



**Graphic Era**  
Deemed to be University  
DEHRADUN

APPLY NOW



# DEPARTMENT OF MECHANICAL ENGINEERING

Programs Offered —

- \* **B.Tech** Mechanical Engineering (ME)
- \* **B.Tech** ME Hons. (Robotics & Automation)
- \* **B.Tech** ME Hons. (Automobile)
- \* **B.Tech** ME for Working Professional
- \* **Ph.D** with Relevant Field

BROCHURE 2026-27

# About the University

## A Legacy of Excellence

Founded by Prof. (Dr.) Kamal Ghanshala with a vision to transform youth through quality education, Graphic Era began its journey in 1993 and evolved into Graphic Era Institute of Technology (GEIT) in 1997. In 2008, it was granted Deemed to be University status by the Government of India.

Today, Graphic Era stands as a NAAC 'A+' accredited university, ranked 52nd in Engineering, 52nd in Management, and 48th in the University Category by NIRF, Ministry of Education. With 6 NBA-accredited programs, the university fosters an industry-academia partnership through collaborations with Tata Technologies and IBM and hosts a DST-sponsored Technology Business Incubator for startups.

With global academic partnerships and student exchange programs across US, Europe, Australia, and Asia, Graphic Era provides a world-class learning experience. Its alumni shine at Apple, Google, Microsoft, HSBC, TCS, Wipro, Infosys, and the Indian Armed Forces, shaping the future with innovation and excellence.

**Be a part of this legacy!**



## Welcome Message by Head of the Department

Welcome to the Department of Mechanical Engineering at Graphic Era Deemed to be University, a hub of academic excellence and innovation. Our vision is to gain regional, national, and international recognition by nurturing creative, ethical, and environmentally conscious engineers. We focus on leadership in mechanical engineering through quality education and impactful research. With accomplished faculty and state-of-the-art facilities, we prepare students to excel in a dynamic world. Join our vibrant community, where academic rigor meets real-world application, shaping a sustainable and prosperous future.

## Our Department

**Vision:** The vision of the department is to be regionally, nationally and internationally recognized in providing Mechanical Engineering education, leading to well qualified Engineers who are Creative, Ethical, Environmental friendly, Self-esteemed and successful in Research.

**Mission:** The mission of the department is to educate, prepare, inspire, and mentor students to excel as professionals at both the undergraduate and graduate levels for leadership roles in the fields of mechanical engineering and to conduct research for the benefit of society.

**M1:** Imparting quality education to the students and enhancing their skills to make them globally competitive engineers.

**M2:** Maintaining vital, state-of-the-art research facilities to improve its students and faculty with opportunities to create, interpret, apply and disseminate knowledge.

**M3:** To develop linkages with world class R&D organization and educational institutions in India and abroad for excellence in teaching, research and consultancy practices.

**M4:** To produce ethical, motivated and competent engineers capable of solving current problems and envisaging and developing new technologies beneficial to society.

# Key Facts & Achievements

## Rankings

**#48** University Category

**#52** Engineering Category

**#52** Management Category



Source: **NIRF 2025 Ranking**  
Ministry of Education,  
Govt. of India

**#41** Sustainability Rank in India

**#138** Southern Asia 2026

**Diamond**

I-Gauge Rating



**#02** in India for Research Quality

**#601-800**

World University Ranking



World University Rankings 2026

## Startups

**₹500+ Cr**

Valuation of Startup's

**100+**

Incubated Startups

**90+**

Startups Recognised

**1000+**

Interns Enrolled

**8000+**

Beneficiaries in 2025

## Accreditations

**NAAC A+**

Grade Accredited



Source: National Assessment & Accreditation Council (NAAC)

**UGC, AICTE, BCI, NMC, INC**

Programs approved by University Grants Commission (**UGC**), All India Council for Technical Education (**AICTE**), Bar Council of India (**BCI**), National Medical Commission (**NMC**), and Indian Nursing Council (**INC**)



**06 NBA**

Courses Accredited

The only University in the region to have **B.Tech (CSE, ECE, ME, CE, Biotechnology)** and **MBA** accredited by NBA



Source: National Board of Accreditation (**NBA**)

## Academic Snapshot

**900+** Distinguished Faculty Members

**14K+** Students

**22** Departments (8 Engineering & 14 Non-Engineering)

**100+** Programmes

## Research & Innovation

**Top 2%**

34 faculty members of Graphic Era University included in Stanford-Elsevier-list.

**₹2648.99 Lac**

Research Project Funding from leading government agencies including DST, DBT, SERB, CSIR, UCOST, MoEF&CC and ISRO.

