MEERUT INSTITUTE OF TECHNOLOGY

MIT

NAAC

Meerut Institute of Technology

NAAC GRADE "A"

B.Tech. CSE, CSE (Data Science), CSE (AI & ML), ECE, ME, CE | B.Pharm | D.Pharm | BBA | BCA | B.Com | B.Com. (Hons.) | B. Sc. Agriculture | B.Sc. (Hons.) Chemistry | MBA | MCA

CHRONICLE

JULY 2025

Capturing Moments..

MIT NEWSLETTER

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PLACEMENT HIGHLIGHTS

Top Placement with Highest Package Batch:- 2025

We are pleased to announce that 14 students from our institution have been successfully placed at **SYNKRIOM TECHNOLOGY through a CAMPUS DRIVE held on** 25-07-2025 at MIT MEERUT. Heartfelt congratulations to all the selected students! We wish them a bright and successful career ahead.

During the internship, students were exposed to real-world industrial workflows, enhanced their understanding of enterprise software systems, and worked on live projects and client-driven requirements under the mentorship of experienced professionals.

Student Name	Student Roll Number	Branch
Shubham kumar	2202921540053	CSE (DS)
ADITYA KUMAR	2202920100009	CSE
Aisha Ghosh	2202920100012	CSE
Ajay Kumar	2202921530003	CSE (AIML)
Harsh Panwar	2202920100046	CSE
Bijendra Kumar Patel	2202920100035	CSE

ACTIVITY

INDUSTRIAL VISIT

Ist year students of B.Sc. Agriculture recently undertook an enriching educational visit to "**Basilica of Our Lady of Graces" in Sardhana.** During the visit, the students were guided through the Basilica's fascinating history and its unique architectural grandeur. The experience offered them a deeper understanding of the region's cultural and historical legacy, making it a valuable and memorable learning opportunity beyond the classroom.

GUEST LECTURE

The **Training and Placement Cell** successfully organized an insightful interaction with **Mr. Shashank Shekhar Mishra, National Head, AON,** on July 15, 2025 aimed at enriching the knowledge base of faculty members and departmental heads at Meerut Institute of Technology (MIT), Meerut regarding the assessments attempted by the students.

Dr. K.L.A. Khan, Director, MIT Meerut, commended the initiative and appreciated both the Training and Placement Cell's efforts and the speaker's enriching perspective.

Mr. Ayush Singhal, Training and Placement Coordinator, extended a heartfelt vote of thanks to the esteemed speaker for sharing his valuable insights.

RADIO TALK

Faculty members from the **Department of Agriculture,** delivered an enlightening and multi-dimensional R**adio Talk on FM 89.6 Meerut**, focusing on different critical aspects of Indian agriculture such as **Paddy Cultivation and Agricultural Economics including water management, high-yielding varieties and key aspects of agricultural economics such as cost-benefit analysis, market linkages, minimum support price (MSP) and effective strategies to enhance farm profitability.**

This integrated radio talk aimed to promote sustainable agriculture, diversified farming and agripreneurship, aligning with the national vision of doubling farmers' income and ensuring both food and economic security.

BRIDGE COURSE

Bridge course is a preparatory program designed to provide a foundation in commerce and business subjects for **students entering Bachelor of Business Administration (BBA) degree**, especially those from non-commerce backgrounds.

It helps new students transition to university-level studies by covering fundamental concepts like basic Accounts, Mathematics, and Business Studies that will be essential throughout their degree.

FACULTY DEVELOPMENT PROGRAMME

Ms. Shivalika Gupta, Ms. Vani, Ms. Arti Yadav & Ms. Shazia Saifi from **Department of Business Administration and Ms. Arti Choudhay from Department of Computer Applications** have attended "**ONE WEEK ATAL FACULTY DEVELOPMENT PROGRAMME sponsored by AICTE on ADVANCED EMERGING TECHNOLOGIES : APPLICATIONS AND FUTURE PROSPECTS" at Subharti Institute of Technology & Engineering, Swami Vivekananda Subharti University, Meerut.**

Dr. Krishna Kaushik and Mr. Vivek Kumar faculty from the Department of Agriculture, successfully completed the **6-days IN-SPACe Short Term Skill Development Course on "Essentials of Space Technology in the Agriculture Sector", held at Amity University, Noida.**

It was organized under the guidance of the Director of Promotion, ISRO (IN-SPACe). The course provided valuable insights into the application of space technology in modern agriculture, including its role in precision farming, resource management and sustainable agricultural practices. Both participants expressed their gratitude for the opportunity to engage in this transformative learning experience.

