ABOUT ECE

The Department of Electronics and Communication Engineering, under School of Engineering and Technology of I.T.S Engineering College was established in the year 2006 with an aim to produce globally competitive and socially sensitized engineering graduates along with a passion to bring out quality research in the frontier areas of Electronics and Communication Engineering. The Department offers four years Bachelor of Technology (B.Tech.) programme (comprising eight semesters in Electronics & Communication Engineering, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (formerly UPTU) and has been accredited by NBA (National Board of Accreditation), New Delhi. The NI Innovation Centre focuses on the Virtual Instrumentation & Automation and is in collaboration with renowned MNC,National Instruments. The student activity club "Envision" and students technical society "(IEEE student Branch)" of the departments also includes ethical and professional skill development programs which includes workshop, webinar, technical quiz, technical rangoli, poster presentation etc. that helps students to grow their overall personality along with technical skills.

Dr A Am (H.O.D. ECE)
FROM THE DESK OF H.O.D.
(ECE DEPARTMENT)

Dear Readers,

Last three decades have been very significant as far as the impact of Technology on Society is concerned. Ability to send information of any type, anywhere, and anytime has altered the way societies live and transact their businesses, be it education, production of goods, selling of goods, entertainment, managing house hold, education, information transaction between individuals, individual to masses, health care, governance etc. Every aspect of social order is getting affected, this is only the beginning of changes in a Technology driven Society.Some of the scientists and thinkers have tried to predict what science and technology holds for us, say by 2030. Michio Kaku (Great Physicist of our time) expresses in his book 'Physics of the Future' and video lecture 'The world in 2030' (You Tube), a glimpse of technology driven society and our role in it. This is just decade plus away.

Vision And Mission

Vision of Institute

"To be a leading educational institution that provides a transformative education to create technically competent and socially responsible professionals and innovators".

Mission of Institute

- To accomplish excellence in the field of Technical Education through rigorous coursework and by providing an understanding of the needs of society and industry.
- To impart advanced and contemporary technical skills to turn students into potential professionals.
- To develop potential Engineers and Managers by enhancing their technical skills and research capabilities to become successful innovators and entrepreneurs.
- To inculcate professionalism, leadership and business acumen amongst students in a dynamic business environment.
- To induce high ethical standards and moral values to our make students socially responsible professionals.
- To promote our students to learn technological advancements and encourage them to keep updating their knowledge and skills by inculcating their habit of continuous learning.

Vision of Department

"To become a department of academic excellence that would produce technically competent and socially responsible professionals in the field of Electronics, Communication and related domains".

Mission of Department

- M1: To achieve an educational excellence through effective teaching-learning processes.
- M2: To create a conducive atmosphere for self learning to face contemporary challenges.
- M3: To foster an environment for nurturing the spirit of creativity, innovation and entrepreneurship with industry participation.
- M4: To imbibe professional ethics, social responsibilities and moral values in students and faculty members.

PEO, PSO And PO

Program Specific Outcomes (PSO)

PSO1: An Ability to apply the knowledge of Analog and Digital electronics to solve, analyze and design electronic circuits and systems.
PSO2: An Ability to synthesize, evaluate and analyze communication systems and networks for multidisciplinary tasks.

Program Educational Objectives (PEO)

- PEO1: Graduates of the program will have multifaceted competency for greater employability and accomplished professional career.
- PEO2: Graduates of the program will emerge as leaders and entrepreneurs and will be able to pursue higher education.
- PEO3: Graduates of the program will have thorough knowledge and skill set to deal with real-time complex problems.
- PEO4: Graduates of the program will be able to adjust to a fast changing world with socially responsible and ethical mindset.

