

# Curriculum Vitae

Dr. Mangesh Subhash Kulkarni  
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## EDUCATION

Qualification	College/Institution	Board/University	Year	Percentage/CGPA
PhD	Lovely Professional University, Punjab	Lovely Professional University, Punjab	August 2025	7.50
M.E (Electrical Power Systems)	Bhirabai Sawant College of Engineering and Research, Pune	Savitribai Phule Pune University	May 2016	7.72 (First Class)
B. E (Electrical Engineering)	Walchand College of Engineering, Sangli	Shivaji University, Kolhapur	July 2009	64.20 % (First Class)
DEE (Electrical Engineering)	Walchand College of Engineering, Sangli	Maharashtra State Board of Technical Education	June 2005	76.31 % (First Class)

## ACADEMIC & ADMINISTRATIVE EXPERIENCE

Role	Institution/Department	Duration
<b>Assistant Professor</b>	Electrical Engineering , Sharad Institute of Technology College of Engineering, Ydrav	May 2016- Present
<b>Controller of Examinations</b>	Sharad Institute of Technology College of Engineering, Ydrav.	2021 – Present
<b>Dean Academics</b>	Sharad Institute of Technology College of Engineering, Ydrav	Dec 2016 – Jul 2017
<b>Head of Department,</b>	Electrical Engineering, Sharad Institute of Technology College of Engineering, Yadrav	Jun 2011 – Jun 2015 & Jun 2017 – Jun 2018
<b>Program Coordinator</b>	Electrical Engineering, Sharad Institute of Technology College of Engineering, Yadrav	Jun 2018 – Present

## RESEARCH PUBLICATIONS

### JOURNAL

- **M. S. Kulkarni**, S. Mishra, S. K. Sudabatulla, and N. K. Sharma, “Enhancing grid resiliency in distributed energy systems through a comprehensive review and comparative analysis of islanding detection methods,” *Scientific Reports, Nature Publishing Group*, vol. 14, no. 1, p. 12124, 2024.
- **M. S. Kulkarni**, S. Mishra, S. Sudabatulla, and N. K. Sharma, “Efficient islanding detection in hybrid microgrids: The hybrid approach integrating ROCPAD and IB-RPV,” *Renewable Energy Focus, Elsevier* vol. 51, p. 100629, Oct. 2024.
- A. Raj, T. D. Jamadar, A. L. **Kulkarni M. S.** Suryawanshi, “SHE-PWM cascaded MI inverters structure with fault tolerance over open circuit faults,” *Journal of Advanced Research in Dynamical and Control Systems*, Scopus vol. 12, no. 1 Special Issue, pp. 348–358, 2020.
- V.A. Gundale, **MS Kulkarni**, “A practical approach to the design & implementation of a water cooled single phase submersible motor,” *Int. J. of Eng. Res. & Appl.*, vol. 2, no. 2, pp. 299–304, 2012.
- V.A. Gundale, **MS Kulkarni**, “Optimization of the Core Length of a Water Cooled Three Phase Submersible Motor,” *OPTIMIZATION*, vol. 2012, pp. 508–514, 2012.
- **MS Kulkarni**, B.R. Patil, S.A. Warake, A. Kalidas, N.V. Patil, P.S. Shinde, “Design and Implementation of Full Bridge Non-isolated DC-DC Bidirectional Converter Using Fuzzy Logic,” *Journal of Embedded Systems and Processing*, vol. 4, no. 2.
- **MS Kulkarni**, N. Nishikant Patil, S. Dhanaji Mane, P. Ramesh Mane, R. S. Patil, P. S. Bhosale, “Design and Implementation Of Non-Isolated Half Bridge DC-DC Bidirectional Converter Using Fuzzy Logic,” *Journal of Switching Hub*, vol. 4, no. 2, Aug. 2019.

### CONFERENCES

- **M.S. Kulkarni** and J.S. Kulkarni, “Performance Analysis of Anti Islanding Protection for Grid Tied Photovoltaic System,” in *Proc. IEEE Int. Conf. on Communication and Signal Processing (ICCSP)*, India, Apr. 6–8, 2017.
- **M.S. Kulkarni**, S. Mishra, S. Sudabattula, "Performance Analysis of Islanding Detection Method for Grid-Tied Photovoltaic System," in *Proc. 2022 IEEE Int. Conf. on Mobile and Embedded Technology (MECON)*, Mar. 2022, pp. 420–424.
- **M.S. Kulkarni**, S. Mishra, S. Sudabattula, "Implementation and Performance Evaluation of Intermittent Bilateral Reactive Power Variation Islanding Detection Technique in Hybrid Microgrid," in *Recent Developments in Control, Automation and Power Engineering: Proc. of the 5th Int. Conf. RDCAPE-2023*, vol. 1, Springer Nature, 2025, pp. 189–202.

## PROPOSALS SUBMITTED/SANCTIONED:

- Proposal submitted (Co-PI) on 1st February 2021 with project entitled “Modernization of Electrical Machines Laboratory” to AICTE MODROB (Aspirational Institutions) with Rs.16,00,000 and it has been sanctioned by the Council under 2021-22 and received fund from AICTE.
- Proposal Submitted to DST, MINISTRY OF SCIENCE & TECHNOLOGY (Division: Technology Development Transfer; Program or Scheme: Technology Development Program) on 15th January 2022 with project entitled “Development of Remote Water Sampling Using Drones for Military Observations” with Rs. 1,54,35,957.

