

Faculty Profile

- **Faculty Name** : Dr. Vishal Shridhar Wadkar
- **Designation** : Associate Professor and Head
- **Department** : Electrical Engineering
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• Educational Qualification

Sl.	Degree	University	Class
1	B.E.- Electrical Engineering	University of Pune	First class with Distinction
2	M.E. - Electrical Engineering (Power Electronics and Drives)	Savitribai Phule Pune University	First class
3	PhD - Electrical Engineering	Dr. A. P. J. Abdul Kalam University	Awarded

• Professional experience:-

Total experience in years:-12

Teaching: - 12

Industrial: -00

Research: -00

Sl.	Organization	Post	Period
1	Ashokrao Mane Group of Institutions, Vathar	Assistant Professor	1 st July 2024 to Till Date
2	DKTE Society's Textile & Engineering Institute, Ichalkaranji	Assistant Professor	1 st June 2023 to 29 th June 2024
3	Sharad Institute of Technology, Yadav	Assistant Professor	19 th September 2018 to 31 st May 2023
4	Vishveshwarya Technical Campus, Miraj	Lecturer	1 st July 2015 to 18 th September 2018
5	SND COE&RC, Yeola	Lecturer	11 th June 2014 to 10 th April 2015
6	Dattakala Group of Institute-Faculty of Engineering, Daund	Assistant Professor	16 th September 2013 to 31 st May 2014

➤ Subject Taught:-

Undergraduate Subjects			
1	Switchgear and Protection	2	Basic Electrical and Electronics Engineering
3	Advance Renewable Energy Sources	4	High Voltage Engineering
5	Electrical Machines	6	Solid State Devices
7	Power Electronics	8	Analog and Digital Electronics

9	Power Quality and Harmonics	10	Electrical Engineering Materials
11	Electric Traction and Utilization	12	Power System
13	Measurement and Instrumentation	14	Power System Operation and Control
15	Numerical Methods and Computer Programming		

- **Project Work at U.G.:-** Landmine Detection using Robotics
- **Project Work at P.G.:-** Voltage Sag and Voltage Swell Compensation using Dynamic Voltage Restorer
- **Title of PhD Thesis:-** Design, Development and Performance Evaluation of Smart Inverter Control Solar PV Based EV Charging Station
- **Research Area of Interest:-** Smart Inverter, Electric Vehicles, Renewable Energy Integration

➤ **Patents :-**

Sl.	Title	Application Number
1	Energy Saving for Data Transmission in Wireless Network	202241020523
2	Smart Factory using Industry 4.0	202321019082
3	Fire Detection and Notification through Alarm using IoT	202321034060
4	Wireless Electric Vehicle Charging Equipment	453960-001
5	Decorative Vertical Rooftop Wind Turbine	456080-001
6	System and Method for Real-Time Electrical Safety and Energy Management in High-Density Environments	202521082566

➤ **Paper Published in National & International Journals:-**

Sl.	Title	Name of Journal	Type* (NJ/IJ)	Date	ISSN No.
1	Analysis of fault location for transmission lines	International Journal of Scientific & Engineering Research	IJ	March 2015	Volume 6 Issue 3
2	Phasor Measurement Unit: An Overview	International Journal of Engineering, Education & Technology	IJ	April 2015	Volume 3 Issue 2
3	An Overview of Dynamic Voltage Restorer for Voltage Sag and Swell Compensation	International Journal of Advanced Technology in Engineering and Science	IJ	March 2016	Volume 4 Issue 1
4	Electrical energy generation by using gym equipment	International Journal of Engineering, Education & Technology	IJ	January 2018	Volume 6 Issue 1

