



April, 2022 – September, 2022

During April, 2022 to Sept., 2022, the Electronics and Communication Engineering Department conducted M.E (Regular), M.E (Modular) and STC programmes. Along with these programmes, the department also conducted many events at department level as well as at Institute level.

NBA Accreditation



Prof. Sandeep Singh Gill, Head, ECE Deptt., presenting the department activities to NBA Expert Committee

The ECE department was seeking accreditation by National Board of Accreditation (NBA) for PG Engineering programs offered by ECE department of NITTTR, Chandigarh. An expert team consisting of two experts conducted onsite evaluation of the programs from 10th June to 12th June, 2022. The report submitted by the Expert Team was considered by the concerned complete NBA Committee constituted for the purpose. The Competent Authority in NBA has approved the accreditation status for the M.E ECE program of NITTTR, Chandigarh upto 30-06-2025.



NBA Expert Team Interacting with M.E (ECE) students



NBA Expert team along with ECE Faculty



Dr. Amod Kumar, Professor, ECE interacting with the Chairman, NBA Expert Team

National Unity Day

The National Unity Day was celebrated on Oct 31, 2022 on the eve of Sardar Vallabhbhai Patel's Jayanti and the following activities were conducted as a part of celebrations:

- i. Run for Unity : the event was conducted in the institute grounds
- ii. Pledge taking ceremony was conducted after the run.
- iii. Immediately after the pledge, all participants assembled in the Auditorium. A brief address was given by the Director. Presentation was made by the students which was followed by a Quiz. Momentos were presented to the Five quiz winners.
- iv. A document on life history of Sardar Patel was also kept outside the auditorium for reference and the same was made available in Library later.



Faculty, Staff and Students participating in Run for Unity Event



Faculty, Staff and Students participating in Run for Unity Event

ME Programmes

ME Subjects	Batches	Name of the Faculty
Research Seminar	2021 (Regular)	Prof. Sandeep Singh Gill
Digital Image Processing(ECE-1202)	2021 (Regular)	Prof. Amod Kumar
Advance Computer Network	2021 (Regular)	Dr. Balwinder S Dhaliwal
VLSI Design (ECE-1205)	2021 (Regular)	Dr. Balwinder Raj
Embedded System Design (ECE-1201)	2021 (Regular)	Dr. Kanika Sharma
Wireless & Mobile Communication	2021 (Regular)	Dr. Garima Saini
Neural Networks & Fuzzy Logic	2021 (Regular)	Prof. Amod Kumar
Research Methodology	2021 (Regular)	Prof. Sunil Dutt Mrs. Amandeep Kaur Prof. UN Roy
Research Seminar-1	2020 (Modular)	Prof. Sandeep Singh Gill
Advance Computer Network	2020 (Modular)	Dr. Balwinder S Dhaliwal
Fiber Optics Communication Systems	2022(Modular)	Dr. Balwinder Raj Prof. Pankaj Sharma
Advanced Digital Signal processing	2022(Modular)	Prof. Amod Kumar
Digital Systems Design	2021 (Modular)	Dr. Kanika Sharma
Advanced Digital Communication	2020 (Modular)	Dr. Garima Saini

ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

STC Conducted (Contact/Online Mode/ICT/Cluster Programme)

Sr. No.	O. Plan No.	Course Title	Start Date	End Date	Venue	Course Coordinator
1.	ICT-ECE-12	Research Trends in Wireless Sensor Network	25.04.2022	29.04.2022	NITTTR, Chandigarh	KS
2.	ICT-ECE-11	Latest Wireless & Communication Technologies	25.04.2022	29.04.2022	NITTTR, Chandigarh	GS
3.	ICT-ECE-41	VLSI Physical Design	09.05.2022	13.05.2022	NITTTR, Chandigarh	BR
4.	ICT-ECE-42	Basic MATLAB Programming	09.05.2022	13.05.2022	NITTTR, Chandigarh	AMK
5.	ICT-ECE-43	5G Communication & its Application	23.05.2022	27.05.2022	NITTTR, Chandigarh	GS
6.	ICT-ECE-45	Digital and Embedded System	23.05.2022	27.05.2022	NITTTR, Chandigarh	KS
7.	ICT-ECE-44	NBA Accreditation and Examination Reforms	23.05.2022	27.05.2022	NITTTR, Chandigarh	BSD/SSG
8.	ICT-ECE-13	Arduino Based System Design using Tinker CAD Free Simulator	20.06.2022	24.06.2022	NITTTR, Chandigarh	BSD
9.	CP-120-170	Academic and Administrative Competency Update Programme	20.06.2022	24.06.2022	NITTTR, Chandigarh	SSG
10.	ICT-ECE-81	5G and IoT	18.07.2022	22.07.2022	NITTTR, Chandigarh	GS
11.	ICT-ECE-82	Basis of Embedded Systems	25.07.2022	29.07.2022	NITTTR, Chandigarh	KS
12.	ICT-ECE-83	Antenna Design using Soft Computing Algorithms	25.07.2022	29.07.2022	NITTTR, Chandigarh	BSD
13.	ICT-ECE-84	Challenges and Opportunities in VLSI Design	25.07.2022	29.07.2022	NITTTR, Chandigarh	BSD/GS
14.	ICT-ECE-104	Free Simulators for ECE Lab Practices (Module-1)	22.08.2022	26.08.2022	NITTTR, Chandigarh	BSD/GS
15.	ICT-ECE-105	Nanoelectronics Devices and Circuits Design	22.08.2022	26.08.2022	NITTTR, Chandigarh	BR
16.	ICT-ECE-106	Advanced Embedded Systems	29.08.2022	02.09.2022	NITTTR, Chandigarh	KS
17.	ICT-ECE-122	VLSI Devices and Circuits for AI Applications	19.09.2022	23.09.2022	NITTTR, Chandigarh	BR
18.	ICT-ECE-123	Free Simulators for ECE Lab Practices (Module-II)	26.09.2022	30.09.2022	NITTTR, Chandigarh	BSD/GS
19.	ICT-ECE-124	Specifications to System Design	26.09.2022	30.09.2022	NITTTR, Chandigarh	KS