## PATENTS PUBLISHED/GRANTED

Title	Inventors	Patent Office	Application No.	Status	Year
Monthly Electricity Billing Pay Automatic and Alert Through Bill SMS on WhatsApp	Mangesh S. Kulkarni, Amol S. Suryawanshi, Chetan D. Patil, Asif L. Jamadar	India (IN)	202321034726	Published	2023
Smart Factory Using Industry 4.0	Mangesh S. Kulkarni, K. Hussain, Asif L. Jamadar, Chandrashekhar S. Patil, and others	India (IN)	202321019082	Published	2023
Hybrid Islanding Detection Method Combining Rate of Change of Phase Angle Difference and Intermittent Bilateral Reactive Power Variation for Hybrid AC/DC Microgrid	Mangesh S. Kulkarni, Sachin Mishra, Suresh Kumar	India (IN)	202411058914 A	Published	2024
Poultry Farm Monitoring System for Dead Chicken Using Image Processing	Sachin Mishra, Mangesh S. Kulkarni	India (IN)	202411085255	Published	2024

Sustainable Farming with Solar-Powered Seed Planting and Pesticide	Sachin Mishra, Mangesh S. Kulkarni, Suresh Kumar	India (IN)	202511047668	Complete Filed	2025
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## WORKSHOPS AND FACULTY DEVELOPMENT PROGRAMS

- Completed a 4-day course on “Stability and Protection of Renewable-Dominated Power Grids” from 6th to 9th January 2025. Short-Term Course (IISc Bengaluru).
- Attended one-week online FDP on resilient energy systems and renewable integration from 22nd to 26th July 2024 RISE-POWER 2024 (NIT Patna, IEEE PES).
- Participated in an advanced research methodology training program held from 10th to 14th July 2023. Ph.D. Summer School 2023 (IIT Bhubaneswar)
- ISTE STTP for Coordinators – IIT Kharagpur Attended the *Electric Power System* training for STTP Coordinators from 1st to 5th May 2017, held at IIT Kharagpur, India.
- ISTE STTP on Electric Power System – Remote Center, IIT Kharagpur Successfully completed the ISTE STTP from 12th June to 15th July 2017 on *Electric Power System* via Remote Learning Center coordinated by IIT Kharagpur.
- Academic Leadership Roles Study – NITTTR Bhopal Participated in a research study on *Academic Leadership Roles*, conducted by the National Institute of Technical Teachers' Training and Research, Bhopal (July–Nov 2021).

## CERTIFICATION COURSES / PROGRAMS

- **NPTEL Certification:** *Economic Operations and Control of Power Systems* – **IIT Delhi**, Jul–Oct 2025 (12-week course), **Score: 76%**, Roll No. NPTEL25EE115S568100362.
- **NPTEL Certification:** *Power System Protection and Switchgear* - **IIT Roorkee** (Jul–Sept 2025, 8-week course) – **Score: 60%**, Roll No. NPTEL25EE101S446600148.
- **NPTEL Certification:** *Power System Analysis* - **IIT Kharagpur** (Jul–Oct 2025, 12-week course) – **Score: 47%**, Roll No. NPTEL25EE169S1168100653.
- **NPTEL Certification: Accreditation and Outcome Based Learning IIT Kharagpur** (Jul–Sept 2025, 08-week course) – **Score: 50%**, Roll No. NPTEL21GE22S14210091.

## PROFESSIONAL CONTRIBUTIONS

- Coordinator for 3 Days FDP on "*Industrial Automation with PLC and SCADA*" organized by Dept. of EE, SITCOE in association with Venjay Automation Pvt. Ltd. Bengaluru from 25-08-2022 to 27-08-2022.
- Coordinator for 5 Days Online FDP on "*Recent Trends in Energy Conversion Technologies: A Research Perspective*" organized by Dept. of EE, SITCOE in association with ISTE and technically sponsored by IEEE Bombay Section from 30-08-2021 to 03-09-2021.
- Coordinator for One week Online FDP on "*Recent Trends in Power Systems*" organized by Dept. of EE, SITCOE from 22-06-2020 to 26-06-2020.
- Coordinator for One week Online FDP on "*Power Quality and Reactive Power Management*" organized by Dept. of EE, SITCOE in association with Clariant Power System Ltd. Pune from 01-06-2020 to 05-06-2020.
- Coordinator for One Week Workshop on "*Energy Conservation and Audit*" at Sharad Institute of Technology College of Engineering from 28-09-2019 to 30-09-2019. (TEQIP-III Sponsored)
- Acted as a Remote Centre Coordinator and contributed to the one-day workshop on *C and C++*, held on 29th February 2020 under NMEICT by MoE, Govt. of India.

## EXPERT TALKS / RESOURCE PERSON CONTRIBUTIONS

- Resource Person – Institutional Staff Capacity Enhancement Program-2025 (June 2025) Resource Person to conduct sessions on "MS Office and Web Skills" during a Staff Development Program held at SITCOE Yadrav from 19<sup>th</sup> June to 24<sup>th</sup> June 2025
- Resource Person – Staff Development Program (Feb 2024) Resource Person to conduct sessions on "MS Office and Web Skills" during a Staff Development Program held at SITCOE Yadrav from 1st to 3rd February 2024.
- Expert Talk on Hydro Power Station – Delivered an expert lecture on "Hydro Power Station" for Second Year Electrical students of Sharad Institute of Technology Polytechnic Yadrav on 4th October 2011.

**Dr. Mangesh S Kulkarni**