Program Outcomes

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PEO, PSO And PO

Program Outcomes

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

WORKSHOPS, INDUSTRIAL VISITS AND EVENTS

TEACHERS' DAY CELEBRATION ON 5TH SEPTEMBER, 2023

GANDHI'S JAYANTI CELEBRATION ON 2ND OCTOBER 2023

TRAINING PROGRAMME ON EMBEDDED SYSTEMS, ROBOTICS WITH IOT & PCB DESIGN TECHNIQUES-INDUSTRIAL TRAINING

EXPERT TALK ON "HOW TO ENTER IN VLSI & EMBEDDED INDUSTRIES"

WORKSHOPS, INDUSTRIAL VISITS AND EVENTS

INTER-COLLEGE TECH-VISION PROJECT EXHIBITION

TRAINING PROGRAM ON: "ADVANCED C PROGRAMMING"

ONE DAY WORKSHOP ON SMART SOLUTIONS: IOT DEVELOPMENT WITH RASPBERRY PI

A VISIT TO "IRSE INTERNATIONAL RAILWAY CONVENTION AND EXHIBITION FOR B. TECH. 2ND, 3RD & 4TH YEAR ECE STUDENTS AT MANEKSHAW CENTRE, DELHI CANTT

WORKSHOPS, INDUSTRIAL VISITS AND EVENTS

A FAREWELL OF ECE DEPARTMENT " DESPEDIDA -2K24"

A TRAINING PROGRAM ON: OOPS WITH C++ PROGRAMMING

INAUGURATION OF WOMEN IN ENGINEERING (WIE) ON THE OCCASION OF INTERNATIONAL WOMEN'S DAY.

SEMINAR ON ACCELERATORS/INCUBATION - OPPORTUNITIES FOR STUDENTS & FACULTIES - EARLY-STAGE ENTREPRENEURS

BOOK/CHAPTER PUBLISHED BY FACULTY

Dr. Setu Garg, Associate Professor, Department of ECE, Published Book Chapter on "Approximated Sparsity Regularization Factor for Monaural Speech Separation" under publication of LNNS, Vol. 787, DOI is https://link.springer.com/chapter/10.1007/978-981-99-6550-2_20.

Dr. Monika Jain, Professor, Department of ECE, Published Book Chapter on "Machine Learning - Based Smart Waste Management in Urban Area " under publication of LNEE, Vol. 1078, DOI is https://link.springer.com/chapter/10.1007/978-981-99-5974-7_39.

Mr. Prabhakar Sharma, Assistant Professor, Department of ECE, Published Book on "Mobile & Wireless Communication" under publication Notion Press, ISBN is 9798890673893.

PAPER PUBLISHED BY STUDENTS

Anushree Bui, Avinash Singh and Piyush Bhardwai (4th Year –ECE) published research article on "IoTVirtual Doctor: Revolutionizing Healthcare with Connected Technologies", in International Scientific Journal of Engineering and Management Paper Published By Students, DOI: 10.55041/ISJEM01038, ISSN: 2583-6129

Ainul Hasan, Muddasir and Kshitij Upmanyu (4th Year-ECE) Published review paper on "A Comprehensive Study on Near-Infrared (NIR) Sensor , ECG Sensor and Electromyography (EMG) Sensor for Biomedical Applications: A Review" in International Scientific Journal of Engineering and Management Paper Published By Students DOI: 10.55041/ISJEM01037, ISSN: 2583-6129

FACULTY PATENT DETAILS

Sr. No	Title of Patent	Applicant (s)	Status (Filed/Published /Granted)	Date (Filed/Published /Granted)	Patent Application Number
1	IOT Enabled Audio Player Integrated Printer	Dr. Monika Jain, Dr. Setu Garg	Granted	03.02.2024	IP India, Application Number: 406468-001
2	Machine Learning-Based Humanoid Device for Object Identification	Dr. Praveen Bhola	Published	30.11.2023	IP India, Application Number: 401040-001
3	IOT Based Health Monitoring System	Dr. Setu Garg	Published	13.10.2023	IP India, Application Number: 202311008495
4	Facial Recognition Based Attendance Management System	Mr. Agha Asim Husain	Published	13.10.2023	IP India, Application No: 202311008496
5	IOT based Smart Mirror for Multi - Dimensional Applications	Ms. Pragati Tripathi	Published	13.10.2023	IP India, Application No: 202311008494