Workshops Conducted

Name of Workshops	From	To	Name of Faculty
Delivered a lecture “Advances in Biomedical Instrumentation” in Symbiosis-Academia Industry Summit towards Indigenous Medical Device Development, 17/06/2022, PGI, Chandigarh	17/06/2022	17/06/2022	Prof. Amod Kumar
Automation and Robotic Curriculum Design Workshop	16/08/2022	16/08/2022	

Research & Development: (Completed)

Sr. No.	List of ME Final Thesis Students	Date of viva-voce
1.	Ashima Kaplesh, ME Regular 2018 batch	02/06/2022
2.	Swapnil Kapoor, ME Regular 2019 batch	10/08/2022
3.	Kanika Sood, ME Regular 2019 batch	30/08/2022
4.	Suryakant, ME Regular 2019 batch	30/08/2022

Papers Published by ECE Faculty in SCI Journals

Sr. No.	Name of the Paper Published	Author (s) Name
1.	“Performance Assessment and Optimization of Vertical Nanowire TFET for Biosensor Application”, Transactions on Electrical and Electronic Materials, Springer Accepted May 19, 2022)	Parveen Kumar Balwinder Raj
2.	“Pm 3D-Printed Acrylonitrile Butadiene Styrene-Based Sensors: Rheological, Mechanical, Morphological, Radio Frequency and 4D Capabilities,” Journal of Materials Engineering and Performance, April 18, 2022. https://doi.org/10.1007/s11665-022-06884-4	Chahat Jain Balwinder S. Dhaliwal Rupinder Singh
3.	“Investigation on the Design of Compact Flexible Wearable Fractal Patch Antenna for Body Area Networks Applications,” Wireless Personal Communications, June 3, 2022 https://doi.org/10.1007/s11277-022-09800-0	Vikas Jain Balwinder Singh Dhaliwal

4.	"Artificial neural network based character recognition Using SciLab," Multimedia Tools and Applications, June 29, 2022 https://doi.org/10.1007/s11042-022-13082-w	Priya Darshni Balwinder S. Dhaliwal Raman Kumar Vincent Aizebeoje Balogun Sunpreet Singh Catalin Lulian Pruncu
5.	"Mathematical Modelling and Simulation of CH ₃ NH ₃ Pb High Efficiency Perovskite Solar Cells", Journal of Computational Electronics, Springer, Accepted July 18, 2022	Divya Sharma Rajesh Mehra Balwinder Raj
6.	"Design of Magnetic Tunnel Junction for Spintronic based STT-MRAM", SPIN-World Scientific, Accepted Aug 20, 2022	Parul Sharma Sandeep Singh Gill Balwinder Raj

Papers Published / Presented in International/ National Conferences

Sr. No.	Title of the Paper Presented/Accepted along with Name of the Conference, venue, and date	Author (s) Name
1.	"Creating Future Path of Scientific Development in 75 th year of Independence", April 18-22, 2022 organised by National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh and Vigyan Prishad Panchnad, Punjab	Balwinder Singh
2.	"Design of Mixed Halide Perovskite Solar Cells for High Efficiency", International Conference on Communication and Signal Processing (ICCSP-2022), September 23-24, 2022	Divya Sharma, Rajesh Mehra and Balwinder Raj

Student Training Programmes

Sr. No.	Title of Training Programme	Period of Training	Venue/Attended by
1.	Industrial Training to B.Tech ECE students	24 Weeks	Dr. Balwinder Raj Dr. Kanika Sharma
2.	Industrial Training of B.Tech ECE Students	06 Weeks	Dr. Balwinder Raj Dr. Kanika Sharma