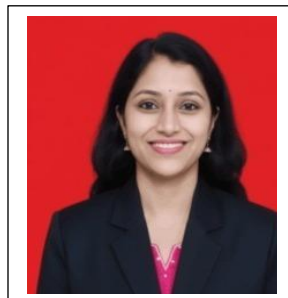




Department of Electronics & Telecommunication Engineering

Faculty Profile



Name:	Dr. Shobha Sachin Nikam		
Designation:	Associate Professor		
Email Id:	ssnikam@aismscoe.com		
Contact No:	+91 9860709687		
Educational Qualification:	1. PHD (E&TC- VLSI)- Savitribai Phule Pune University		
	2. ME (E&TC)- Savitribai Phule Pune University		
	3. BE(E&TC)- Savitribai Phule Pune University		
Experience:	Teaching- 18 Yrs	Industry- 0 Yrs	Total-18 Yrs
Awards/ Achievements	1. Best Young researcher from IRDP		
	2. Fellowship from VLSI Society of India for attending VLSI D conference.		
Subject Taught (UG &PG)	1. VLSI Design and Technology (UG)		
	2. Digital Systems (UG)		
	3. Design for Testability (UG)		
	4. ASIC Design (UG)		
	5. Fiber Optic Communication (UG)		
	6. Process Automation (UG)		
	7. System on Chip (PG)		

Course/ Seminar/Workshop/FDP Attended:	
1. 12 Week NPTEL FDP on “Leadership and Team Effectiveness”- Topper-Silver medal	
2. 12 Week NPTEL FDP on “NBA Accreditation and Teaching and Learning in Engineering” - Topper-Silver medal	
3. 12 Week NPTEL FDP on “Digital Systems Design”- Topper-Silver medal	
4. 8 Week NPTEL FDP on “System Design Through Verilog”- Topper-Silver medal	
5. Engineering Education Research Course by IUCEE, from August 2025 to January 2026	
6. AICTE-approved National Initiative for Technical Teachers Training (NITTT) courses on: • Orientation towards Technical Education and Curriculum Aspects • Professional Ethics & Sustainability • Communication Skills, Modes and Knowledge Dissemination • Instructional Planning and Delivery • Technology Enabled Learning and Life-long Self-learning • Student Assessment and Evaluation • Creative Problem Solving, Innovation and Meaningful R&D • Institutional Management & Administrative Procedures	
Area of Specialization:	1. VLSI Design and Technology
	2. Analog and Digital CMOS Design
	3. Artificial Intelligence/ Machine Learning/ Deep Learning
Publication Details(Journal/Conference):	1. Ku Band UltraLow Phase Noise PLL Frequency Synthesizer using 0.18 μ m CMOS Process, International Journal of Engineering Trends and Technology, August 2022
	2. An ultra-low current mismatch charge pump and loop filter in 0.18 μ m CMOS process for low spur PLL applications, International Journal of Engineering Trends and Technology, June 2021
	3. Inertial sensors based road condition monitoring & alternate route suggestion, International Journal of Innovative Technology and Exploring Engineering, May 2019
	4. Automatic Segmentation Using U -Net for Accurate Liver Segmentation of CT Images, International Journal of Intelligent Systems and Applications in Engineering, 21 September 2023
	5. Computer -aided automated detection of kidney disease using supervised learning technique, International Journal of Electrical and Computer Engineering, October 2023
	6. Fuzzy Fault Diagnosis of Open Switch Failure in Three Phase VSI, Journal of Pharmaceutical Negative Results, 31 December 2022
	7. Fuzzy Internet of Things -based water irrigation system, Agricultural Engineering International: CIGR Journal, 28 February 2023

	8. Image segmentation in Diagnosing the Ground Bud Necrosis Virus in Tomatoes using K -Means Clustering, International Journal of Electrical and Electronics Research, 30 July 2023
	9. Fuzzy Logic Diagnostics for Open -Circuit Faults in Renewable Energy Voltage Source Inverters with Changeable Load Conditions, International Journal of Intelligent Systems and Applications in Engineering, 25 December 2023
	10. Integrating Human Pose Regression with Motion Analysis and Lightweight Edge Solutions for Advanced Pedestrian Detection, SSRG International Journal of Electrical and Electronics Engineering, Dec 2024
	11. Comparative Study of Pre- Trained and Traditionally Trained Models for Text Based Sentiment Analysis, International Journal of Applied Mathematics, 2025
	12. Deep Learning based emotion recognition from facial expressions, international journal of computer information systems and industrial management applications, 2026
Patent/IPR/Research Work:	1. Funded Research: Design Feasibility of PLL Frequency Synthesizer for Ku Band. Duration: 1 Year 6 Months. Funding Agency: Indian Space Research Organization (ISRO) Grant Type: Research grant Grant Amount: 8, 60,000/- (Eight Lakh Sixty Thousand Only)
	2. Granted Patent: AI Based Street Cleaning Vehicle.
	3. Granted Patent: AI based robot to analysing farm and crops.
	4. Granted Patent: Wallbot: The smart wall cleaning robot.
	5. Published: Text to Speech Converter using Machine Learning
	6. Published: IOT Based Automated Control System for Monitoring the Emission Levels of Individual Vehicles
Responsibility Handled:	1. Associate Dean Academics (Institute Level)
	2. Dean Academics (Institute Level)
	3. NEP Coordinator (Institute Level)
	4. Ph.D. Coordinator (Institute Level)
	5. Internal Complaints Committee coordinator (Institute Level)
	6. Social Media, Website coordinator (Department Level)
	7. NAAC Cri-3, NBA Cri-5, NBA Cri-6 (Department Level)
Guest Lecture/Seminar Delivered:	1. Resource person in faculty orientation program on TE (Electronics Engineering -VLSI D&T) revised syllabus (2019 Course) under the aegis of Board of Studies (E&TC), Savitribai Phule Pune University, for subject ASIC Design., 2026
	2. Resource person in faculty orientation program on SE (Electronics Engineering -VLSI D&T) revised syllabus (2024 Course) under the

	aegis of Board of Studies (E&TC), Savitribai Phule Pune University, for subject FPGA based System Design.,2026
	3. Resource person in faculty orientation program on BE(E&TC) revised syllabus (2019 Course) under the aegis of Board of Studies (E&TC), Savitribai Phule Pune University, For subject VLSI Design and Technology,2022
	4. Expert talk on “ Digital systems ” at Cusrow Wadia Institute of Technology, Pune,2024
	5. Expert talk on “ CMOS Technology: Advanced and Beyond ” at Cusrow Wadia Institute of Technology, Pune,2023
	6. Judge for Research Symposium at PCCOE, Pune
No of Projects Supervised	UG: 20
	PG: 2
	PHD: 3 (Ongoing)