**₹3472.17 Lac**

Consultancy Project Funding

**15500+**

Research Publications

**240+**

Patents Granted

**2100+**

Patents Published

# Courses Offered

---

## Under Graduate Courses

- ⚙️ B.Tech Mechanical Engineering
- ⚙️ B.Tech Mechanical Engineering (Hons.) - (Robotics and Automation)
- ⚙️ B.Tech Mechanical Engineering (Hons.) - (Automobile)

### Eligibility —

All interested candidates should have passed Class XII from a recognized board of examination with Physics, Mathematics, and Chemistry or equivalent or as per AICTE guidelines.

- ⚙️ B.Tech Mechanical Engineering for Working Professional

### Eligibility —

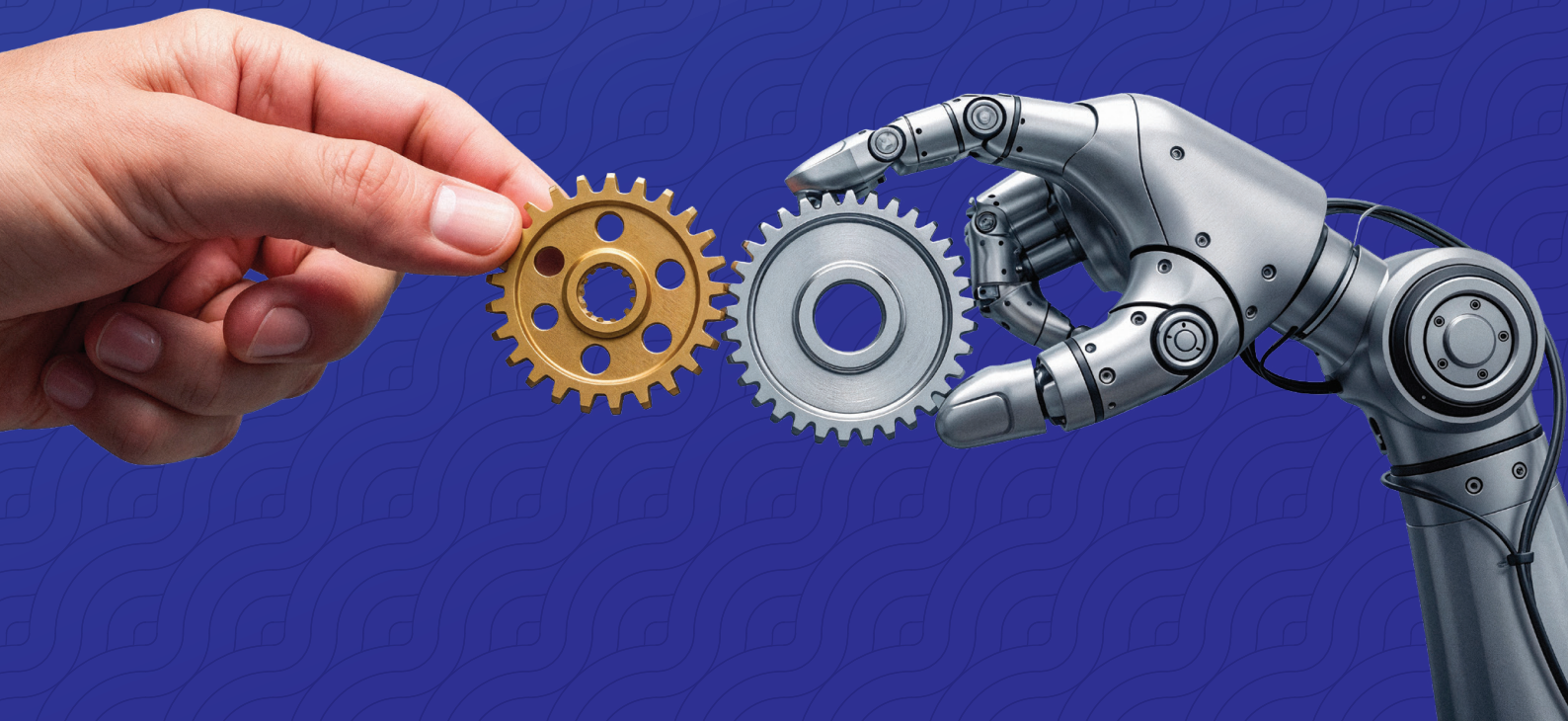
Pass a 3-year engineering diploma. Classes will be evening based 6PM to 10 PM Monday to Friday and Saturday full day.

---

## PhD with Relevant Field

### Eligibility —

Master's Degree from any AIU/UGC/AICTE recognized University/ Institutions or any other qualification recognized as equivalent thereto in the fields of study notified from time to time by the University.



# Opportunities After Engineering

---



## Core Mechanical Fields

Opportunities in automotive, aerospace, thermal power, HVAC, and robotics, focusing on design, manufacturing, and quality control.



