism Assited Self-Aligned Couplings for Space Application"	Dr. Girish Mehata	Awaited	Awaited 02/08/2025 (RAC)	Ongoing
18	Mechanical Engineering	Mechanical Engineering	Pranati Kedar	To increase Operational efficiency of Battery for Vehicles	Dr. Pravin Khope	Awaited	Awaited 02/08/2025 (RAC)	Ongoing
19	Mechanical Engineering	Mechanical Engineering	Rushikesh Lavale	A framework for Integrating patent analysis into product lifecycle management in mechanical design and management	Dr.Subhash Waghmare	Awaited	Awaited 02/08/2025 (RAC)	Ongoing
20	Mechanical Engineering	Mechanical Engineering	Sachin Joshi	Experimental and numerical investigation of stress triaxility and failure mechanism in Ballistic steel under high strain rate loading	Dr.Subhash Waghmare	Awaited	Awaited 02/08/2025 (RAC)	Ongoing
21	Mechanical Engineering	Mechanical Engineering	Ujwal Bambel	Aviation safety and human factor effect	Dr. Pravin Khope	Awaited	Awaited 02/08/2025 (RAC)	Ongoing
22	Mechanical Engineering	Mechanical Engineering	Pravin Wanjari	Experimental investigation of cnc Mxene hybrid nanofluid based biofuelt	Dr. Shrikant Awatade	Awaited	Awaited 02/08/2025 (RAC)	Ongoing

Table-C: List of Ph.D. (Part-Time) Scholars – Electronics (E&T) Engineering (AY 2025–26)

S.N	Department	Subject	Name of research scholar	Title of Ph.D	Name of supervisor	Registration number	PhD Registration date	Status
1	Electronics Engg	Electronics Engg.	Manisha Gawande	Design an effective artificial intelligence-based model for vein detection and analysis of blood flow velocity for possible health diagnosis.	Dr Suchita Varade	RTMNU/ PHD cell/RRC/2022 /R1/1710	21-03-2022	Ongoing
2	Electronics Engg	Electronics Engg.	Gaurav Agrawal	Analyzing the effect of temporal severity of epilepsy on vital organs via transfer learning algorithms.	Dr.A.P. Rathkaniwar	RTMNU/ PHD CELL/RRC/2022/R1/1820	19/3/2022	Ongoing
3	Electronics Engg	Electronics Engg.	Pallavi Ganorkar	Deep learning approach for generation of melodious artificial music with variations in the music database.	Dr.A.P. Rathkaniwar	RTMNU/ PHD CELL/RRC/2022/R 1/1586	19/3/2022	Ongoing
4	Electronics Engg	Electronics Engg.	Pradnya P Parate	A novel approach for data extraction from satellite images with improved accuracy and speed using deep learning.	Dr S.S. Shriramwar	RTMNU/ PHD cell/RRC/2022 /R1/375	30-03-2022	Ongoing
5	Electronics Engg	Electronics Engg.	Sumit D Chafale	Design and performance enhancement of indoor positioning by sub carrier spacing in OFDM.	Dr Virendra Taksande	RTMNU/ PHD cell/RRC/2022 /R1/231	30-03-2022	Ongoing
6	Electronics & Comm Engg	Electronics Engg	Shrikant Goje	To Design Hacking - Free AI Based Security Model Using the Analysis of Threats in Communication Network	Dr . G.M.Asutkar	RTMNU/ PH.D CELL/RRC/2022/R 1/1624	30-03-2022	Ongoing
7	Electronics & Comm Engg	Electronics Engg	Girish Ghormode	A BLOCKCHAIN AND DEEP NEURAL NETWORKS BASED SECURE FRAMEWORK FOR ENHANCED NETWORK SECURITY	Dr Soni Chaturvedi	RTMNU/ PH.D CELL/RRC/2022/R 1/1591	19-03-2022	Ongoing
8	Electronics & Comm Engg	Electronics Engg	Anand S.Deshkar	Design of Ultrawhite band and MIMO antenna using fractal sectional technique for defence application.	Dr Soni Chaturvedi	RTMNU/ PH.D CELL/RRC/2022/R 1/1601	19-03-2022	Ongoing

