


<b>Department of Electronics and Telecommunication Engineering</b>				
<b>Name</b>	<b>Dr. Nilashree Mahesh Madakath</b>			
<b>Date of Birth</b>	<b>10-11-1980</b>			
<b>Education Qualifications</b>	<b>UG</b>	<b>PG</b>	<b>PhD</b>	
	Electronics & Telecommunication on Engineering	Electronics & Telecommunication on Engineering	Technology, Electronics Branch	
<b>Work Experience</b>	<b>Teaching</b>	<b>Research</b>	<b>Industry</b>	<b>Others</b>
	22 years	-	-	-
<b>Area of Specialization</b>	<b>Probability and statistics, Speech and Signal Processing, Error control coding</b>			
<b>Courses taught</b>	<ul style="list-style-type: none"> <li>• Computer Communication Networks TE EXTC Sem VI (rev 2019)</li> <li>• Random Signal Analysis TE EXTC Sem V (rev course)</li> <li>• Internet Communication Engg. (Rev) – BE EXTC Sem VII</li> <li>• Internet Communication Engg. (Old) – BE EXTC Sem VIII</li> <li>• Internet and Voice Communication (CBGS) - BE EXTC Sem VIII</li> <li>• Basic Electricity and Electronics Engg (Rev/CBGS) FE Sem I</li> <li>• Optical fiber communication (Old/Rev)-- BE EXTC Sem VIII</li> <li>• Optical Communication and Networks (CBGS) - BE EXTC Sem VII</li> <li>• Radar Engineering TE EXTC Sem VI (rev course)</li> <li>• Probability and Random Processes TE EXTC Sem V(old course)</li> <li>• Electronic devices and circuits SE IT Sem III(old course)</li> <li>• Optical fiber communication BE EXTC Sem VIII (old + rev course)</li> <li>• Basic Electricity and Electronics Engg FE Sem 1 (for old + rev course + CBGS+CBCGS)</li> <li>• Statistical Signal Analysis (ME EXTC CBGS)</li> <li>• Digital communication (B Tech. Sem VI, at VJTI Mumbai as QIP Research scholar)</li> <li>• Advanced Digital communication (M tech., Sem I at VJTI Mumbai as QIP Research scholar)</li> <li>• Error control coding (B Tech. Sem V, at VJTI Mumbai as QIP Research scholar)</li> <li>• Probability concepts in Engineering (under IETE professional society activity, AMIE)</li> <li>• Integrated circuits (MSBTE syllabus, L &amp; T Institute, Powai)</li> <li>• Principles of Communication (MSBTE syllabus, L&amp; T Institute, Powai)</li> <li>• Digital communication (MSBTE syllabus, L &amp; T Institute, Powai)</li> </ul>			
<b>Research guidance (Number of Students)</b>	<b>Under Graduate projects</b>	BE project guidance 1) In progress BE Final year students of the batch 2024-25 project on “Multilevel authentication for Bank Locker systems”, Abhinav P, Saniya Y, Amit W and Shruti H. 2)		

		<p>BE Final year students of the batch 2021-22 project on “Multilevel authentication systems”, Anupama Karmesh Ashish and Joshanu.</p> <p>3) BE Final year students of the batch 2018-19 project on “Biometric Authentication using speaker recognition”, Charu K., Riddhi T., Robin N, Joshua N..</p> <p>4) BE Final year students of the batch 2017-18 project on “High speed Optical Xilinx GTP transceiver”, Vedant C., Raviraj G. , Shamika G, Joso G., in consultation with TIFR.</p> <p>5) BE Final year students of the batch 2016-17 successfully completed a project on “Remote controlled Quadcopter”, Mahendra G, Thomson J, Roshan V, Abhimanyu G.</p> <p>6) BE Final year students of the batch 2015-16 successfully completed a project on “Smart Bag”. Shweta Mhavarkar, Tanvi Pulekar, Poonam Sakhare.</p> <p>7) BE Final year students of the batch 2014-15 successfully completed a project on “Android controlled Robot”. Himani Pathak, Aditya Shinde, Vidyalaksmi.</p> <p>8) BE Final year students of the batch 2010-11 successfully completed a project on “Zigbee based Monorail”. Nilesh Pagire, Santosh , Vishal C.</p> <p>9) BE Final year students of the batch 2010-11 successfully completed a project on “Data collecting Space Rover”. Ashish G, Pratima W., Kiran P</p> <p>10) BE Final year students of the batch 2008 successfully completed a project on “Development of two way mobile radio”. Melwin Louis Anugrah Srivastava Chandrakant .Mahale Sandhya.</p> <p>11) BE Final year students of the batch 2007 successfully completed a project on “Multichannel two way mobile radio”. Shankar Jadhav Harshal Nehete Rupesh Patil Shrinand Shirwal</p> <p>12) BE Final year students of the batch 2006 successfully completed a project on “Implementing two way mobile radio”. Sagar G Pankaj K. Omkar K. Mukesh P.</p> <p>13) BE Final year students of the batch 2006 completed project on “m-Commerce using Near Field Communication(NFC)”. Parameshwaran L. Nikhil P. Sushant P. Shwetangi S.</p> <p>14) BE Final year students of the batch 2005 completed project on “Two way mobile radio”. Shankar Narayan A. Ajit V. Onkar Bhardwaj. Dipen Dalal.</p>
--	--	---