ITS Engineering College-Greater Noida	
Students Placement Summary (ECE) 2024 Batch	
SL. No.	**STUDENT'S NAME**	**NAME OF THE EMPLOYER/ INSTITUTIONS**

SL. No.	STUDENT'S NAME	NAME OF THE EMPLOYER/ INSTITUTIONS
1	ABHINAV KUMAR KANTH	INTEGER TELECOM SERVICES INDIA Pvt.
2	AMAN PRATAP SINGH	VVDN TECHNOLOGIES
3	AMBIKA	EFFECTUAL SERVICES
4	AYUSH RAJ	NEXTGEN GLOBAL SERVIES Pvt. Ltd
5	DIVYA VERMA	COLORJET INDIA Ltd
6	KANCHAN GUPTA	KION INDIA PRIVATE LIMITED
7	KASHISH SOLAN	EFFECTUAL SERVICES
8	KAVITA YADAV	INTEGER TELECOM SERVICES INDIA Pvt.
9	LOKESH BISHT	RAMY INFOTECH
10	RAJU KUMAR	TECH MAHINDRA
11	SUMAN KUMAR	COLORJET INDIA Ltd
12	UMESH KUMAR	COLORJET INDIA Pvt. Ltd _Phase 2
13	VIKRAM KUMAR JHA	VVDN TECHNOLOGIES
14	JITENDRA RAWAT	INTEGER TELECOM SERVICES INDIA Pvt.
15	NAVDEEP THAKUR	HITACHI ASTEMO POWERSTRAIN SYSTEM
16	PRASHANT KUMAR	COLORJET INDIA Ltd
17	DEEPAK MANDAL	NOKIA INDIA

LIST OF MOOCS COURSES DONE IN 2023-2024

S.NO.	NAME OF STUDENT	MOOCS COURSE CERTIFICATE	COURSE NAME	CERTIFICATE ISSUE DATE
1	Aakash kumar sharma	Coursera	How google does machine learning	12-Jan-24
2	Abhishek patel	Coursera	Introduction to machine learning	23-Dec-23
3	Akamal hussain	Udemy	Learn C++ programming beginner to advance-deep dive in C++	01-Oct-23
4	Ambika	Bharat intern (MSME)	Web development	10-Sep-23
5	Ambika	Udemy	mastering data structures & algorithms using C and C++	11-Jan-24
6	Aniket singh	Coursera	Introduction to generative AI	02-Dec-23
7	Aniket singh	Coursera	Introduction to large languge models	02-Dec-23
8	Ayush gautam	Pantech e-learning	21 days Python programming	25-oct-23 to 14-Nov-23
9	Vidit kumar singh	Pantech e-learning	21 days Python programming	25-oct-23 to 14-Nov-23
10	Vikram kumar jha	Udemy	Learn microsoft excel for data analysis zero to hero	11-January-24
11	Vikram kumar jha	Udemy	The ultimate guide to learn SQL from scrath [2023 Edition]	11-January-24
12	Anket srivastav	Coursera	Introdution to the internet of things and embedded systems	23-Dec-23
13	Ankit mishra	Great learning	Front end development-HTML	On Oct-23
14	Ankit mishra	Coursera	How google does machine learning	04-Dec
15	Avantika gupta	Coursera	Introdution to the internet of things and embedded systems	21-Dec-23