9	Electronics & Comm Engg	Electronics Engg	Deepak A.Kapgate	A novel machine learning based model for performance analysis of Indian stock market price forecasting	Dr Soni Chaturvedi	RTMNU/ PH.D CELL/RRC/202 2/R 1/1629	21-03-2022	Ongoing
10	Electronics & Comm Engg	Electronics Engg	Sangita P.Rajankar	Real World Spatial Data Mining for Conceptualizing Smart Village towards g-Governance	Dr Soni Chaturvedi	RTMNU/ PH.D CELL/RRC/202 2/R 1/315	30-03-2022	Ongoing
11	Electronics & Comm Engg	Electronics Engg	Sharda Mungle	To design an efficient fault tolerant resilient system for wireless sensor network	Dr.S.S.Shrimwar	RTMNU/ PH.D CELL/RRC/2022	23-11-2023	Ongoing
12	Electronics & Comm Engg	Electronics Engg	Divya meshram	Design of Optimized self adaptive reconfigurable system for changing Environment and Conditions	Dr.S.S.Shrimwar	RTMNU/ PH.D CELL/RRC/2022	22-11-2023	Ongoing
13	Electronics & Comm Engg	Electronics Engg	Shruti A.Chawale	Design and Development of Energy Efficient algorithm for IOT applications by using Machine Learning.	Dr.G.M. Asutkar	RTMNU/PH.D CELL/RRC/202 3/R1/2187	21-02-2024	Ongoing
14	Electronics & Comm Engg	Electronics Engg	Dipti S.Sawarkar	The implementation of Machine Learning Technology for energy optimization and data security of IoT enabled wireless network.	Dr.V.K. Taksande	RTMNU/PH.D CELL/RRC/202 3/R1/1786	21-02-2024	Ongoing
15	Electronics & Comm Engg	Electronics Engg	Ms.Vrushali V.Shirpurkar	"Study and Analysis of Vedic Mantras & its effect on Electromagnetic Field of human body for human health Monitoring"	Dr.Mrs.A. P.Rathkantihiwar	RTMNU/PH.D CELL/RRC/202 3/R1/1847	21-02-2024	Ongoing
16	Electronics & Comm Engg	Electronics Engg	Mrs.Supriya Jawale	Design and Development of Machine learning model for analysis and classification of Biomedical Signal	Dr.G.M.Asutkar	RTMNU/PH.D CELL/RRC/202 3/R2/1842	16-01-2025	Ongoing
17	Electronics & Comm Engg	Electronics Engg	Gaurishankar Girhe	Performance Improvement of Energy efficient protocol for high speed data transmission over Wireless Sensor network using machine Learning Algorithm	Dr.G.M.Asutkar	RTMNU/PH.D CELL/RRC/2023/ R1/1804	14-03-2024	Ongoing
18	Electronics & Comm Engg	Electronics Engg	Ashish V.Saywan	Design of Neuromorphic Machine Learning Methods for Medical Image Analysis and Disease Diagnosis.	Dr.Mrs.Soni Chaturvedi	RTMNU/PH.D CELL/RRC/202 3 /R1/2162	21-02-2024	Ongoing
19	Electronics & Comm Engg	Electronics Engg	Vikramsingh R. Parihar	Design of Adaptive Machine Learning and Blockchain-Enabled Navigation Systems for Autonomous Drone	Dr.Mrs.Soni Chaturvedi	RTMNU/PH.D CELL/RRC/202 3/R1/1846	21-02-2024	Ongoing
20	Electronics & Comm Engg	Electronics Engg	Mrs.Snehal G.Wankhede	Performance Enhancement in QoS Parameter for HANET by Advanced Service Routing Protocol	Dr.G.M.Asutkar	RTMNU/PH.D CELL/RRC/202 3/R2/1840	16-01-2025	Ongoing
21	Electronics & Comm Engg	Electronics Engg	Abhijit Varade	"An optimized framework for solar power prediction using machine learning"	Dr.M.K. Demde	RTMNU/PH.D CELL/RRC/202 3/R1/2082	21-02-2024	Ongoing
22	Electronics & Comm Engg	Electronics Engg	Aparna Khairkar	Spectral Analysis of Water Bodies Using Multispectral Satellite image processing Techniques	Dr.V.K. Taksande	RTMNU/PH.D CELL/RRC/202 23/R1/2161	22-02-2024	Ongoing
23	Electronics & Comm Engg	Electronics Engg	Syed Rizwana Ali	Computational Analysis and Detection of Lung Tumor classification using Machine Learning	Dr.M.K. Demde	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
24	Electronics & Comm Engg	Electronics Engg	Kaheksha Sheikh	Dynamic model for optimizing 6G network communication using predictive maintenance with machine learning techniques	Dr.V.K. Taksande	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
25	Electronics & Comm Engg	Electronics Engg	Sneha Kherde	A parallel learning framework for Progressive diabetic retinopathy detection and classification with multimodal data integration	Dr.Mrs.S.W. Varade	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
26	Electronics & Comm Engg	Electronics Engg	Pooja Yawle	Artificial Intelligence - Driven Energy Management System for Smart Grids : "A sustainable approach"	Dr.Mrs.M.Vyawahare	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
27	Electronics & Comm Engg	Electronics Engg	Kirti Sharma	Design of Robust Multi- attribute Deepfake Detection System	Dr.M.K.Demde	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
28	Electronics & Comm Engg	Electronics Engg	Ankita Rekkawar	Design a Novel Algorithm for Rate Estimation for Critical Respiratory Disease Diagnosis using Machine Learning	Dr.G.M.Asutkar	Awaited	Awaited 01/07/2025 (RAC)	Ongoing

