K.N.S. GOVERNMENT POLYTECHNIC, SAMASTIPUR

Department of Mechanical Engineering

Learning • Innovation • Practical Skills • Professional Growth

DEPARTMENT NEWS LETTER

Session 2025-2026



STUDENT INTRODUCTION & ORIENTATION PROGRAMME







Academic Session 2025–26

Welcoming a New Academic Journey

The Department of Mechanical Engineering welcomes its students to a new academic journey filled with learning, practical knowledge and professional development.
The department encourages students to actively participate in academic activities, laboratory sessions, technical workshops and skill-development programmes.
Through faculty guidance, teamwork and hands-on learning, students are motivated to develop technical knowledge, confidence and professional skills.

Learn • Explore • Innovate • Achieve

Department of Mechanical Engineering
K.N.S. Government Polytechnic, Samastipur

CNC Machining & CAD/CAM Training at CIPET, Hajipur





About the Training

A 14-day Skill Development Training Programme on CNC Machining Techniques using CAD/CAM/CAE was organized at CIPET, Hajipur, under the Department of Science, Technology and Technical Education (DSTTE), Government of Bihar, in collaboration with the Bihar Skill Development Mission (BSDM).
The training was conducted from 23 September to 6 October 2025 for final-year Mechanical Engineering students of K.N.S. Government Polytechnic, Samastipur.
The programme provided practical exposure to CNC machining, computer-aided design, manufacturing techniques and modern industrial practices.

Practical Skills • Precision Machining • Industry Readiness



49
Mechanical Student

14
Days of Training

Sports Achievements at UMANG 2025 | Organised by DSTTE









Champion's

Divisional-Level Volleyball

K.N.S.G.P. Volleyball Team

Runners-up

Male volleyball team

2nd of 46

Overall position among polytechnics

K.N.S. Government Polytechnic, Samastipur showcased outstanding sports performance at UMANG 2025, organised by DSTTE, Government of Bihar.
The institute's volleyball team emerged as Divisional-Level Champions. Several girls' teams also demonstrated excellent performance and reached the final rounds in their respective competitions.

CENTRE OF EXCELLENCE IN 3D PRINTING



The Centre of Excellence provides students with opportunities to explore modern manufacturing technologies, develop innovative ideas and transform digital CAD models into physical engineering components.

About the Centre of Excellence

Kameshwar Narayan Singh Government Polytechnic, Samastipur, has established a Centre of Excellence (CoE) in collaboration with IIT Patna to promote advanced technical education, innovation and practical learning.
The centre focuses on 3D Printing Technology and Additive Manufacturing, providing students with exposure to modern manufacturing techniques through FDM and SLA 3D printing technologies.

Technology & Applications

The facility enables students to convert CAD designs into physical components and develop engineering prototypes.

Major Applications:

- Rapid Prototyping
- Mechanical Component Development
- Product Design & Innovation
- Engineering Models
- Practical Project Development

The Future of Mechanical Engineering



Practical Learning & Industrial Exposure

Mechanical Engineering education at K.N.S. Government Polytechnic, Samastipur focuses on practical skills, modern manufacturing and industry-oriented learning. Through CNC machining training at CIPET Hajipur, 3D printing facilities developed in collaboration with IIT Patna and industrial visits, students gain valuable technical exposure and understand real-world engineering practices.

Emerging Technologies & Career Opportunities

The future of Mechanical Engineering offers opportunities in advanced manufacturing, automotive industries, electric vehicles, CNC machining, CAD/CAM and industrial automation. With practical knowledge and technical skills, diploma engineers can build careers in production, quality control, maintenance, design and modern manufacturing industries.

SUMMER INTERNSHIP & INDUSTRIAL TRAINING



Industrial Exposure at ECR Loco Shed

Mechanical Engineering students gained practical exposure through four weeks of vocational training at the Diesel Locomotive Shed, Samastipur (East Central Railway).

The training covered WDM/WDP diesel-electric locomotive systems, IC engine maintenance, turbocharger assembly, braking systems and mechanical components.

Industrial Internship at Sudha Dairy, Barauni

Students completed four weeks of industrial internship at Sudha Dairy Plant, Barauni, gaining practical knowledge of industrial refrigeration, ammonia vapour-compression systems, steam boilers, heat exchangers and automated packaging operations.

Practical Learning Outcomes

- Diesel Engine Maintenance
- Turbocharger & Transmission Systems
- Industrial Refrigeration
- Boiler & Thermal Systems
- Industrial Equipment Maintenance

MECHANICAL ALUMNI SPOTLIGHT



From Diploma Education to Professional Careers

The alumni of the Department of Mechanical Engineering, K.N.S. Government Polytechnic, Samastipur, are building careers across public-sector organisations, railways and reputed industries.

Alumni Career Highlights

- **Indian Oil Corporation Limited (IOCL), Barauni** – Junior Engineer and other technical roles.
- **South East Central Railway** – Assistant Loco Pilot (ALP).
- **Eastern Railway** – Junior Engineer (JE).
- **Bharat Electronics Limited (BEL), Ghaziabad** – Engineering Assistant (EA).
- **South West Railway** – Assistant Track Machine.

Our Pride. Their Achievement. Our Inspiration.

Preparing skilled diploma engineers for professional growth and lifelong learning.



Thank You

Department of Mechanical Engineering

K.N.S.G. Polytechnic, Samastipur