



MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY, JAIPUR

(An Institute of National Importance under MoE, Government of India)

NEWLY LAUNCHED
B. TECH. COURSE

ENGINEERING PHYSICS

BY
DEPARTMENT OF PHYSICS
MNIT JAIPUR

Explore Physics. Engineer Solutions. Transform the Future.

The B.Tech. in Engineering Physics at MNIT Jaipur combines fundamental physics with engineering and technology to solve real-world problems. The program builds strong analytical, computational and experimental skills, preparing students for **emerging frontiers** of science and engineering.



APPLICATIONS & RESEARCH AREAS

SEMICONDUCTOR AND PHOTONICS



- Semiconductor materials and devices
- Optoelectronics
- Integrated photonics
- LED, OLED, Laser technologies
- Photodetectors & solar cells

ENERGY MATERIALS



- Advanced battery materials
- Supercapacitors
- Fuel cells & hydrogen energy
- Perovskite & thin film solar cells
- Energy storage & conversion

SOFT MATERIALS



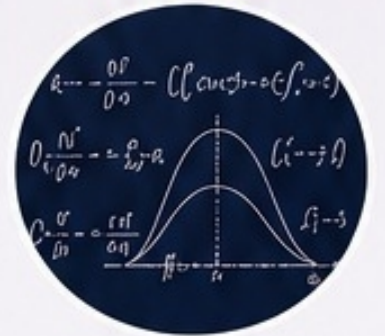
- Polymers & hydrogels
- Self-assembled systems
- Biomaterials
- Responsive & smart materials
- Flexible & wearable electronics

QUANTUM MATERIALS AND DEVICES



- 2D materials & topological materials
- Quantum dots & defects
- Quantum transport
- Spintronics
- Quantum computing hardware

THEORETICAL PHYSICS



- Quantum mechanics
- Statistical mechanics
- Condensed matter theory
- Computational physics
- Field theory & cosmology



WHY CHOOSE ENGINEERING PHYSICS?

- ✓ Strong foundation in Physics with Engineering orientation
- ✓ Interdisciplinary curriculum with modern laboratories
- ✓ Research-driven learning & innovation
- ✓ Excellent career opportunities in industry, academia & research



HIGHLIGHTS

- ✓ State-of-the-art laboratories & facilities
- ✓ Experienced faculty & research guidance
- ✓ Collaborations with industry & leading research institutes
- ✓ Project-based learning & hands-on experience
- ✓ Holistic development for future leaders



CAREER PATHS

- ✓ Semiconductor & Photonics Industry
- ✓ Energy & Renewable Sector
- ✓ Research & Development Labs
- ✓ Quantum Technologies
- ✓ Higher Studies in India & Abroad
- ✓ Entrepreneurship & Start-ups



BUILD THE FUTURE WITH PHYSICS.
INNOVATE. EXPLORE. TRANSFORM.



SCAN TO
KNOW MORE

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