## Interdisciplinary Fields

Scope in biomedical engineering, data analytics, and mechatronics, merging mechanical expertise with emerging domains.



## Manufacturing & Production

Roles in production engineering, tool & die making, and quality assurance to optimize manufacturing processes.



## Government Sector

Opportunities in PSUs (BHEL, NTPC, IOCL), Indian Railways, DRDO, and ISRO in design, maintenance, and R&D.



## Research & Development (R&D)

Innovation in materials, manufacturing, thermal, and industrial design, with opportunities in government and private R&D labs.



## Higher Education & Certifications

Advanced studies (M.Tech, PhD, MBA) and skill enhancement through ANSYS, CATIA, Six Sigma, PMP certifications.



## Emerging Technologies

Careers in 3D printing, renewable energy, IoT, and smart systems for industrial advancements.



## Global Opportunities

High demand for mechanical engineers in Germany, Canada, USA, Japan, and Australia.



## Entrepreneurship

Starting ventures in manufacturing, robotics, renewable energy, and consultancy.



# Infrastructure and Facilities



- ✔ **State-of-the-art labs:** Well-equipped labs for robotics, mechatronics, CAD/CAM, and computational fluid dynamics.
- ✔ **Advanced manufacturing facilities:** 3D printing, CNC machining, and laser cutting facilities.
- ✔ **Mechanical workshop:** Fully equipped workshop for hands-on training and project development.
- ✔ **Research centers:** Established research centers for renewable energy, robotics, and advanced manufacturing.



- ✔ **Industry collaborations:** Partnerships with leading industries for joint research projects and internships.
- ✔ **Innovation incubator:** Dedicated space for students to develop and incubate their innovative ideas in any of our lab simulation labs can also be included.
- ✔ Advanced ML-AI based innovations, projects and skill development courses.
- ✔ Active clubs for robotics, racing, and innovation, annual technical festivals with competitions, workshops, and guest lectures, Regular industrial visits and tours to provide hands-on experience.





⚙️ **Advance Manufacturing Center:** The Advanced Manufacturing Center focuses on developing and implementing cutting-edge production technologies like automation, robotics, 3D printing, and smart factory systems.

⚙️ **Mechatronics Center:** The Mechatronics Center is dedicated to the integration of mechanical engineering, electronics, computer control, and software into complex systems.

⚙️ **Tear Down and Bench Marking Center:** The Tear Down and Bench Marking Center systematically disassembles competitor products or existing designs to thoroughly analyze their components, materials, manufacturing costs, and performance.

⚙️ **Visualization Center:** The Visualization Center utilizes advanced hardware and software (like virtual reality, augmented reality, and large-scale displays) to create immersive, interactive visual models and simulations of products, processes, or data.



# Meet Our Experts

Name	Designation	Qualification	Area of Expertise
<b>Dr. Kapil Kumar Sharma</b>	HOD	Ph.D (IIT Roorkee) M.Tech B.Tech	CFD, Continuous Casting Modelling, Composites, Thermal Engineering Software Proficiency: CFD Simulation, Ansys, MATLAB, SolidWorks, Creo, AutoCAD, Solid Edge
<b>Dr. Desh Bandhu Singh</b>	Professor	Ph.D (IIT Delhi) M.Tech B.Tech	Thermal Engineering, Development of solar systems (Listed in top 2% scientists and researchers list provided by Stanford University California)
<b>Dr. Rakesh Chandmal Sharma</b>	Professor	Ph.D (IIT Roorkee) M.Tech	Rail Vehicle Dynamics, Machine Design, Mechanical Vibrations (Listed in top 2% scientists and researchers list provided by Stanford University California)
<b>Mr. Amir Shaikh</b>	Professor	Ph.D (P) (GEU) M.E, B.E	Biomechanics, Prosthetics
<b>Dr. Ashwani Kharola</b>	Associate Professor	PDF, Ph.D (GEU) M.Tech B.Tech	Soft-Computing Techniques, Nonlinear Systems, Control Theory, Machine Learning.
<b>Dr. Brijesh Prasad</b>	Associate Professor	Ph.D (GEU) M.Tech B.Tech	Polymer Sensors & Actuators, Composites, Water Treatment
<b>Dr. Manvandra Kumar Singh</b>	Associate Professor	Ph.D (IIT BHU) M.Tech B.Tech	Composites and Hybrid Composites (MMCs), Tribology, Bio-Tribology Advanced Materials, Nano-Materials Synthesis and characterizations of Materials
<b>Dr. Pravat Ranjan Pati</b>	Associate Professor	Ph.D (NIT Rourkela) M.Tech B.Tech	Waste management, Materials Engineering, Composites, Surface Coating, Tribology
<b>Dr. Gagan Bansal</b>	Assistant Professor	Ph.D (IIT BHU) M.Tech MBA, B.Tech	Biocomposite materials, Biotribology, Advanced composite material, Biomedical Applications, Synthesis and Characterization of composites, ML & AI, Advanced computational analysis, waste management, surface modification and hydrophobic/ hydrophilic coating.
<b>Dr. Gopal Ji</b>	Associate Professor	PDF, Ph.D (IIT BHU) M.Tech B.Tech	Corrosion Inhibitors Green, Natural, and waste natural materials for corrosion inhibition, Anti-corrosive coatings, Surface Engineering Wear and corrosion testing of Composites Synthesis and application of Nanocomposites
<b>Dr. Vineet Kumar</b>	Assistant Professor	Ph.D (IIT BHU) M.Tech B.Tech	Tribology, Surface topography. Materials, Advanced Composite Manufacturing, High Temperature casting