	<b>Masters</b>	<b>ME project guidance</b> 1. ME Final year student of the batch 2020-21 worked on project “Non-Iterative and Fast In-Vivo Gradient Shimming for Magnetic Resonance Imaging” , with IIT Sameer Powai, Student : Aiman Darwajkar 2. ME Final year student of the batch 2018-19 worked on project “Control of devices using FPGA” with IIT SAMEER Kharghar, Student : Hema Manjule 3. ME Final year student of the batch 2014-15 worked on project “Public Key Encryption in Visual Cryptography” Student : Sarita Kulhari. 4. ME Final year student of the batch 2015-16 worked on project “Vocal tract Shape Estimation for Children” Student : Veena S	
<b>External Fund Received</b>	-		
<b>Patent (Filed / published / Granted)</b>	-		
<b>No. of papers published in National/International Journals/Conferences</b>	<b>07 in National Conferences</b>	<b>12 in International Conferences</b>	<b>08 in Journal Papers</b>
<b>Research Publications (No. of papers in National/International Journals / Conferences and No. of Books/ Book Chapters published</b>	Scopus/SCI indexed journals: 04 Peer reviewed / UGC journals: 04 IEEE/Springer conferences: 9 Books/Book Chapters: 2 Other International Conferences: 3 National Conference: 7  BOOK PUBLISHED N. Madakath and S. Wagh, “Reliable Speaker Recognition Systems: A Comparative Accuracy Analysis with LDPC and Polar Codes”, Scholar's Press, 1st ed. Technology, Published in Jan. 15, 2025. ISBN-13: 978-3-639-71862-1, ISBN-10: 3639718623.  BOOK CHAPTER PUBLICATION : LECTURE NOTES IN SPRINGER E-BOOK 1. Nilashree W., “Voice based Biometric Authentication”, Springer ebook lecture notes Lecture Notes in Electrical Engineering , proceedings of “Nanoelectronics circuits and communication systems”, ISBN 978-981-15-74863 (eBook) page number 229-238 , Nov 2019 2. Wankhede, N.S., Wagh, S., “Augmenting Reliability in Speaker Recognition Systems Through Low Density Parity Check Codes” In: Bradford, P.G., Gadsden, S.A., Koul, S.K., Ghatak, K.P. (eds) Proceedings of IEMTRONICS 2024. IEMTRONICS 2024. Lecture Notes in Electrical Engineering, vol 1228. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-97-4784-9_26">https://doi.org/10.1007/978-981-97-4784-9_26</a> , 2025. Award(s) received : Awarded the Best paper title for the research paper on “Augmenting reliability in Speaker recognition systems using Low Density parity check codes,” presented at IEMTRONICS 2024		

	(International IOT, Electronics and Mechatronics Conference) held during 3rd – 5th April 2024 at Imperial College London, UK, 2024
<b>Projects Carried out</b>	<p>1) Successfully completed PhD under QIP AICTE at Veermata Jijabai Technological Institute, Mumbai in December 2024. Supervisor: Dr. Sushama Wagh, Research domain : Error control coding for reliable speaker recognition systems.</p> <p>2) Completed a hardware design of analog optical communication with self-finance under lab experiment set up/ prototype development.</p> <p>3) Successfully completed ME project work from Fr. C R I T, Vashi, Navi Mumbai, in the year 2013. Supervisor: Dr. Milind S. Shah, Dissertation topic: Vocal tract shape estimation</p> <p>4) Successfully completed BE project work from MGM Engineering College, Kamothe, in the year 2002. Project Guide: Prof. S. Wadkar, Project topic: Wideband FM Generation</p>
<b>Other major responsibilities</b>	<b>Listed down</b>

