

M.E. Thesis Guidance in 2021- 2025

Sr.No.	Name of Student	Topic of Research	Supervisors	Date of Completion
1.	Ranjeet Singh Chauhan	Carbon Nanotube FET based SRAM Design and Performance Analysis	Dr. Rajesh Mehra	April 2021
2.	Himanshu Mahatma	Single Image Dehazing by using Hybrid Dark Channel Prior	Prof. Maitreyee Dutta	April 2021
3.	Surender Kumar	Modeling and Performance Analysis of the Drain Doping Engineering in Group IV Material based Heterojunction Tunnel FET	Dr. Rajesh Mehra	April 2021
4.	Kamaljeet Singh	Design Techniques for Low Power CMOS Band Gap Voltage Reference	Dr. Rajesh Mehra	April 2021
5.	Bhupender Singh	Dual Band MIMO Antenna for 5G Applications	Dr. Garima Saini	August 2021
6.	Shweta Tripathi	Circularly Polarised Antenna for UHF Band	Dr. Garima Saini	August 2021
7.	Shiwani Vashist	Face recognition using Principal Component Analysis and Artificial Neural Networks	Dr. S.S. Gill Dr. Balwinder Raj	September 2021
8.	Parul Sharma	Microaneurysm Detection in Fundus Images	Dr. Amod Kumar Dr. Balwinder Singh Dhaliwal	September 2021
9.	Jagriti Kumari	Hybrid Nonlinear Companding Scheme for PAPR Reduction in FBMC	Dr. Balwinder Raj Dr. S.S. Gill	September 2021
10.	Kush Singla	Design and Analysis of 3D Printed Substrate Based Antenna For Wearable IOT Applications	Dr. Garima Saini Dr. Balwinder Singh Dhaliwal	October 2021
11.	K.M. Shivani	Optimized Proskite Solar Cell Design using Suitable Defects in layers for enhanced efficiency	D. S. S. Gill Dr. Meenakshi Sood	October 2021
12.	Parminder Kaur	Design and Performance Analysis of Zinc Oxide Thin Film Transistor (ZnO ₂ TFT) with High-K Dielectric Materials	Dr. Balwinder Raj Dr. S.S. Gill	October 2021
13.	Geetanjali	FPGA based Multiplier-decimator for Wireless Communication System	Dr. Rajesh Mehra	October 2021

14.	Ranbirjeet Kaur	Electricity Theft Detection Using RNN-LSTM Technique	Dr. Garima Saini	January 2022
15.	Shefali Bharti	Carbon Nanotube FET Waste Soft Error Masking Latch	Dr. Rajesh Mehra	January 2022
16.	Parul Sharma	Design and Analysis of Spintronics based MRAM for artificial Intelligence and Neurimorphic Computing Applications	Dr. S.S. Gill Dr. Balwinder Raj	January 2022
17.	Simran Malhotra	Design of Provskite Solar Cell for enhanced efficiency using Optimized Defect in layers	Dr. Rajesh Mehra Dr. Meenakshi Sood	January 2022
18.	Amit Kumar	EEG based Pain Estimation	Dr. Amod Kumar Dr. Kanika Sharma	February 2022
19.	Ashima Kaplesh	Design of Microstrip Patch Antenna Array for the Detection of Motionless Human Target Behind the Wall	Dr. Amod Kumar Dr. Garima Saini	May 2022
20.	Laxmi	Fault Detection in Electrical and Electronic Equipment using Thermal Imaging	Dr. Rajesh Mehra	May 2022
21.	Zeba Afroz	A Transfer Learning Approach For Brain Tumor Segmentation Using Deep Learning	Dr. Garima Saini	August 2022
22.	Kanika Sood	Enhanced Distance Vector Hop Localization Algorithm for Wireless Sensor Network	Dr. Amod Kumar Dr. Kanika Sharma	August 2022
23.	Suryakant	Design of Computer Vision Based Road Marking System	Dr. Amod Kumar Dr. Garima Saini	August 2022
24.	Swapnil Kapoor	Energy Efficient Unequal Clustering Routing Algorithm based on Neuro-Fuzzy Logic for Wireless Sensor Network	Dr. Balwinder Singh Dhaliwal Dr. Kanika Sharma	August 2022
25.	Apeksha Choudhary	Product Price Prediction in Supply Chain Management System using Machine Learning Algorithms	Dr. Meenakshi Sood	August 2022
26.	Nandini Devi	Performance evaluation of Machine Learning Algorithms for Intrusion Detection System	Dr. Balwinder Singh Dhaliwal	August 2022
27.	Chitra Sharma	Augmented Reality based Remote Assistance System with	Dr. Kanika Sharma	August 2022