Name	Designation	Qualification	Area of Expertise
Dr. Lalit Ranakoti	Assistant Professor	Ph.D (NIT Uttarakhand) M.Tech B.Tech	Natural fiber biopolymer composite characterization for automotive and marine applications. Blending of biopolymers for properties enhancement. Thermal energy storage material for water treatment. Heat transfer in microchannels
Dr. Narendra Gariya	Assistant Professor	Ph.D (GEU) M.Tech B. E.	Soft Robotics (Soft robots embedded with soft sensors for industrial and medical applications. Smart composites for sensing application. Natural-fiber reinforced composites for industrial applications
Dr. Royal Madan	Assistant Professor	Ph.D (NIT Raipur) M.Tech, B.E.	Functionally graded materials, Computational mechanics, composites, biomechanics, structures
Dr. Aqueel Ahmad	Assistant Professor	Ph.D (NSUT Delhi) M.Tech B.Tech	Energy and Emission Control; Alternative Fuels ; Biohydrogen ; Biogas ; Biodiesel ; Hydrogen-Enriched Fuels; IC Engine Testing ; Engine Modification; Optimizatio; AI-Based Modeling ; Dual Fuel Mode Engines ; Sustainable Energy Solutions
Mr. Durgeshwar P. Singh	Assistant Professor	Ph.D (P) (GEU) M.Tech B.Tech	CFD, composites, Computational mechanics, biomechanics, structures
Mr. Yatharth Joshi	Assistant Professor	Ph.D (P) (GEU) M.Tech B.Tech	Composite Material, Manufacturing, Design and Circular economy
Mr. Paritosh Mishra	Assistant Professor	Ph.D (P) M.Tech (IIT Delhi) B.Tech	Solid Mechanics, Experimental Stress Analysis, Fracture Mechanics, Mechanical Vibrations, Nano Generations and Sensors
Dr. Neeraj Sengar	Assistant Professor	Ph.D (IIT Delhi) M.Tech B.E. Diploma	Entrepreneurship Education Ecosystem, Innovation & Technology Transfer, Mergers & Acquisitions (M&A), Circular Economy, Solar Energy, Software Proficiency: AutoCAD, PLS-SEM
Mr. Harvindra Singh	Assistant Professor	Ph.D (P) (GEU) M.Tech B.Tech	Heat transfer, Solar energy, Fluid machinery, Fluid mechanics, Material science
Mr. Akashdeep Negi	Assistant Professor	Ph.D (P) (GEU) M.Tech B.Tech	Thermal Energy Engineering, Energy Storage Materials, Solar Desalination, Nanomaterials

# Research & Achievements

Research and innovation in Mechanical Engineering play a vital role in advancing industrial technology and driving engineering excellence. Our department is at the forefront of cutting-edge research, addressing real-world challenges and pioneering solutions in advanced materials, thermal systems, robotics, automation, and renewable energy.

Our state-of-the-art research labs facilitate groundbreaking studies in composite materials, fluid dynamics, smart manufacturing, and sustainable energy solutions. Collaborative efforts with industry

partners, research organizations, and government agencies enhance our ability to create impactful innovations.

Breakthroughs in mechanical design, additive manufacturing, and intelligent automation contribute to industrial growth and global competitiveness. By investing in research and fostering a culture of innovation, the department is shaping the future of engineering, making significant contributions to technological advancement, sustainability, and economic development.