5	Design of LC Meter Using Arduino	Journal of Instrumentation and Innovation Sciences	NJ	2019	Volume 4 Issue 1
6	Wireless Power Transmission by Inductive Coupling	Journal of Control and Instrumentation Engineering	NJ	2019	Volume 5 Issue 1
7	Design and Implementation of Supercharger for Lithium Ion Battery	International Journal of Advanced Research in Electrical, Electronics & Instrumentation Engineering	IJ	2020	Volume 9 Issue 5
8	Development of Remote Controlled Mine Detection Robot	Seybold Journal	IJ	2020	Volume 15 Issue 7
9	A Review on Distributed Energy System and Smart Inverters	International Journal of Multidisciplinary Educational Research	IJ	2021	Volume 10 Issue 11(4)
10	Optimizing Solar-Powered EV Charging with Smart Inverter: A Performance Analysis	European Chemical Bulletin	IJ	2023	Volume 12 Issue 6
11	Portable Weight Measurement Instrument for Trolley	International Journal for Science and Advance Research in Technology	IJ	2024	Volume 10 Issue 05
12	Comparative Study of Performance Metrics for Smart Inverter Control in Solar PV-Based EV Charging Stations	Journal of Electrical Systems	IJ	2024	Volume 20 Issue 7s
13	Enhancing Power Quality in ON-Grid Systems with PV-STATCOM for Reactive Power Compensation	Journal of Electrical Systems	IJ	2024	Volume 20 Issue 7s
14	Evaluating the Effectiveness of Smart Inverter Control for Solar-Powered EV Charging Stations	International Journal of Intelligent Systems and Applications in Engineering	IJ	2024	Volume 20 Issue 7
15	Optimization of Smart Inverter Control Strategies for Solar-Powered Electric Vehicle Charging Stations: A Comprehensive Analysis	Journal of Innovative Engineering and Research	IJ	October 2024	Volume 7 Issue 2

* NJ- National Journal

IJ- International Journal

➤ **STTP/FDP/Workshops/Attended/Participated:-**

Sl.	Name of STTP/FDP/workshop	Organized By	Date
1	Recent Advancements in IoT – Industrial Perspective	National Institute of Electronics & Information Technology (NIELIT) and Ashokrao Mane Group of Institutions, Vathar	19th to 24th January 2026
2	NBA Accreditation Preparation	Ashokrao Mane Group of Institutions	4th January 2026
3	NEP 2020: Guidelines for Syllabus Design	Ashokrao Mane Group of Institutions	3rd January 2026
4	Next-Gen Manufacturing: Embracing Industry 4.0	Ashokrao Mane Group of Institutions, Vathar	25th to 30th August 2025
5	Research Challenges & Opportunities in Electrical Engineering	Rajarshi Shahu College of Engineering, Pune	26th May to 31st May 2025
6	NPTEL course on FACTS Devices	IIT Roorkee	Jan-March 2025
7	ATAL FDP on Urban Development of Smart Cities and Mobility	Ashokrao Mane Group of Institutions, Vathar	30 th December to 4 th January 2025
8	FDP on Advance Machine Learning using Python with Green Technology	Ashokrao Mane Group of Institutions, Vathar	18 th December to 21 st December 2024
9	ATAL FDP on Recent Trends and Advancement in Integrated Power Systems	Bharath Institute of Science and Technology	16 th December to 21 st December 2024
10	NEP-2020 Orientation & Sensitization Programme	Sri Guru Tegh Bahadur Khalsa College, University of Delhi	2 nd December to 11 th December 2024
11	ATAL FDP on Emerging Trends in Electric Vehicle	Walchand College of Engineering, Sangli	8 th January to 13 th January 2024
12	NPTEL FDP on Electric Vehicles – Part 1	IIT Madras	Jan-Feb 2023
13	FDP on Research, Funding & Consultancy	SITCOE, Yadav	3 rd January to 7 th January 2023
14	NPTEL course on NBA Accreditation and Teaching and Learning in Engineering (NATE)	IISc Bangalore	Jan-April 2022
15	ATAL FDP on Power Quality and Reliability Issues for Distributed Energy Sources in Microgrids	Government Engineering College, Bharuch	28 th February to 4 th March 2022
16	FDP on Simulation Tools for Research	SITCOE, Yadav	8 th February to 14 th February 2022
17	Capacity Building Programme (CBP) on Teaching, Learning and Research	Faculty Development Centre, Maharshi Dayanand University	12 th January to 25 th January, 2022