		Gesture Interaction, Multi-user Connectivity and Authenticated Access		
28.	Preetiyanka	Real Time Face Mask Detection using Convolution Neural Networks and AI	Dr. Balwinder Raj	August 2022
29.	Yogesh Thakur	Design of Organic Field Effect Transistor for Gas Sensing	Dr. Balwinder Raj Dr. S.S. Gill	October 2022
30.	Sachin Maithani	Design and Analysis of PET Substrate - Based Flexible Antenna for ISM Application	Dr. Garima Saini Dr. Balwinder Singh Dhaliwal	October 2022
31.	Apurva	Electrochemical Impedance Spectroscopy for the Detection of Degradation of Edible oil	Dr. Amod Kumar Dr. Kanika Sharma	October 2022
32.	Shivam Bansal	Characterization Of 3-D Printed Meta-Structure PLA Substrate Based Patch Antenna For ISM Band Applications	Dr. Garima Saini Dr. Balwinder Singh Dhaliwal	November 2022
33.	Himala Sharma	A Systematic Review of A Patient in a Hospital using Machine Learning Algorithms	Dr. S.S. Gill	December 2022
34.	Ankit Meghwal	Design of A Multident Microstrip Patch Antenna For TV White Space Communication	Dr. Garima Saini Dr. Balwinder Singh Dhaliwal	January 2023
35.	Anavil Mishra	Wideband Planar Antennas with Multiple Resonances	Dr. Garima Saini	February 2023
36.	Yashica Thakur	Foam Based Z-Shaped Microstrip Patch Antenna for 5G Application	Dr. Garima Saini Dr. Balwinder Singh Dhaliwal	February 2023
37.	Alka Yadav	Gain Enhancement of CPW Fed Monopole Antenna using Artificial Magnetic Conductor	Dr. Garima Saini Dr. Balwinder Singh Dhaliwal	February 2023
38.	Shahraan Hussain	Design and Simulation of Lead Free Provkite based Tandem Solar Cell	Dr. S.S. Gill Dr. Balwinder Raj	February 2023
39.	Kulbhaskar	Design And Analysis of Foam Substrate Based Flexible Antenna for UWB Application	Dr. Garima Saini Dr. Balwinder Singh Dhaliwal	March 2023
40.	Vijay Kumar Meena	Hybrid Meta-heuristic based Energy Efficient Routing algorithm for	Dr. Amod Kumar Dr. Kanika	March 2023

		Heterogeneous Wireless Sensor Network	Sharma	
41.	Sitaram Meena	Design and Analysis of Prediction Model for Lung Cancer Detection and Classification using Deep Learning	Dr. Amod Kumar Dr. Meenakshi Sood	March 2023
42.	Pankaj Tailor	Design of a High Performance Unsigned Radix-16 Multiplier for IoT	Dr. S.S. Gill Dr. Balwinder Raj	March 2023
43.	Akansha Mishra	Design and Simulation of Organic Field Effect Transistor for Low Power Sensor	Dr. Balwinder Raj Dr. S.S. Gill	March 2023
44.	Sakshi Awasthi	Facial Paralysis Severity Assessment Via Convolutional Neural Network	Dr. Kanika Sharma Dr. Amod Kumar	May 2023
45.	Prajwal Rohela	Design of High-Performance Indium Based HEMT for Power Amplifier Application	Dr. SS Gill Dr. Balwinder Raj	July 2023
46.	Amit Kumar Rana	FPGA Based Efficient FIR Filter Design Using Multiplier-Less Technique	Dr. Rajesh Mehra	December 2023
47.	Nirbhay Kumar Singh	Reconfigurable Optimized IIR Filter Design Using Multiplier-Less Technique	Dr. Rajesh Mehra	December 2023
48.	Badal Nishant, Batch	Machine Learning Based Visual Inspection and Sorting System for Soap Bar Packaging Defects	Dr. SS Gill Dr. Balwinder Raj	December 2023
49.	Meenakshi, Batch	Obstacle Detection and Warning on Blind Curve road to avoid Collision	Dr. Balwinder S Dhaliwal Dr. Garima Saini	Decemeber 2023
50.	Monika Sharma,	Desing and Performance Analysis of FineFET based SRAM Cell Configurations	Prof. SS Gill Dr. Kanika Sharma	February 2024
51.	Kirti Bazar	Energy Efficient Multi-HOP Multipath Sub-Clustering Routing Protocol For Wireless Sensor Networks	Dr. Kanika Sharma	March 2024
52.	Adarsh Rana	Development of Contention Window Based MAC Protocol In Wireless Sensor Network	Dr. Kanika Sharma	May 2024
53.	Mohd. Shariq Mahboob	Improved Adaptive Ranking Based Routing Algorithm for Wireless Sensor Networks	Dr. Kanika Sharma	May 2024