## Department Faculty among the World's Top 2% Scientists



**Dr. Desh Bandhu Singh**  
Professor



**Dr. Rakesh Chandmal Sharma**  
Professor



**Dr. Lalit Ranakoti**  
Assistant Professor



**Dr. Aqueel Ahmed**  
Assistant Professor

## MoUs



# Successful Career Paths

## Student Placements and Achievements



Ekta  
Dhapola



Alekh  
Dwivedi



Aman  
Kumar



Gunjan



Dil Bahadur  
Bohara



Mritunjay  
Raj



Priyan  
Bhatnagar



Radhika  
Agarwal



Ramandeep



Rohit Pant



Tanmay Kohli



Yuvraj Deopa





# Events & Activities



1. Industrial Visit to Sara Sae
2. Plantation Drive
3. National Workshop Cum Faculty Development Program
4. Awareness Camp on Road Safety
5. Workshop on Advanced Tools Use for Workshop and Manufacturing Practices
6. Formula Kart
7. Workshop on Getting Started with Arduino
8. RevFest 2025
9. Formula Kart Design Challenge - Coimbatore 2025
10. Acheiving Excellence Through Self Exploration by Dr. Navneet Arora



1. Team Vonk 3.0 – A Legacy of Excellence
2. ICRTMMTCT Conference 2024
3. Lakhveer Singh's Powerlifting Silver medal Glory
4. Jeep India's Tech Showcase
5. Mechame Racers at MEGA ATV Championship 2016
6. Cart Manufacturing Workshop – Skills in Action
7. Shell Eco Marathon, Indonesia 2022 – Spirit of the Event Award
8. Shell Eco Marathon, Bangalore 2019 – Circular Economy Award
9. Industrial Visit to Rockman Industries



# Startups and Mechepreneurs



## Mr. Rajat Jain

Founder and CEO of Sunfox India Pvt. Ltd.

A star boy as featured on Shark tank India with glorious "ALL 5 SHARKS DEAL". Sunfox is currently working on several health care issues.



## Prakhar Srivastava

Founder and CEO, Raysteeds Energy Pvt Ltd

Our distinguished alumni and a rising star in the field of solar energy ventures and businesses.



## Abhijeet Roy

Founder and CEO, Plades Innovation Pvt. Ltd.

Our distinguished alumni and a rising star in the field of tile making by recycling synthetic waste.



## Mr. Yatharth Joshi

Papertechy Team Pvt. Ltd

Having several records and creative achievements in the bucket, the startup is going to be the next big thing in the years to come



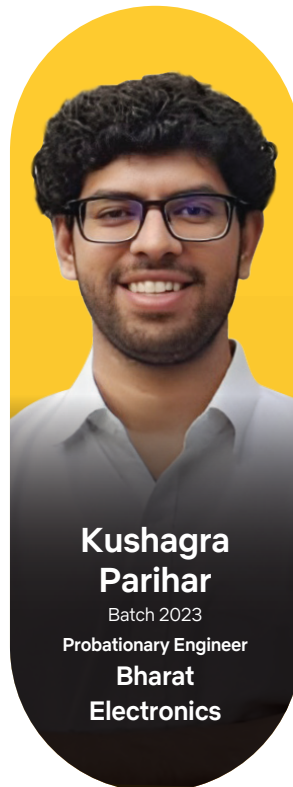
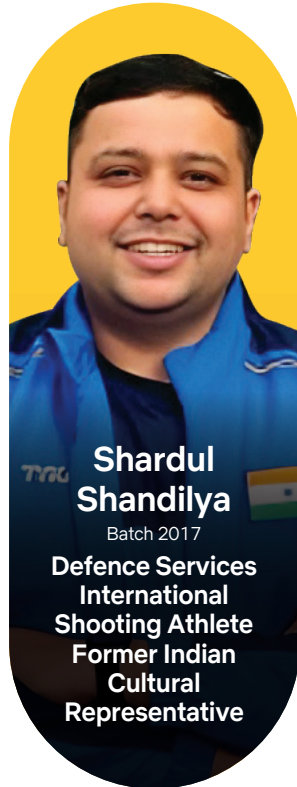
## Ishank Sahadeva

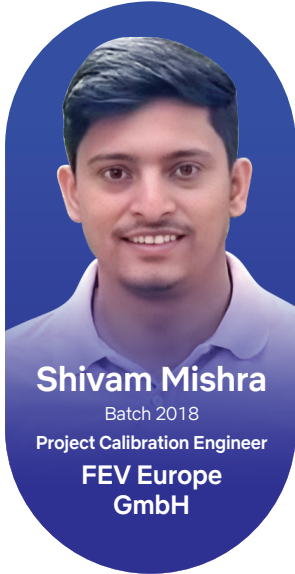
Founder, 18 Solitaire

Co-Founder, Swarn Mahal Jewels

# Our Esteemed Alumni

---





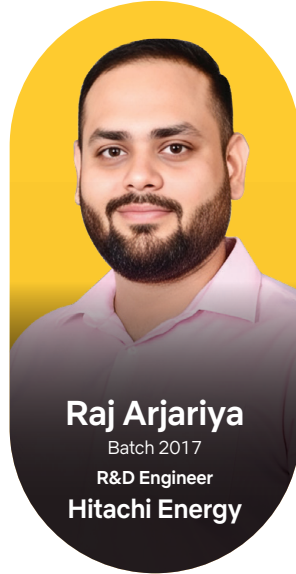
**Shivam Mishra**  
Batch 2018  
Project Calibration Engineer  
FEV Europe  
GmbH