FACULTY DEVELOPMENT PROGRAM

Dr. Yogesh Kumar, Assistant Professor, Department of Agriculture, has successfully participated in the **Five-day Online Faculty Development Programme (FDP**) on **"Indian Knowledge System: Roots, Relevance and Re-imagination**" organized by the department of computer science and engineering in **collaboration with the Department of Applied Science and Humanities and the Institution's innovation council at Greater Noida Institute of Technology**. Greater Noida affiliated to Guru Gobind Singh Indraprastha University, New Delhi, held from July 14 to July 18, 2025.

The book titled "**Hi-Tech Horticulture: Next-Generation Horticulture Practices**" by **Dr. Manish Kumar and Dr. Krishna Kaushik, Assistant Professors in the Department of Agriculture.** This insightful work showcases cutting-edge techniques and scientific innovations that are shaping the future of horticulture. The book serves as a valuable resource for students, researchers, and professionals aiming to stay abreast of the latest advancements in the field.

Mr. Gaurav Kumar, Assistant Professor in the Department of Mechanical Engineering attended the "**Summer Faculty Research Fellow programme (SFRF-2025)**" at the **Indian Institute of Technology (IIT)**, Delhi, under the Mentorship of Prof. Kusum Meena , Department of Mechanical Engineering, from May 14, 2025 to July 14, 2025 in Hybrid Mode.

CERTIFICATE OF MERIT

This certificate is proudly presented to :

Ritika Garg

of Meerut Institute of Engineering & Technology (MIET)

has successfully completed Two- days Faculty Development Workshop (FDP) on

"DEEP LEARNING WITH MATLAB"

held from 14th to 18th July, 2025 on

organized by AICTE IDEA Lab, MIET, Meerut

MS. MONIKE PREETAM SINGH

PROF. (DR.) SANJAY K.K. SINGH

The **Department of Computer Science & Engineering** continues to foster academic excellence and technological advancement through active faculty development.

Recently, **Ms. Ritika Garg,** a dedicated faculty member of the CSE department, successfully completed a **two-day Faculty Development Program (FDP) on "Deep Learning with MATLAB", organized by AICTE IDEA Lab, MIET** in collaboration with MathWorks.

Innovation in Action: CSE Faculty Files Design Patent

INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

GOVERNMENT OF INDIA

Controller General of Patents,Designs and Trademarks
Department of Industrial Policy and Promotion
Ministry of Commerce and Industry

Design Application Details

Application Number:
465616-001

CBR Number:
214940

CBR Date:
14/07/2025 15:55:24

Applicant Name:
1. Dr. Praveen Kumar 2. Dr. Preeti Singhwal 3. Puja Kumari 4. Dr. Pankaj Sharma
5. Shikha 6. Ms. Amita Chaudhary 7. Dr.Vinita Mittal 8. Dr.Shreya Panwar
9. Anjali Gupta 10. Priyanka 11. Mansi 12. Aarti Chaudhary

Design Application Status

Application Status:
Application Under Process(awaiting for Technical Examination)

Back (/DesignApplicationStatus/)

Disclaimer: Application status is available for the application filed on or after 1st April 2009 with application no 222230.The information under " Design Application Status" is dynamically retrieved and is under testing, therefore the information retrieved by this system is not valid for any legal proceedings under the Design Act 2000. In case of any discrepancy you may contact the appropriate Patent Office or send your comments to following email IDs:
Design Office, Kolkata : controllerdesign[dot]ipo[at]nic[dot]in
Controller General of Patents, Designs and Trademarks

The **Computer Science & Engineering Department** proudly celebrates another milestone in innovation and research.