54.	Rahul Singh	Design of Flexible Polyimide Film Substrate Based Microstrip Antenna For High-Temperature Environment	Dr. Balwinder S Dhaliwal Dr. Garima Saini	September 2024
55.	Manju (Modular Batch 2020)	Design And Optimization of Wideband Micro strip Patch Antenna on 3D Printed ASA Substrate For Wifi 6E Applications	Dr. Balwinder S Dhaliwal Dr. Garima Saini	September 2024
56.	Kamal Gurgar	Flexible 3D Printed Substrate Based ISM Band Patch Antenna Design For Diverse Operating Conditions	Dr. Balwinder S Dhaliwal Dr. Garima Saini	September 2024
57.	Manish Bajaraniya	Design And Performance Analysis of 3D Printed Plano-Concave Substrate Based Patch Antenna For Wearable Applications	Dr. Balwinder S Dhaliwal Dr. Garima Saini	September 2024
58.	Manoj Kumar	Design of a 3D Printed ASA Substrate Based Compact Fractal Patch Antenna For Cubesat Application	Dr. Balwinder S Dhaliwal Dr. Garima Saini	September 2024
59.	Kislaye Sharma	Monitoring and Analysis of a Mumbai Based Deonar Waste Disposal Site Using Low Resolution Satellite Images	Dr. Meenakshi Sood Dr. Amod Kumar	September 2024
60.	Nirdesh Shukla	Design of Hybrid Fusion-Framework for CT and MRI Medical Images Using Multi-Scale Decomposition Techniques	Dr. Meenakshi Sood Dr. Amod Kumar	September 2024
61.	Garuav Goyal	Improved Dual-Tier Cluster-Based Routing Protocol For Mobile Wireless Sensor Network	Dr. Kanika Sharma	September 2024
62.	Birbal Kumar Rajak	An Improved Cluster Head Rotation Approach For Sensor Networks	Dr. Kanika Sharma	October 2024
63.	Harjeet Kaur	Fake Indian Grrrency Detection Using Digital Image Processing	Dr. Amod Kumar Dr. Kanika Sharma	November 2024
64.	Parvej Kumar Tanwar	Design of High Input Impedance & Power Efficient Instrumentation Amplifier For Bio-Medical Application	Dr. Balwinder Raj	December 2024
65.	Ravi Bamnavat	Design of Low Noise Power Efficient Instrumentation Amplifier for Bio-Medical Applications	Dr. S.S. Gill Dr. Balwinder Raj	December 2024

66.	Sunil Bhardwaj	Design of U ² Net Enhanced Convolution Neural Network (UECNN) for Maize Disease Detection and Classification	Dr. Amod Kumar	January 2025
67.	Ashima Singh	Bandwidth Enhancement of Compact Wearable Microstrip Antenna Using Multi-Layer Substrate Configuration	Dr. Balwinder S Dhaliwal Dr. Garima Saini	February 2025
68.	Neeraj Kumar Garg	Design and Implementation of Vedic Multiplier by using Energy Efficient Hybrid Full Adder	Dr. SS Gill Dr. Kanika Sharma	July 2025
69.	Manoj Kumar Meena	Optimized Energy Efficient Routing Protocol with Mobile Sink in Wireless Sensor Network	Dr. Kanika Sharma	July 2025
70.	Ambika Rathore	Design of S-Band Stacked Antenna Using Different 3D Printed Substrates	Dr. Garima Saini Dr. Balwinder S Dhaliwal	July 2025
71.	Naresh Kumar Meena	Investigation of Compact Planar Inverted-F Antenna on 3D Printed Substrate with Partial Ground	Dr. Garima Saini Dr. Balwinder S Dhaliwal	August 2025
72.	Ravi Sangwa	Design And Analysis of Compact Fractal Antenna on 3D 8.Printed Substrate for UAV Applications	Dr. Garima Saini Dr. Balwinder S Dhaliwal	August 2025
73.	Anil Kumar	Design of Germanium Source Based Double Gate Tunnel Fielded Effect Transistor For Bio-sensing Application	Dr. SS Gill Dr. Kanika Sharma	September 2025
74.	Aakash Meena	Design of a high-Performance Multiply-Accumulate Unit with Different Adder Architectures	Dr. SS Gill Dr. Kanika Sharma	October 2025