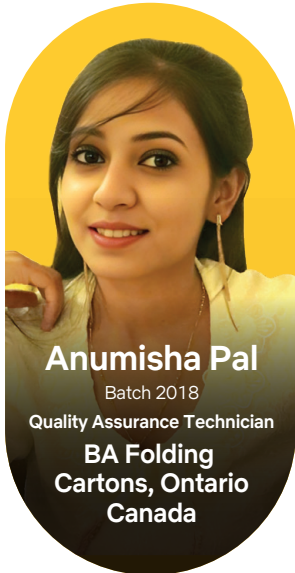
**Vipin Sati**  
Batch 2017  
Deputy Manager  
Maruti Suzuki  
NEXA



**Bilas Hussain**  
Batch 2016  
Quality Control Inspector  
Ali & Sons  
Contracting LLC  
Abu Dhabi



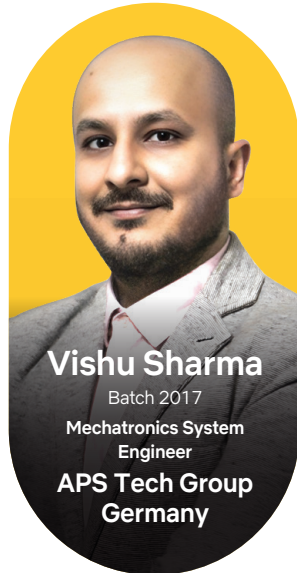
**Raj Arjariya**  
Batch 2017  
R&D Engineer  
Hitachi Energy



**Anumisha Pal**  
Batch 2018  
Quality Assurance Technician  
BA Folding  
Cartons, Ontario  
Canada



**Intekhab Alam**  
Batch 2018  
Business Development and  
Quality Executive  
Nine Yards  
UK



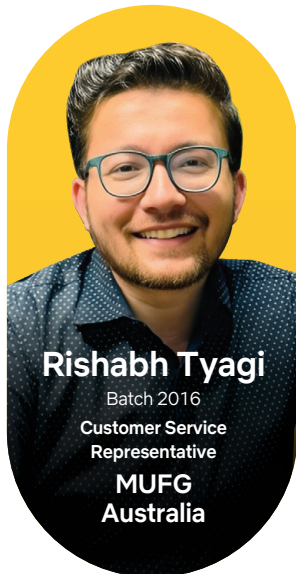
**Vishu Sharma**  
Batch 2017  
Mechatronics System  
Engineer  
APS Tech Group  
Germany



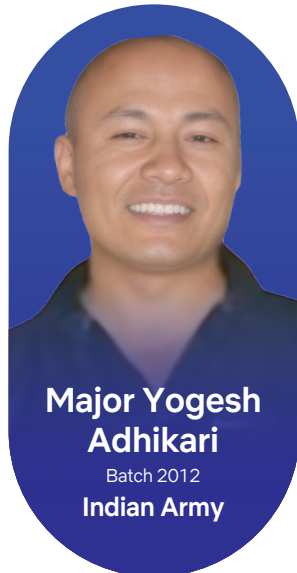
**Bhumika Rautela**  
Batch 2018  
Strategic/ Project Purchaser  
Dauphin Human  
Design Group  
Germany



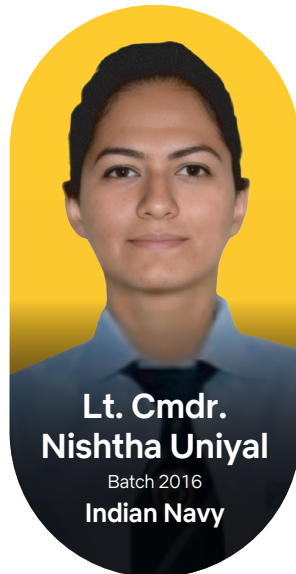
**Robin Tyagi**  
Batch 2018  
Sales Manager  
IKEA  
NS, Canada



**Rishabh Tyagi**  
Batch 2016  
Customer Service  
Representative  
MUFG  
Australia



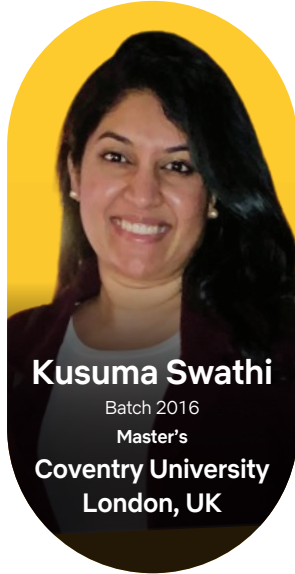
**Major Yogesh  
Adhikari**  
Batch 2012  
Indian Army