A **team of 12 faculty members** from various departments, including several from the CSE department, have successfully filed a **Design Patent Application under the Intellectual Property India (Controller General of Patents, Designs and Trademarks).**

The **design application (Application No. 465616-001)** was officially recorded on 14th July 2025, marking a commendable step towards innovation-driven academia. The application, currently under process awaiting technical examination, is a testament to the interdisciplinary collaboration and the faculty's commitment to solving real-world problems through design and development.

Faculty members from the CSE Department include:

Dr. Praveen Kumar, Dr. Preeti Singhwal, Ms. Amita Chaudhary, Dr. Vinita Mittal, Dr. Shreya Panwar, Anjali Gupta, Priyanka, Mansi

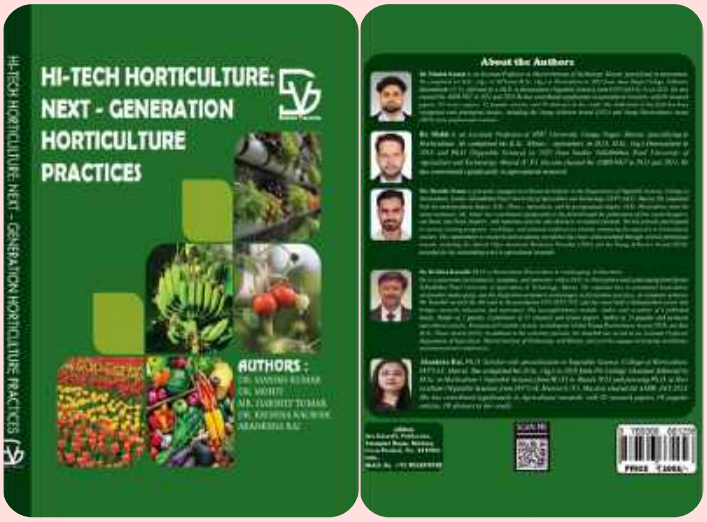
This initiative highlights the growing culture of research and intellectual property awareness within the department. By encouraging patent filings and product-oriented innovations, the CSE department continues to empower its faculty and students to contribute meaningfully to the technological and entrepreneurial ecosystem.

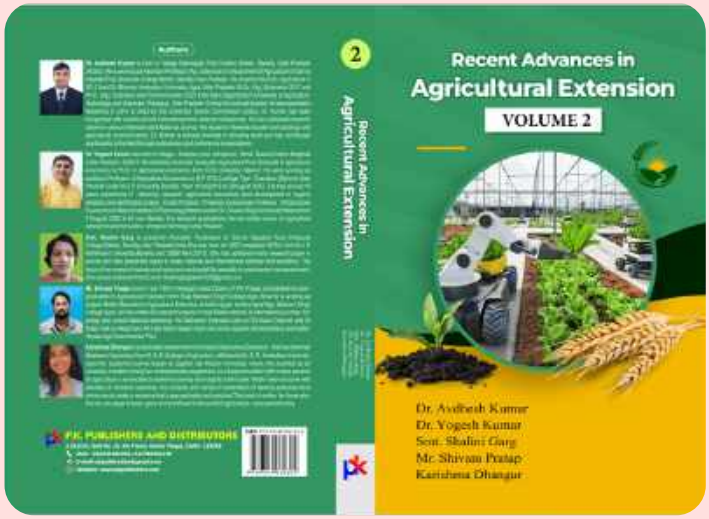
STUDENT'S ACHIEVEMENT

On 1st July 2025, students of **B.Sc. (Hons.) Agriculture**, participated in a workshop on **"Feedback and Impact Assessment" held at the Shri Ram Institute of Industrial Research, Delhi**. The event was organized as a follow-up to an earlier session and included competitions where students from various colleges presented their learnings and experiences. Agriculture students from MIT Meerut attended the workshop under the guidance of **Dr. Vikash Singh and Dr. Ravi Shankar Singh.**

We are proud to share that **Karan Bathla, a 3rd year B.Sc. (Hons.) Agriculture student**, secured the First Prize in the competition.