#### Administrative work

- 1) Syllabus setting for Sem 5 and Sem 6 subjects for Autonomy model. ( CCN , IoT, Network security vertical SEM 5 and Sem 6, RSA)
- 2) NBA Criteria 5 preparation.
- 3) Senior supervisor for Sem III Mid Sem (MSE) and End Sem (ESE) main Examinations (Autonomy Batch) SH2024
- 4) Project Coordinator for Major Projects BE EXTC for the academic year 2024-2025.
- 5) Convenor of the “Convocation” Certificate Distribution Ceremony for 2024 BE graduates of FCRIT held in March 2025.
- 6) Felicitation function coordinator for pass out batch 2020-2024 held on 19<sup>th</sup> Oct 2024.
- 7) Class teacher for Semester 6 TE EXTC FH2024.
- 8) Paper reviewer for ICNTE 2023.
- 9) Paper setting done for Internet communication Engg for year 2021 exam
- 10) Paper reviewer for ICNTE 2021.
- 11) Paper setting done for Internet and voice communication, Optical fiber communication, Random signal Analysis and Internet communication Engg for year 2020 exams
- 12) Syllabus setting done for Radar Engg subject for 2019 revision
- 13) Handling defaulter students in EXTC department for FH2019
- 14) Member of Accreditation committee NBA and NAAC for the year 2019
- 15) Senior supervisor for university examinations FH2019
- 16) Prelim conduction for Institute FH2019
- 17) Handling defaulter students in EXTC department for FH2019.
- 18) Convenor of the “Convocation” Certificate Distribution Ceremony for 2019 BE graduates o FCRIT held on 16th March 2019.
- 19) Class teacher for SemVIII EXTC during first half of academic year 2018-2019.
- 20) Conduction of Internal Assessment test 2 for FH2019
- 21) Publication core committee member for ICNTE 2019

- 22) Organized Workshop for S.E. students on 30th June 2018 under IETE.
- 23) Handling defaulter students in EXTC department for SH2018. 23) Member of Accreditation committee for the year 2018.
- 24) Convenor of the "Convocation" Certificate Distribution Ceremony for 2017 BE graduates of FCRIT held on 15th March 2018.
- 25) Senior supervisor for university examinations FH2017
- 26) Prelim conduction for Institute FH2017
- 27) Member of Accreditation committee for the year 2017.
- 28) Handling defaulter students in EXTC department for SH2017.
- 29) Convenor of the "Convocation" Certificate Distribution Ceremony for 2016 BE graduates of FCRIT held on 18 February 2017.
- 30) Class teacher second for SemVIII EXTC during first half of academic year 2016-2017.
- 31) Department coordinator for ETAMAX 2017.
- 32) Member of Accreditation committee for the year 2017.
- 33) Handling defaulter students in EXTC department for FH2017.
- 34) Organized Workshop for S.E. students on 2nd July,2017 under IETE.
- 35) Convenor of the "Convocation" Certificate Distribution Ceremony for 2015 BE graduates of FCRIT held on 22 January 2016.
- 36) Project Coordinator for EXTC Department for FH2016.
- 37) Organized Felicitation programme ( Food Committee member) held in September 2015.
- 38) Organized (Food Committee member)"Convocation" Certificate Distribution Ceremony for 2014 BE graduates of FCRIT held in February 2015.
- 39) Project Coordinator for EXTC Department for SH2015. 40) Reporting Officer (SH15).
- 40) Member of Food committee of "ICNTE-15" International conference organized by Fr. CRIT, Vashi, held on Jan 9-10, 2015.
- 41) Reporting Officer (FH15).
- 42) F.E. Admission cell duties done for the first half of academic year 2015-2016.
- 43) Class teacher for SemVIII EXTC during first half of academic year 2015-2016.
- 44) Organized Workshop for S.E. students on 3th and 4th July,2015 under IETE.
- 45) Member of Food committee during Felicitation programme held in September 2014.
- 46) F.E. Admission cell duties done for the first half of academic year 2014-2015.
- 47) Organized Workshop for S.E. students on 4th and 5th July,2014 under IETE.
- 48) Judge for technical paper presentation held on 22nd August 2014 under Oscillations 2014.
- 49) Reporting Officer(SH14)
- 50) Class teacher for SemVIII EXTC during first half of academic year 2014-2015.
- 51) F.E. Admission cell duties done for the first half of academic year 2014-2015.
- 53) Organized Workshop for S.E. students on 4th and 5th July,2014 under IETE.
- 52) F.E. Admission cell duties done for the first half of academic year 2013-2014.
- 53) Reporting Officer(FH14)
- 54) Class teacher for SemVIII EXTC during first half of academic year 2013-2014.
- 55) Reporting Officer(SH13)
- 56) Member of Organizing committee of MICRO-2013 (1-Day Lecture Series- SE/TE/BE EXTC students) for Department of EXTC, Fr. CRIT, Vashi on August 17, 2013.