LIST OF MOOCS COURSES DONE IN 2023-2024

S.NO.	NAME OF STUDENT	MOOCS COURSE CERTIFICATE	COURSE NAME	CERTIFICATE ISSUE DATE
16	Ayush raj	Bharat intern (MSME)	Web development	10-Sep-23
17	Rahul raj	Bharat intern (MSME)	Web development	10-Sep-23
18	Komal nagar	Pregrad	Data science/analytics	3-Sep-23 to 5-Dec-23
19	Lokesh bisht	Udemy	Linkedin marketing with dekker:linkedin Ads, linkedin leads	11-Jan-24
20	Lokesh bisht	Udemy	Digital marketing mastery with dekker	11-Jan-24
21	Lokesh bisht	Udemy	The ultimate guide to learn SQL from scrath [2023 Edition]	08-Jan-24
S.NO.	NAME OF STUDENT	MOOCS COURSE CERTIFICATE	COURSE NAME	CERTIFICATE ISSUE DATE
22	Nikhi lal bahadur singh	Coursera	How google does machine learning	12-Jan-24
23	Praveen	Coursera	Azure: Create a virtual machine and deploy a web server	22-Dec-23
24	Piyush kumar	Coursera	Programming for every (Gretting stated with python)	28-Dec-23
25	Prabhat kumar mishra	Coursera	Introduction to generative AI	20-Dec-23
26	Prabhat kumar mishra	Coursera	Introduction to large langue models	20-Dec-23
27	Prabhat kumar mishra	Coursera	Introduction to responsible AI	20-Dec-23
28	Prashant kumar	Codsoft	C++ Programming	07-Sep-23
29	Pritam kumar gupta	Coursera	Machine learning on google cloud	10-Nov-23

LIST OF MOOCS COURSES DONE IN 2023-2024

S.NO.	NAME OF STUDENT	MOOCS COURSE CERTIFICATE	COURSE NAME	CERTIFICATE ISSUE DATE
30	Raju kumar	Infosys	Java language features	23-Dec-22
31	Raju kumar	Infosys	JavaSE 8 Features	23-Dec-23
32	Raju kumar	Infortrixs	Web developer	01-Sep-23
33	Raju kumar	Infosys	Java programming fundamentals	23-Dec-23
34	Raju kumar	Udemy	The complete 2023 web development bootcamp	17-Sep-23
35	Kavita yadav	Coursera	Foundations of cybersecurity	13-Dec-23
36	Kavita yadav	Coursera	Java Programming : solving problems with software	05-Jul-23
37	Avinash A B roy	NPTEL	Computer architecture	Jul-Dec2023
38	Aditya kumar yadav	Coursera	Introduction to Embedded Machine Learning	19-Jan-24
39	Archi Mishra	Great learning	Cloud Computing Architecture	01-Dec-23
40	Archi Mishra	Great learning	What is IoT	01-Dec-23
41	Archi Mishra	Coursera	Introduction to Embedded Machine Learning	19-Jan-24
42	Angad Kumar Singh	Coursera	Introduction to generative AI	11-Jan-24
43	Azaz Khan	Coursera	Cybersecurity for Everyone	13-Jan-24
44	Raghunanadan kumar	Pantech e-learning	30 days Master Class On IoT	25-dec-23 to 24-Jan-24

LIST OF MOOCS COURSES DONE IN 2023-2024

S.NO.	NAME OF STUDENT	MOOCS COURSE CERTIFICATE	COURSE NAME	CERTIFICATE ISSUE DATE
45	Kanchan Gupta	Coursera	Elastic Google Cloud Infrastructure: Scaling and Automation	22-Sep-23
46	Kanchan Gupta	Coursera	Google Cloude Fundamentals: Core Infrastructure	23-Sep-23
47	Kanchan Gupta	Coursera	Preparing for Google Cloud Certication: Cloud Architect	25-Sep-23
48	Prabhat kumar mishra	Pantech e-learning	30 days Master Class On IoT	25-dec-23 to 24-Jan-24
49	Ravindra Chauhan	Pantech e-learning	30 days Master Class On IoT	25-dec-23 to 24-Jan-24
50	Rahul kumar Prajapati	Infosys	Java programming fundamentals	14-Jan-24
51	Shivam Bhati	Great learning	Front end development-HTML	On Oct-23
52	Kanchan Gupta	Coursera	Reliable Google Cloude Infrastructure: Design and Process	24-Sep-23
53	Kanchan Gupta	Udemy	Python For Beginners-Hindi me Shikhe Python Programming	11-Sep-22
54	Rahul Raj	Infosys	Basic of Python	21-Sep-23
55	Raju kumar	Infosys	HTML5- The Language	22-Dec-22
56	Ambika Jha	Infosys	Multi- Paragramming with Modern C++	05-Jan-24
57	Raju kumar	Infosys	Big Data -301	18-Oct-23
58	Raju kumar	Infosys	Big Data -201	18-Oct-23
59	Raju kumar	Infosys	Big Data -101	18-Oct-23

