

Welcome to our Engineering Physics Laboratory...!



CV RAMAN ENGINEERING PHYSICS LAB



ENGINEERING PHYSICS LAB-1

The Engineering and Applied Physics laboratory offers students hands-on experience and practical knowledge of physical concepts. Managed by experienced faculty, the lab is equipped with necessary facilities and equipment for experiments. Through experiments, students gain expertise in laboratory instruments, critical thinking skills, effective teamwork, and practical applications of physics in engineering and related fields, preparing them for future careers.

The Physics Laboratory offers a unique learning experience for students, equipping them with the necessary tools to succeed in future careers in engineering and related fields.

Objectives of Engineering Physics Lab

1. **Providing hands-on experience:** The primary objective of the engineering physics lab is to provide students with practical experience in the field of physics. Students have the opportunity to apply theoretical concepts learned in the classroom to real-life situations, enhancing their understanding of physical concepts.
2. **Developing critical thinking skills:** The engineering physics lab aims to develop critical thinking skills in students by challenging them to analyse properties and measurements of various quantities of materials.
3. **Promoting teamwork:** The lab encourages students to work in teams, fostering a collaborative learning environment. This not only helps students develop teamwork skills but also enhances their communication and interpersonal skills.
4. **Preparing students for industry:** The lab prepares students for future careers in engineering and related fields by providing them with practical knowledge and skills that are applicable in industry. This helps them to be better equipped to solve real-world problems in their future careers.

Lab Courses Offered

The Physics Lab offers the following courses that cover various physical concepts and principles.

1. **Engineering Physics Lab:** The course is offered for Civil and mechanical engineering programs. The course comprises several experiments that enable students to apply theoretical concepts learned in the classroom to real-world situations, preparing them for future careers in the field

of physics. The course includes a variety of experiments that cover a broad range of topics, including CRO, Hall effect apparatus, analysis of LASER and various pendulums.

2. **Applied Physics Lab:** The course is offered for CSE, EEE, ECE, AI&DS, AIML, CSE(DS) and CSE(AI) engineering programs. This course encompasses a plethora of experiments that facilitate students to apply their theoretical knowledge acquired in the classroom to practical scenarios, thereby equipping them with the necessary skills and expertise required for their future endeavours in the realm of physics.

Equipment offered by Physics Labs

The physics laboratory is well-equipped with a range of advanced instruments that are used to conduct various experiments with high accuracy and precision. The laboratory includes an array of sophisticated equipment. such as optical instruments. The following equipment is available for use.

- Spectrometer
- Travelling micro scope
- Various light sources
- B-H curve apparatus
- Dielectric Resonance apparatus
- Stewart-Gee's apparatus
- Optical fiber
- Hall effect instrument
- Energy gap kit
- Torsional pendulum
- LASER particle size
- Diffraction grating