- 57) Member of Venue committee for AICTE Sponsored National Level STTP on “VLSI and Embedded Systems” July 1-5, 2013 organized by EXTC Department of Fr. CRIT, Vashi.
- 58) F.E. Admission cell duties done for the first half of academic year 2011-2012.
- 59) Organized Workshop for S.E. and T.E. students on 15th and 16th July, 2011 under IETE.
- 60) Reporting Officer(FH11)
- 61) Class teacher for SemVIII EXTC during first half of academic year 2010-2011.
- 62) Member of AICTE committee of EXTC Department( FH2011)
- 63) Organized Oscillations 2011 (Feb. 10-11, 2011 ) an intercollegiate event.
- 64) Organized Student-teacher Interactive event- Buzz 2011 for EXTC Department.
- 65) F.E. Admission cell duties done for the first half of academic year 2010-2011.
- 66) Reporting Officer(FH10)
- 67) Organized Oscillations 2010 (Feb. 10-11, 2010 ) an intercollegiate event.
- 68) Organized Student-teacher Interactive event- Buzz 2010 for EXTC Department.
- 69) Member of AICTE committee of EXTC Department( SH2010)
- 70) Reporting Officer(SH10)
- 71) Convener of IETE/ETSA committee of EXTC Dept. (FH-2009)
- 72) Reporting Officer(FH09)
- 73) Organized Oscillations 2009 (Feb. 13-14, 2009 ) an intercollegiate event.
- 74) Organized Student-teacher Interactive event- Buzz 2009 for EXTC Department.
- 75) Member of accreditation Committee of EXTC Dept. (SH-2008)
- 76) Convener of IETE/ETSA committee of EXTC Dept. (SH-2008)
- 77) Organized Techno-cultural event “EXTACY-2008” under IETE/ETSA on August 8th -9th , 2008. 80)
- 78) Member of food committee during Felicitation programmed held in September 2008.
- 79) Reporting Officer(SH08)
- 80) Class teacher for Sem I Div E during first half of academic year 2008-2009.
- 81) F.E. Admission cell duties done for the first half of academic year 2008-2009. 84)
- 82) Organized Oscillations 2008 (Feb. 15-16, 2008 ) an intercollegiate event.
- 83) Reporting Officer(FH08)
- 84) Member of venue committee of NCNTE-08 national conference organized by Fr. CRIT, Vashi, held on 29th Feb & March 1st, 2008.
- 85) Organized Student-teacher Interactive event- Buzz 2008 for EXTC Department.
- 86) Comparer for the Departmental seminar on “Latest Technologies (LOOPS-2K8)” at Fr. CRIT, Vashi, held on 28/02/2008.
- 87) Member of Accreditation Committee at EXTC Dept. (FH-2008) 90) Co-convener of IETE-ETSA Committee at EXTC Dept.
- 88) Member of Cleanliness Committee at EXTC Dept.
- 89) Reporting officer.(SH07)
- 90) Working for Budget ( Financial Statement preparation) on departmental as well as Institute level.
- 91) Organized Techno-cultural event- Oscillations 2007 for EXTC Department.
- 92) Organized Student-teacher Interactive event- Buzz 2007 for EXTC Department.
- 93) Class-teacher for Sem VI EXTC during first half of academic year 2007-2008.
- 94) Accompanied BE students for industrial visit to Bangalore & Mysore from 26th Feb to 4th March 2007.
- 95) Organized Techno-cultural event- Extacy 2006 for EXTC Department.

- 96) Class teacher for Sem I Div E during first half of academic year 2006-2007.
- 97) F.E. Admission cell duties done for the first half of academic year 2006-2007.
- 98) Member of Cultural and Sports committee of EXTC Dept. up to first half of academic year 200506.
- 99) Class teacher for Sem I Div E during first half of academic year 2005-2006.
- 100) F.E. Admission cell duties done for the first half of academic year 2005-2006.
- 101) Organizational support to ExTaCy 2005 (23rd to 26th Aug 2005 )
- 102) Staff in charge for Sports like Table tennis, Carrom and Chess competitions held at Fr.C.R.I.T ,Vashi during FACES 2005 (13/09/05).
- 103) Judge for the “Group Singing Competition” held at Fr.C.R.I.T ,Vashi during FACES 2005.
- 104) Arranged assembly for One week (19th to 26th of Oct 2005) for the college.
- 105) IInd class Teacher for EXTC Sem VI for the year 2005-06.
- 106) Accompanied the TE EXTC students during their industrial visits to “Bharati Broadband Ltd, Nerul” for the academic year 2005-06.
- 107) Member of venue committee for LOOPS 2K6 , Departmental Seminar held on 18 February , 2006

Member of Sponsorship Committee and reception committee for Conference on National Regeneration for Responsible Citizenship during first half of academic year 2005-2006