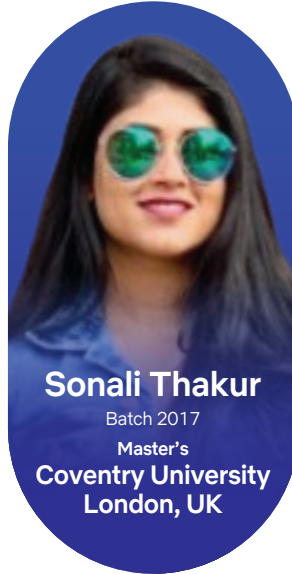
**Lt. Cmdr.  
Nishtha Uniyal**  
Batch 2016  
Indian Navy



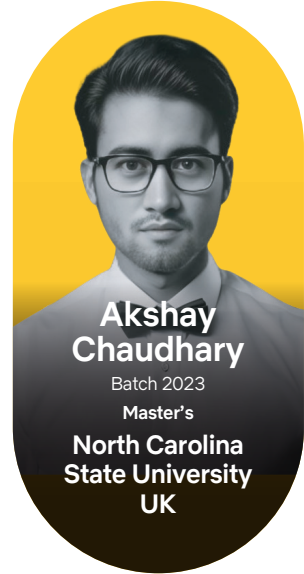
**Jyot Niranjn  
Chand Ramola**  
Batch 2014  
Assistant Commandant  
Indian Coast  
Guard



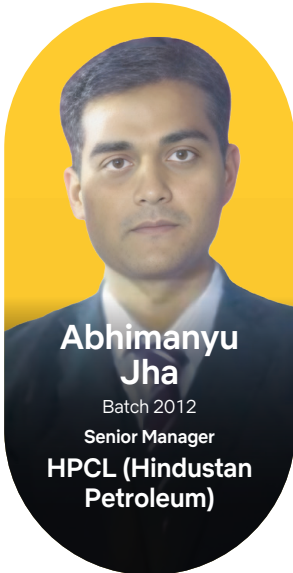
**Kusuma Swathi**  
Batch 2016  
Master's  
Coventry University  
London, UK



**Sonali Thakur**  
Batch 2017  
Master's  
Coventry University  
London, UK



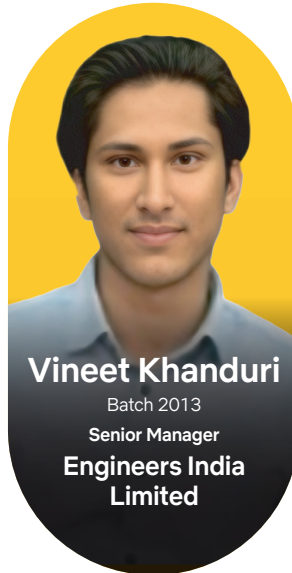
**Akshay  
Chaudhary**  
Batch 2023  
Master's  
North Carolina  
State University  
UK



**Abhimanyu  
Jha**  
Batch 2012  
Senior Manager  
HPCL (Hindustan  
Petroleum)



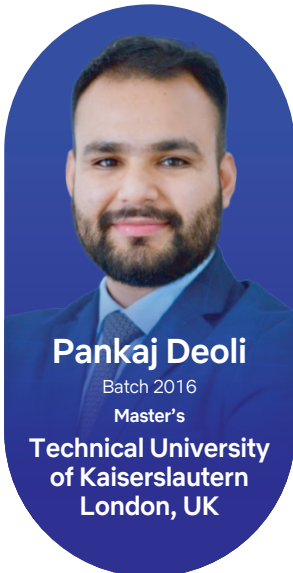
**Gitin Kullar**  
Batch 2013  
Executive Engineer  
ONGC



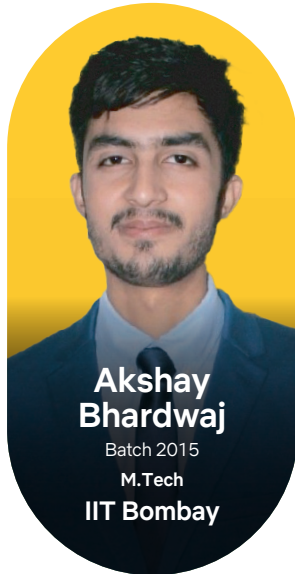
**Vineet Khanduri**  
Batch 2013  
Senior Manager  
Engineers India  
Limited