RESEARCH & DEVELOPMENT CELL





Dr. Yogesh Kumar, Assistant Professor in the Department of Agriculture, has recently published a book titled **"Recent Advances in Agricultural Extension."**

This publication highlights contemporary developments and innovative approaches in the field of agricultural extension, contributing valuable insights for students, researchers and practitioners alike. Dr. Kumar's work reflects his academic dedication and commitment to advancing agricultural education and outreach.

Heartiest congratulations to **Dr. Yogesh Kumar** on this significant academic achievement!

MRS. SHILPI GUPTA
ASSISTANT PROFESSOR (CSE DEPARTMENT)

TRANSFORMING HEALTHCARE THROUGH BLOCKCHAIN-IOT CONVERGENCE

Ms. Shilpi Gupta presents **'Healthcare management in Bigdata with Blockchain and IOT integrated System' at IEEE Conference**, showcasing innovative solutions for secure, efficient, and data-driven healthcare management, published in IEEE Xplore.

FACULTY CERTIFICATION

National Institute of Technical Teachers Training and Research Chandigarh

MINISTRY OF EDUCATION, GOVERNMENT OF INDIA

Certificate

This is to certify that

SANYAM SHARMA

MEERUT INSTITUTE OF TECHNOLOGY, MEERUT UTTAR PRADESH

Participated in the AICTE Recognized Faculty Development Programme

on

NEP and its Implementation

Conducted by

Mechanical Engineering Department

from

17/03/2025 to 21/03/2025 (One Week)

at

IET, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur, UP

Coordinator Director

F.No AICTE/FDP-SI/OnlineWorkshop/229/2445534

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI

Certificate of Participation

This is to certify that Ms. Baby Verma from Meerut Institute of Technology, Meerut has participated and successfully completed the 5-day Online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 24th February to 28th February 2025.

Dr. Rajneesh Arora
Chairman
National Coordination Committee for Induction Program

Prof. Rajive Kumar
Member Secretary, AICTE

Certificate Of Participation

Awarded To

Aarti Chaudhary

Participated in Faculty Development Program on

Cloud Computing

Organized by the J B Institute of Engineering & Technology (JBIET), Hyderabad, Telangana, GITA Autonomous College, Bhubaneswar, Hyderabad Institute of Technology & Management (HITAM), Telangana, BV Institute of Technology & Management (BVITM), Bangalore, Karnataka, Atria Malik Institute of Technology and Research, in Collaboration with Excelr Edtech Pvt. Ltd.

Date: 14th July to 18th July 2025

Infosys

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COURSE COMPLETION CERTIFICATE

The certificate is awarded to

monika rana

for successfully completing the course

Statistics for Data Science

on June 2, 2025

Infosys | Springboard

Congratulations! You make us proud!

Thirumalai Anshi
Executive Vice President and Global Head
Education, Training & Assessment (ETA)
Infosys Limited

RESEARCH & DEVELOPMENT CELL

Congratulates to

Ms. Pallavi Jain
(Assistant Professor)
Department of Business Administration

For obtaining SWAYAM certificate in "Advanced Topics in Organizational Behaviour (Three Credit Course)" (January-June 2025) by IIM, Sirmaur

RESEARCH & DEVELOPMENT CELL

CONGRATULATES TO

Ms. Arti Yadav
(Assistant Professor)
Department of Business Administration

For acheiving SWAYAM online certification (4 Credit Course) on "Finance for Non-Finance" in Jan-April 2025 (12 Weeks) by Dr. Jagant Oke of Savitribai Phule Pune University, Pune.

