



Babu Banarasi Das Northern
India Institute Of Technology

Department of
Mechanical Engineering

NEWS **LETTER**

2023 - 2024



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THE CHAIRPERSON'S MESSAGE

MRS. ALKA DAS

M.B.A., L.L.B.,
Advocate & Social
Worker Chairperson,
BBD Group



A lady with spirit, determination and zeal, Mrs. Alka Das has been the driving force behind her husband Dr. Akhilesh Das. She is the daughter of Late Justice D. P. Gupta, who held high positions in the State of Rajasthan, as its Governor and Chief Justice. She was brought up on Gandhian ideals and philanthropic traditions. Mrs. Das is a Management expert and a legal luminary who has a long involvement with issues of social justice and women empowerment in our country. She is a legal consultant to several reputed organizations and an active Social Worker. She is connected with many National Social & Educational Organizations. She is also a Life Member of the "Rajasthan High Court Bar Association". The establishment of Northern India Engineering College, Lucknow was an initiative taken by her to provide quality professional education to match the International Standards. She has travelled extensively to countries like Denmark, Italy, Japan, France, Switzerland, UK and USA to study the pattern of education and facilities provided to the students there. As a Co-founder of Babu Banarasi Das Group of Educational Institutions, Mrs. Das has made a fertile attempt to nurture a generation of self-made and highly motivated students with an inbuilt commitment to do something constructive for the Country.

DIRECTOR'S MESSAGE

Prof. (Dr.) V. K. Singh
Director(Engg.)



Dear Readers, ***“Education is the most powerful weapon which you can use to change the world.” – Nelson Mandela*** It gives me immense pleasure to introduce the latest edition of our college magazine at Babu Banarasi Das Northern India Institute of Technology (BBDNIIT), Lucknow. Since its inception, BBDNIIT has been committed to providing quality technical education and developing competent technocrats who are socially sensitive and committed to excellence on a global scale. For over 17 years, BBDNIIT has stood as a beacon of academic excellence and innovation in the field of engineering. Our esteemed faculty, state-of-the-art infrastructure, and rigorous academic processes are all geared towards nurturing talent and fostering an environment of growth and learning. In this magazine, you will find a vibrant showcase of the creativity, dedication, and hard work of our students and faculty. It reflects the dynamic and inclusive community we have cultivated, where every student is encouraged to pursue their passions and excel both academically and personally. Our systematic teaching-learning process prepares students for the challenges ahead, equipping them with the knowledge, skills, and ethical values necessary to make significant contributions to society. The global technology landscape is evolving rapidly, and to remain competitive, our students must be prepared to face new challenges head-on. BBDNIIT is dedicated to training students to meet these challenges with confidence and competence. We continue to strive for excellence in professional education, aiming for new heights and fostering a thinking, professional order. I encourage all students to make the most of their time with our dedicated faculty and staff, to develop their proficiency, and to grow both personally and professionally. The doors of our faculty members are always open for guidance and support. With best wishes for your continued success and growth.

MESSAGE FROM HEAD OF DEPARTMENT

Prof. (Dr.) NAGENDRA KUMAR MISHRA
Head of Department – ME



Welcome to the Department of Mechanical Engineering at Babu Banarasi Das Northern India Institute of Technology, Lucknow. We have a strong undergraduate program in mechanical engineering. Our students work in almost every technology-based industry: automotive, steel and materials, robotics and manufacturing. Our goal for undergraduate students is to give them a high-quality engineering education that includes hands-on experience. In their curriculum, they are encouraged to take up mini and major projects to supplement theoretical knowledge with practical experience. These projects enable them to understand the relevance of working in a group and also help them to realize the finer aspects and importance of teamwork. The faculty members work with capable students on individual projects. The teaching learning is carried out using latest techniques of pedagogy. It is our endeavor to inculcate in the students adequate level of knowledge, skill and attitude.

The department has a distinguished record in teaching and can boast of faculty members having excellent academic credentials and teaching expertise.

We strive to ensure that all our undergraduate students have a strong education with teaming and leadership skills, involvement in extra-curricular activities, and the practical background of internship experience. We believe that emphasizing these areas will make our students well qualified to take leadership roles in the future.

Whether you are a current or former student, a potential student, or a visitor, please feel free to contact or visit us.

INSTITUTE VISION

To establish a multi-disciplinary environment with excellence in technical education and research for developing competent professionals who meet the challenges of industrial and societal development with human values and ethics.

INSTITUTE MISSION

- To provide an excellent environment with supporting infrastructure to prepare globally competent professionals acceptable to industry and society.
- To inculcate a spirit of research, innovation and entrepreneurship by exposing multi-disciplinary approach.
- To motivate aspiring graduates to solve real life problems with zeal of lifelong learning.
- To imbibe a healthy environment which helps to develop intellectual capabilities among graduates to transform them into professionals with human values and ethics.

DEPARTMENT VISION

To be a leading center in Mechanical Engineering by providing value-based quality education that nurtures competent, versatile, and entrepreneurial professionals capable of excelling at the global level.

DEPARTMENT MISSION

M1: To deliver quality education using cutting edge infrastructure for producing competent professionals.

M2: To encourage students to pursue higher education and explore entrepreneurial skills through innovation to serve society at large.