18	NPTEL course on Accreditation and Outcome Based Learning	IIT Kharagpur	Jul-Sep 2021
19	FDP on Recent Trends in Energy Conversion Technologies: A Research Perspective	SITCOE, Yadrav	30 th August to 3 rd September 2021
20	FDP on Green Technology for Sustainable Life: Indian Perspective	National Institute of Technology, Assam	19 th July to 23 rd July 2021
21	FDP on Emerging Trends in Electric Vehicles and Infrastructure Development	RIT, Rajarnanagar	12 th July to 17 th July 2021
22	ATAL FDP on Role of Renewable Energy Sources in Power System	Government Engineering College, Patan	5 th July to 9 th July 2021
23	FDP on Emerging Trends in Industry	KBT College of Engineering, Nashik	18 th May to 22 nd May 2021
24	ATAL FDP on Energy Storage	KPR Institute of Engineering and Technology	22 nd February 2021 to 26 th February 2021
25	ATAL FDP on Accreditation and Outcome Based Education	Yeshwantrao Chavan College of Engineering	8 th February 2021 to 12 th February 2021
26	FDP on Nearly Zero Energy Building (nZEB)	SITCOE, Yadrav	10 th August to 14 th August 2020
27	FDP on Recent Trends in Power Systems	SITCOE, Yadrav	22 nd June to 26 th June 2020
28	FDP on Power Quality and Reactive Power Management	SITCOE in Association with Clariant Power System Ltd, Pune	1 st June to 5 th June 2020
29	FDP on Industrial Smart Automation, Control & Advance Solar Technology System	Sinhgad College of Engineering, Pandharpur	16 th December to 20 th December 2019
30	Industrial Training at Sigma Engineers	SITCOE	01 st December 2019 to 07 th December 2019
31	FDP on Fundamentals of C Programming	SITCOE	26 th November 2019 to 30 th November 2019
32	Workshop on Industrial Automation & Solar System	SITCOE	23 rd August 2019 to 31 st August 2019
33	Workshop on PLC Automation	SIT, Polytechnic	08 th April 2019 to 13 th April 2019
34	Industrial training on Train the Trainer	Bharat Forge Ltd., Pune	25 th March 2019 to 27 th March 2019
35	STTP on Recent trends of power electronics in power system	Sinhgad college, Solapur	13 th June 2016 to 17 th June 2016

36	Workshop on Syllabus setting of BE Electrical Engineering under Shivaji University	Sanjay Ghodawat Institute, Atigre	20 th April 2016
37	Workshop on Advances in Switchgear and Protection	Dnyanganga College of Engineering & Research, Pune	20 th March to 22 nd March 2012

➤ **Special Achievements :-**

- “Young Researcher Award” by LKP Academy, Tamil Nadu on 15th August 2025
- “Best Teacher Award” by Devdan Sevabhavi Sanstha, Sangli on 3rd September 2017

➤ **Departmental Responsibilities:-** ISTE, NPTEL, PBL Coordinator

➤ **Other Experience/Responsibilities:-**

- Worked as a Reviewer and received a Certificate of Excellence in Reviewing from the Journal of Engineering Research and Reports for the AY 2025–2026 in March 2026
- Worked as Convener for ISTE Approved FDP on “Advances, Challenges and Research trends in Electric Vehicle Technology” organized by Department of Electrical Engineering Ashokrao Mane Group of Institutions, Kolhapur from 27th to 31st January 2026
- Worked as a Reviewer for the 7th International Symposium on Advanced Electrical & Communication Technologies- Intelligent Systems for a Sustainable and Connected Future (ISAECT 2025) held at CGC University, Mohali, Punjab, India 18th – 20th December 2025
- Worked as a Reviewer for the IEEE International Conference on Future Technologies (ICFT-2025) organized by Walchand College of Engineering, Sangli held on 7th–8th November 2025
- Worked as an organizing committee member and reviewer for International Conference on Integrated Research and Sustainable Development (ICIRSD) -2025 organized by Ashokrao Mane Group of Institutions, Kolhapur on 30th –31st October & 1st November 2025
- Worked as an Workshop coordinator for 45th GISFI Standardization Series Meeting & International Workshop on “DIGITIZATION: BRIDGING THE PRESENT & FUTURE” organized by Ashokrao Mane Group of Institutions, Kolhapur on 30th–31st October & 1st November 2025
- Worked as a Reviewer for book chapter “A Feed-Forward Back-Propagation Neural Network Approach for Integration of Electric Vehicles into Vehicle-to-Grid (V2G) to Predict State of Charge for Lithium-Ion Batteries” and awarded with Certificate of Excellence in Peer-Reviewing for the Academic Year 2025–2026 by BP International.
- Worked as a Conference Coordinator for THE DECCAN DIALOGUE – INTERNATIONAL SUMMIT 2025 organized by Ashokrao Mane Group of Institutions, Kolhapur on 26th to 28th September 2025
- Delivered session as a Resource Person on “EV Powertrain & Battery Systems” of Faculty Development Program “Electrical Vehicle Technology, Infrastructure & Future