RESEARCH & DEVELOPMENT CELL

CONGRATULATES TO

Ms. Himani Mishra
(HoD - BBA)
Department of Business Administration

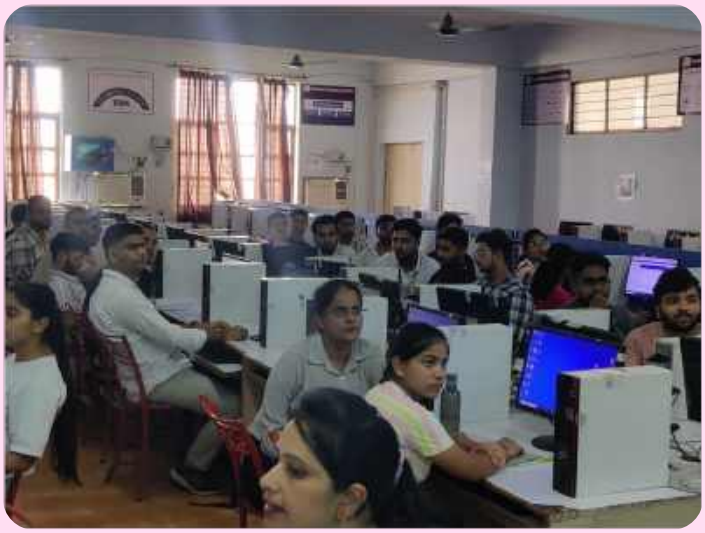
For acheiving NPTEL online certification & AICTE - FDP on "AI in Human resource Management" in Jan-April 2025(12 Weeks) by IIT Guwahati.

FACULTY LECTURE SERIES

Bachelor of Computer Applications successfully conducted **FACULTY LECTURE SERIES** on **11th and 12th July 2025,** delivered by esteemed faculty members. The sessions covered various subjects, including **Mathematics, C-Programming, Computer Fundamentals, and Principles of Management.**

TWO WEEKS TRAINING PROGRAM ON AWS & AI/ML

Bachelor of Computer Applications conducted **2 weeks training program on AWS and AI/ML** from 7th July 2025 to 18th July 2025 for enhancing their skills for industrial exposure.



Faculty Corner

Harnessing Artificial Intelligence in Modern Drug Delivery System Innovation

The integration of artificial intelligence (AI) is transforming pharmaceutical research, particularly in drug delivery systems (DDS). AI enhances the design, development, and optimization of delivery platforms, ushering in a new era of precision and efficiency.

Traditionally, drug delivery system development relies on trial-and-error methods, but AI's advancements in machine learning and predictive modeling now allow researchers to forecast interactions between drug components, optimize formulation parameters, and simulate biological performance before in-vitro testing.

One significant contribution of AI is in formulation strategies, where it analyzes vast datasets to identify ideal combinations of excipients, delivery vehicles, and active ingredients. This accelerates the formulation process and improves the likelihood of achieving desired therapeutic outcomes. Furthermore, AI enables individualized drug delivery by incorporating patient-specific information, such as genetic profiles and metabolic data, to design systems tailored to individual physiological conditions, improving both safety and efficacy.

AI-driven simulations, or "in silico" models, simulate how drugs behave in the human body, reducing reliance on animal studies and enabling the assessment of pharmacokinetics and bioavailability in virtual environments. Despite the immense potential, challenges such as data standardization, algorithm transparency, and regulatory validation remain.

At Meerut Institute of Technology, the Department of Pharmacy is engaging students through seminars, interactive sessions, and hands-on learning to raise awareness and encourage the application of AI in drug development. This initiative prepares students for future roles in the evolving pharmaceutical landscape.

In summary, AI is not just enhancing pharmaceutical workflows; it is reshaping how drug delivery systems are conceived, offering the promise of more targeted, efficient, and patient-centric therapies.

Dr. Amrendra Pratap Yadav
Assistant Professor
Department of Pharmacy

Faculty Corner

Bio-char in Agriculture and Water Purification

Bio-char, a carbon-rich material produced through the pyrolysis of organic waste under low oxygen conditions, has gained global attention for its environmental benefits, particularly in agriculture and water purification. Its application in India and worldwide shows promise in enhancing soil quality ,increasing crop productivity, and removing contaminants from water.

In agriculture, Bio-char improves soil structure, increases nutrient retention, enhances microbial activity, and boosts water-holding capacity. A seminal study by Lehmann et al. (2011) demonstrated that Bio-char application can increase crop yields by up to 30% in degraded soils. Similarly, Chan et al. (2008) found that Bio-char improved soil pH, water retention, and microbial diversity, especially in acidic soils with low organic matter. In India, Bio-char is commonly applied at rates between 10 to 30 tons per hectare. Research by Kumar et al. (2014) reported a 20% increase in rice yield in Punjab when Bio-char was used in acidic soils. Additionally, in dry land areas like Rajasthan, Bio-char improved water retention by as much as 40%, significantly reducing irrigation needs (Rai et al., 2015). The quality of Bio-char depends on feedstock and pyrolysis conditions; Zhao et al. (2014) observed that Bio-chars derived from agricultural residues had higher surface areas (700–1000 m^2/g) and greater nutrient adsorption capacity compared to wood-based Bio-chars.