M3: To Inculcate the values of leadership & integrity with sensitivity for societal issues.

PROGRAMME EDUCATIONAL OBJECTIVES

- **PEO 1:** Graduates will be able to apply domain knowledge for employment, advanced studies, entrepreneurial activities and for facing challenges in professional life.
- **PEO 2:** Graduates will exhibit professionalism through effective communication skills, ethical values, and social responsibility.
- **PEO 3:** Graduates will demonstrate team spirit and leadership qualities and engage in lifelong learning to contribute to nation-building.

PROGRAMME OUTCOMES

PO1: Engineering knowledge:

- Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

PO3: 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.

PO4: 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.

PO5: 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.

PO6: 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.

PROGRAMME OUTCOMES

PO7: 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.

PO8: ETHICS:

- Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: INDIVIDUAL AND TEAM WORK:

- Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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.

PO11: 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.

PO12. 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.

PROGRAMME SPECIFIC OUTCOME

On completion of the B.Tech. Mechanical Engineering degree the graduates will be able to be:

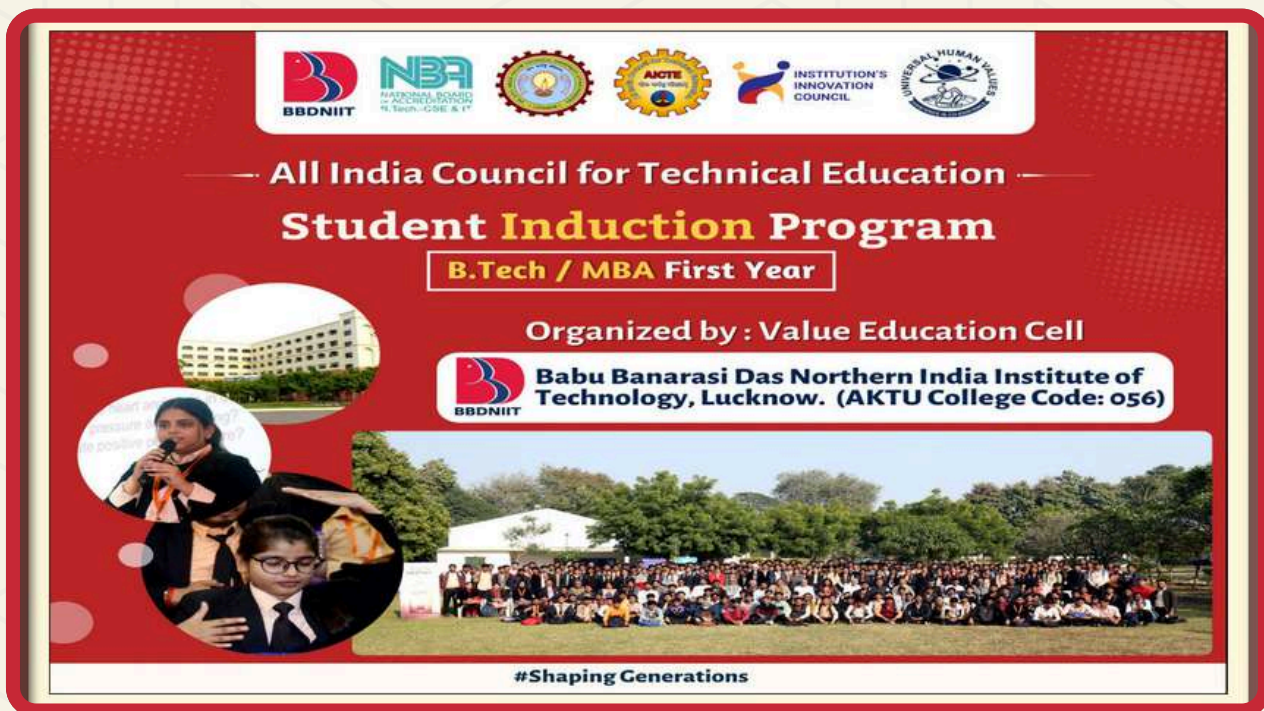
- **PSO-1:** Graduates will be able to apply the fundamentals of thermal engineering, production engineering, and design engineering to provide solutions in the field of Mechanical Engineering and interdisciplinary areas.
- **PSO-2:** Graduates will have the ability to develop advanced mechanical systems and processes using tools of Mechanical Engineering for practical applications.

LIST OF ORGANIZED ENGINEERING EVENTS

<u>S.No</u>	<u>Topic</u>	<u>Type</u>	<u>Association</u>	<u>Date</u>
1	Swachh Bharat Mission	—	—	Oct 1, 2023
2	Induction and Orientation	—	—	Sep 29, 2023
3	BBDNIIT Smart India Hackathon 2023	Workshop	—	Sep 25, 2023
4	Industrial Visit	Workshop	ME Department	Dec13, 2023
5	Industrial Visit	Workshop	ME Department	May, 2024



Swachh Bharat Mission



Induction and Orientation



BBDNIIT Smart India Hackathon 2023



Industrial Visit 2023



Industrial Visit 2023-24

FACES BEHIND THE

NEWS LETTER



MOHD ALTAMASH

ME - 2020-24 Batch



DEEPAK KUMAR

ME - 2021-25 Batch



Babu Banarasi Das Northern
India Institute Of Technology