29	Electronics & Comm Engg	Electronics Engg	Shraddha Bijwe	Design and Implementation Real-Time Brain wave Emotion recognition system using Machine Learning	Dr.Mrs.M.Vyawahare	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
30	Electronics & Comm Engg	Electronics Engg	Anuradha Ingole	Design of Data driven Models for early Brain stroke detection using Machine Learning	Dr.Mrs.Y.A.Nafde	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
31	Electronics & Comm Engg	Electronics Engg	Priyanka patil	Performance analysis of Seed Germination using Digital Image processing and Machine learning	Dr.P.P.Ashtankar	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
32	Electronics & Comm Engg	Electronics Engg	Rashmi Rajurkar	Design a Noval model for Smart monitoring of critical forming parameter using Machine Learning Algorithms	Dr.G.M.Asutkar	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
33	Electronics & Comm Engg	Electronics Engg	Mrs.Vaishali Dhurnal	Multimodel Sensor Fusion based WSN for Smart Health Monitoring of Solar Systems	Dr.Mrs.S.W.Varade	Awaited	Awaited 01/07/2025 (RAC)	Ongoing

Table-D: List of Ph.D. (Part-Time) Scholars – Electrical Engineering (AY 2025–26)

S.N	Department	Subject	Name of Research Scholar	Title of Ph.D	Name of Supervisor	Registration number	PhD Registration Date	Status
1	Electrical and Power	Electrical Engg	Ganesh B. Kamble	High Starting torque wide range speed control of 3/ Synchronous Reluctance Motor.	Dr Umesh Hiwase	RTMNU/P HD cell/RRC/2022/R 1/173	30-03-2022	Ongoing
2	Electrical and Power	Electrical Engg	Dinesh D Mujumdar	An Improved Grid connected wind power QUALITY CONTROL USING Facts devices.	Dr Umesh Hiwase	RTMNU/P HD cell/RRC/2022/R 1/171	30-03-2022	Ongoing
3	Electrical and Power	Electrical Engg	Abhijit Datta	Fast Charging System for New Generation Electric Vehicle with efficient Converters for wireless power transfer stations.	Dr Kishor Porate	RTMNU/P HD cell/RRC/2022/R 1/1565	16-03-2022	Ongoing
4	Electrical and Power	Electrical Engg	Akil A. Ahmad	Power Quality Improvement In Integrated Grid energy system with hybrid renewable energy sources USING UPQC.	Dr Kishor Porate	RTMNU/P HD cell/RRC/2022/R 1/1566	16-03-2022	Ongoing
5	Electrical and Power	Electrical Engg	Harsha B Sarvaiya	Wireless Power Transfer in Electric Vehicle Application.	Dr (Mrs) S.P. Muley	RTMNU/P HD cell/RRC/2022/R 1/1564	16-03-2022	Ongoing
6	Electrical Engg	Electrical Engg	Manjusha K Parve	Protection of Compensated Transmission Line for Improvement of reliability and selective using Machine Learning Technique.	Dr R A.Keswani	RTMNU/P HD cell/RRC/2022/R 1/177	30-03-2022	Ongoing
7	Electrical and Power	Electrical Engg	Vashali Shridharrao Malekar	Machine Learning Based Distance Protection Scheme for Performance Analysis of Transmission Line.	Dr R A.Keswani	RTMNU/PH.D CELL/RRC/2022/R1 /1402 , Dated 08/05/2023	03.02.2023	Ongoing
8	Electrical and Power	Electrical Engg	Kavish Gautam Gaurkhede	Design & Simulation of Control Technique for BLDC Motor using Artificial Intelligence (AI)	Dr Umesh Hiwase	RTMNU/PH.D CELL/RRC/2023/R1 /2025, Dated 20/01/2025	15.02.2024	Ongoing
9	Electrical and Power	Electrical Engg	Chetan Ashokrao Jambhulkar	Design & Analysis of STATCOM for Solar Power fed Transmission Line	Dr Umesh Hiwase	RTMNU/PH.D CELL/RRC/2023/R1 /2025, Dated 20/01/2025	15.02.2024	Ongoing
10	Electrical and Power	Electrical Engg	Ashish Kishorrao Duchakke	Machine Learning-Based Energy Management System for an Optimization of Power in Hybrid Electric Vehicles.	Dr.(Mrs) U.B.Malkhandale	RTMNU/PH.D CELL/RRC/2023/R1 /2132, Dated 30/01/2025	15.02.2024	Ongoing
11	Electrical and Power	Electrical Engg	Shishir Sharad Pande	Energy Management in Electric Vehicle using AI-Techniques	Dr.(Mrs) U.B.Malkhandale	RTMNU/PH.D CELL/RRC/2023/R1 /2291, Dated 24/06/2025	15.02.2024	Ongoing
12	Electrical and Power	Electrical Engg	Anagha Wasudeo Waghadkar	Design and Analysis of Single Phase Active Filter Integrated with PV for Various Load Systems	Dr.V.G.Umale	RTMNU/PH.D CELL/RRC/2023/R1 /2016,Dated 20/01/2025	19.02.2024	Ongoing
13	Electrical and Power	Electrical Engg	Harshal Takeshwar Ghatole	Hybrid Intelligent Power System Stabilizers for Effective Damping in Renewable Integrated Multi-	Dr.(Mrs) U.B.Malkhandale	Awaited	Awaited 01/07/2025 (RAC)	Ongoing