Bio-char also shows great promise in water purification due to its high surface area and porous structure, which enable adsorption of heavy metals, organic pollutants, and pathogens. Zhao et al. (2015) reported that Bio-char produced from coconut shells and wood could remove up to 95% of heavy metals like arsenic, lead, and cadmium from contaminated water. Kameyama et al. (2020) found Bio-char filters removed 85–90% of bacterial contaminants, reducing health risks in areas with poor sanitation. In India, rural studies by Chandra et al. (2016) showed Bio-char filters could remove 90% of arsenic and 80% of fluoride from groundwater in West Bengal. Urban studies by Kumar et al. (2019) demonstrated up to 85% microbial contaminant removal from waste water. Despite its benefits, challenges remain in the energy-intensive and costly production of Bio-char. Yamato et al. (2006) highlighted that pyrolysis at 450–550°C yields Bio-char with higher nutrient retention but entails significant energy use. Future research should focus on optimizing pyrolysis for higher yields and lower energy consumption, as suggested by Vogt et al. (2017), who proposed co-producing Bio-char with biofuels to improve economic viability. Moreover surface modifications, such as iron oxide coating, have been shown by Kameyama et al. (2020) to enhance Bio-char's effectiveness in removing heavy metals from water.

In conclusion, Bio-char holds strong potential to improve agricultural productivity and water quality sustainably. With continued advancements in production technologies and functional enhancements, Bio-char could become a widely applicable and economically feasible solution for environmental challenges in India and globally.

Mr. Divyanshu Bhatt
Assistant Professor
Dept. Civil Engineering

Faculty Corner

Micro Thin Metal Tubes Using The Laser Powder Bed Fusion Additive Manufacturing Technique

Micro Thin Metal Tubes Processed by Laser Powder Bed Fusion Micro-thin metal tubes are of great interest for a variety of applications including biomedical device, aerospace and microelectronics. Conventional manufacturing techniques like extrusion and drawing tend to be somewhat limited in their ability to manufacture tubes with high accuracy complex geometries. The arrival of Laser Powder Bed Fusion (LPBF) as a type of additive manufacturing technique has made possible the manufacture and fabrication these complex structures. LPBF makes it possible to manufacture parts from metal in a layer-by-layer fashion, thus Offers much better control over material properties and geometries at small scales

Laser Powder Bed Fusion works by using a strong laser to melt metal powder in a bed of powder. A layer of the part is made, then more powder is added and the process is repeated. This is how the finished part is built up. Some research shows that this method is good for making very thin metal tubes. The method can make very small features and complex shapes that are hard to make in other ways. One study by Zhang et al. (2019) showed that Laser Powder Bed Fusion can make very thin wall parts with high accuracy.Using the LPBF process they showed that the tube wall can be as thin as 0.2 mm and still be strong. Similarly, Lee et al. (2020) studied how to change the laser power and rate of the laser to make the tube without making it too hot and weak. These settings are very important when making thin wall tubes from materials like titanium and stainless steel.

Further work on how the process is controlled has also been done. The materials that are used have also been studied. For example, they have looked at how multiple materials can be used together. This has been done to make the tubes work better. It also makes it possible to put different types of materials in the same part. The future for LPBF to make micro-thin metal tubes looks good. There are many developments that are expected to make this technique better.

Adding real-time control and observation systems could help make sure each layer of the build stays steady and good. Plus, new powder metals for AM will most likely make more micro-thin metal tubes use possible. Laser Powder Bed Fusion is getting better at making micro-thin metal tubes that are exact and have complex shapes. We've come a long way, but further research on how to better the process and on new materials will help us make the most of this new tech. AsLPBF keeps getting better, it will surely change the ways things are made that need to be very precise at a small size.

Mr. Gaurav Kumar
Assistant Professor
Dept. Mechanical Engineering

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Thank You!