STUDENT ARTICLE

5G AND NEXT-GENERATION CONNECTIVITY

5G technology is the fifth generation of wireless communication, offering ultra-fast internet speeds up to 10 Gbps, ultra-low latency (as low as 1 millisecond), and the ability to connect billions of devices seamlessly. It enables high-speed downloads, real-time applications like remote surgeries, autonomous vehicles, and smart cities. Industries such as healthcare, education, entertainment, and manufacturing will benefit from 5G's enhanced connectivity. The technology also supports massive IoT integration, making smart homes and industrial automation more efficient. Despite challenges like high infrastructure costs and cybersecurity concerns, 5G is set to revolutionize digital interactions and drive global innovation. Few key benefits of 5G technology are Enhanced Speed and Bandwidth, Low latency, Massive IOT connectivity and improved Network Reliability .I want to conclude that 5G is not just an upgrade but a transformation in the way we connect and interact with technology. As the backbone of future digital innovations, it will drive economic growth, enhance digital experiences, and create new opportunities in various sectors. With responsible implementation and continuous advancements, 5G will pave the way for a smarter and more connected world. The rollout of 5G technology is set to revolutionize connectivity with faster speeds, lower latency, and higher capacity. This will save the way for the Internet of Things (IoT), smart cities, and autonomous vehicles, enhancing real-time communication and data exchange. Industries such as telemedicine, remote work, and entertainment will greatly benefit from this technological leap. Furthermore, 5G will enable advancements in edge computing, reducing reliance on centralized cloud infrastructures and improving real-time data processing for critical applications such as emergency response and industrial automation.

By- Pritam Kumar Gupta

IOT TECHNOLOGY

The Internet of Things (IoT) is a technology that connects everyday devices to the internet, allowing them to communicate and work automatically. It is used in smart homes to control lights, fans, and security systems with just a phone. In healthcare, smart devices help doctors monitor patients remotely. Agriculture benefits from IoT by using sensors to check soil moisture and improve farming. Industries and factories use IoT for automation, making machines more efficient. Smart cities use IoT for better traffic control and waste management. It also helps in transportation, tracking vehicles and reducing fuel consumption. However, IoT faces challenges like data security and privacy risks. As technology improves, IoT will continue to make life easier, safer, and more efficient.

By- Sanjeev Yadav

EDITORS
Ms. Manju Singh   Assistant Professor ECE Department
Mr. Prabhakar Sharma   Assistant Professor ECE Department
Ms. Archi Mishra   2nd year B.Tech ECE Department
Mr. Aditya Yadav   2nd year B.Tech ECE Department

INDUSTRIAL VISITS@ I.T.S

CELEBRITIES @ I.T.S

COURSES OFFERED BY I.T.S. - THE EDUCATION GROUP

CAMPUS - I Mohan Nagar (ESTD. 1995)	CAMPUS - II Murad Nagar (ESTD. 2000)	CAMPUS - III Greater Noida (ESTD. 2006)	CAMPUS - IV Greater Noida (ESTD. 2006)	CAMPUS -V
COURSES OFFERED PGDM/ MBA/ MCA / BBA/ BCA	COURSES OFFERED Ph.D (Pharmaceu cal Science) / MDS/BDS/BPT/MPT D. Pharma/B.Pharma/M.Pharma	MBA, B.Tech - ME CSE, CE, E&CE, SE-AI&ML CSE-DS, BBA, BCA BPT	MDS/BDS	CHADHA PUBLIC SCHOOL Meerut - 250501

ITS ENGINEERING COLLEGE
GREATER NOIDA | SINCE 2006

School of Engineering & Technology
46, Knowledge Park III, Greater Noida - 201310
Website: itsengg.edu.in
Email: admission.ec@its.edu.in

Admission Helpline
7982951195
8510010840/41/42

Toll Free - 18001800840

VISIT US AT