Trends” organized by Sharadchandra Pawar Institute of Technology on 6th September 2025

- Working as an ISTE Coordinator at Ashokrao Mane Group of Institutions, Vathar Tarf Vadgaon from 01/08/2024 to Present
- Worked as a Sponsorship Coordinator for A National Level Technical Event “Tech-Symposium 2k24” at DKTE Society’s Textile & Engineering Institute, Ichalkaranji
- Worked as a NSS (National Service Scheme) Officer at Sharad Institute of Technology, Yadav during 2020-2022
- Organized NSS camps and also conducted activities like Swachh Bharat Abhiyan, Tree Plantation, Blood Donation Drive, Health Camp, Awareness Rallies etc.
- Delivered Guest lecture delivered at Yashoda Technical Campus, Satara for course “Electrical Traction and Utilization” on 7th January 2022 and “Switchgear and Protection” on 25th May 2021
- Worked as an In-Charge HOD of Electrical Department at Vishveshwarya Technical Campus, Miraj from 01/01/2017 to 23/12/2017
- Worked as an Officer In-Charge for MSBTE Exam at Vishveshwarya Technical Campus, Miraj from 19/11/2017 to 27/11/2017
- Worked for NBA, NAAC and Autonomous committees at Various Institutes
- Worked as an Organizing committee member for National conference on Emerging trends and research in Engineering Science at SND COE & RC, Yeola held in March 2015
- Worked as Coordinator for various Workshops, Hands on Trainings, Faculty Development Programs, Webinars etc. at Various Institutes
- Worked as a Paper Setter for Dr. Babasaheb Ambedkar Technological University, Lonere for courses “Special Purpose Electrical Machines” and “Solid State Devices”
- Worked as a Paper Setter for Shivaji University for “Electrical Generation and Utilization”
- Worked as a Paper Setter for Maharashtra State Board of Technical Education for “Fundamental of Electrical Engineering”
- Worked as a Paper Setter, Senior Supervisor, Junior Supervisor, Examiner, Moderator, External Examiner (POE, Projects) at Various Institutes

➤ **Social Contribution:-** Tree Plantation, Health Check Camp, Awareness Rally

➤ **Professional Membership:-**

- Life Member of Indian Society for Technical Education (ISTE)
- Associate Member of The Institution of Engineers (India)
- Member of Institute of Electrical and Electronics Engineers (IEEE) for year 2021-22
- Senior Member of International Association of Electrical and Electronics Engineers (IAEEEE)
- Member of National Institute for Technical Training and Skill Development (NITTSD)
- Member of International Association of Engineers (IAENG)
- Editorial Board Member of Journal of Power Electronics & Devices (MAT Journals)
- Member of International Journal of Creative Research Thoughts (IJCRT)

- Advisory Board Member of World Research Forum for Engineers & Researchers
- (WRFER)
- Editorial Board Member of „Blue Eyes Intelligence Engineering and Sciences
- Publication“ and it“s journals for year 2021-22
- Editorial Board Member of A R Research Publication & Conference World from 2017-
- 2020