				Machine Systems				
14	Electrical and Power	Electrical Engg	Vishakha Ramesh Jambhulkar	Renewable Energy based dynamic charging system for Electric Vehicle	Dr R A Keswani	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
15	Electrical and Power	Electrical Engg	Mansi Babanrao Shedame	Resilient Power System Operation through Optimal Inertia Estimation and Scheduling	Dr.(Mrs) U.B.Malkhandale	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
16	Electrical and Power	Electrical Engg	Sheikh Md. Nawaz	Enhancing PV Electrolysis Green Hydrogen Production using DC-DC Converters with destroyer model for fuel cell EV	Dr.V.G.Umale	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
17	Electrical and Power	Electrical Engg	Pooja Gunwant Mahakulkar	An analysis of Intelligent Grid integrated with Hybrid PV Wind System	Dr R A Keswani	Awaited	Awaited 01/07/2025 (RAC)	Ongoing
18	Electrical and Power	Electrical Engg	Chetan Haribhau Kidile	AL-LMS based Power Quality Engagement in Solar Integrated Three Phase Distribution Grid.	Dr.V.G.Umale	Awaited	Awaited 01/07/2025 (RAC)	Ongoing

Table-E: List of Ph.D.(Part-Time) Scholars – Computer Science and Engineering (AY 2025–26)

S.N	Department	Subject	Name of Research Scholar	Title of Ph.D	Name of Supervisor	Registration number	PhD Registration Date	Status
1	Computer Science and Engineering	Computer Science and Engineering	Kalyani Karule	A Deep Learning and Hybrid Optimization Based Secure Routing Framework for Anomaly Detection in MANETs	Dr. P. S.Prasad	Awaited	Awaited 27/6/25 (RAC)	Ongoing
2	Computer Science and Engineering	Computer Science and Engineering	Priya Vaidya	Federated Learning on Medical Imaging Systems for Security Enhancement	Dr. P. S.Prasad	Awaited	Awaited 27/6/25 (RAC)	Ongoing
3	Computer Science and Engineering	Computer Science and Engineering	Swati Sonune	Emotion-Regulated Reinforcement Learning for Adaptive AI Tutoring Systems: Affective Feedback-Driven Instructional Policy Optimization	Dr. N. M.Thakre	Awaited	Awaited 27/6/25 (RAC)	Ongoing
4	Computer Science and Engineering	Computer Science and Engineering	Sheetal Shahare	Scalable quantum machine learning models for high dimensional data clustering	Dr. P. M. Chaudhari	Awaited	Awaited 27/6/25 (RAC)	Ongoing
5	Computer Science and Engineering	Computer Science and Engineering	Prakash Patil	Quantum-Assisted Multi-Modality Medical Images Security Framework using Chaotic Map Key Generators	Dr. P. M. Chaudhari	Awaited	Awaited 27/6/25 (RAC)	Ongoing
6	Computer Science and Engineering	Computer Science and Engineering	Ashwini Ghadge	Development of an Agentic AI-Powered Personal Assistant	Dr. P. M. Chaudhari	Awaited	Awaited 27/6/25 (RAC)	Ongoing
7	Computer Science and Engineering	Computer Science and Engineering	Paritosh Nagarnaik	Share Market with AI : Improving Algorithmic Treading in the Indian share market using Machine learning and deep learning	Dr. S. S. Golait	Awaited	Awaited 27/6/25 (RAC)	Ongoing
8	Computer Science and Engineering	Computer Science and Engineering	Bharat Parihar	Self adaptive dialogue system with real time emotional intelligence	Dr. S. S. Golait	Awaited	Awaited 27/6/25 (RAC)	Ongoing

Date: 18/12/2025