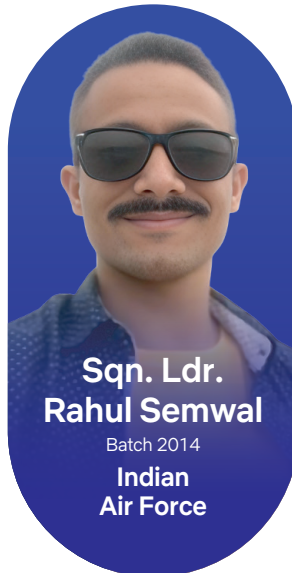
**Anurag Butola**  
Batch 2013  
Scientist  
ISRO - Indian  
Space Research  
Organization



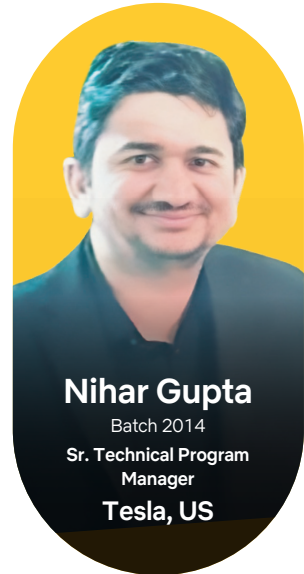
**Pankaj Deoli**  
Batch 2016  
Master's  
Technical University  
of Kaiserslautern  
London, UK



**Akshay  
Bhardwaj**  
Batch 2015  
M.Tech  
IIT Bombay



**Sqn. Ldr.  
Rahul Semwal**  
Batch 2014  
Indian  
Air Force

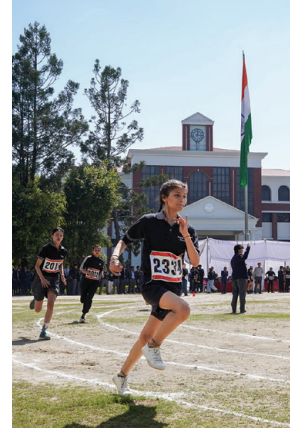


**Nihar Gupta**  
Batch 2014  
Sr. Technical Program  
Manager  
Tesla, US



# Beyond Classrooms

Where Every Event Tells a Story



Join us in 2026!



# Career Counselling Services

The Department of Mechanical Engineering equips students with the guidance, skills, and opportunities needed for career success. Our Career Counseling and Professional Development Services prepare them for every stage of their professional journey.

## Domain-Specific Mentorship

We have dedicated Chair Heads for Marketing, Finance, and Human Resources, providing students with:

- Expert Mentorship
- Counseling Support

## Professional Development Program (PDP)

### Placement Support

Our Placement Department plays a vital role in shaping students' careers by providing:

- Support for Summer Internships (SIP) and Final Placements
- Internship Guidance

## Alumni Mentorship

# Graphic Era Common Entrance Test (GECET)

Scholarship upto

₹100  Cr

Unlock up to 100% scholarships with GECET – Graphic Era Common Entrance Test.

Secure your admission & financial support for a brighter future!

Apply Now – [gecet.geu.ac.in](http://gecet.geu.ac.in)



# Scholarships & Support Benefits

Upto

 **100%** Scholarship based on 12th or UG marks

 **10%** Scholarship to the Girl Candidates

 **05%** Scholarship to the children of Defense Personnel

 **05%** Scholarship to the Sport Person (National Level)

 **7.5%** Current Sibling Student Scholarship


 **05%** Passed out Sibling Student Scholarship


 **10%** Alumni Loyalty Scholarship

 **10%** Single Parent Scholarship (COVID Case)

 **05%** Single Parent Scholarship (Normal Case)

 **05%** Yearly Payment of Fees

 All students are covered under a comprehensive health insurance plan.

 Medical services are provided through the state-of-the-art Graphic Era Hospital.

 Student loan facilities are available to support financial needs.

## Student Facilities & Engagement



Well-equipped and comfortable hostel facilities



Efficient transportation services



Extensive sports facilities



Free student uniform



Vibrant student clubs and extracurricular activities



Multiple hygienic and student-friendly cafeterias



Green, eco-friendly campus environment



ICT-enabled smart classrooms



# Graphic Era

## Deemed to be University

### DEHRADUN

## GET IN TOUCH

Tollfree —  
1800 270 1280, 1800 890 6027

HOD Mechanical —  
(+91) 9058514181

WhatsApp —  
(+91) 70881 19995

Website —  
[www.geu.ac.in](http://www.geu.ac.in)

E-mail —  
[admissions@geu.ac.in](mailto:admissions@geu.ac.in),  
[hod.mechanical@geu.ac.in](mailto:hod.mechanical@geu.ac.in)

Campus —  
Bell Road, Clement Town, Dehradun,  
Uttarakhand, India 248002

Register Now —



LinkedIn —



Instagram —

