



JECRCTM
UNIVERSITY
BUILD YOUR WORLD

CBCS Based B. Sc. (Hons) - Physics
PROGRAMME OBJECTIVES

Department of Physics

Faculty of Sciences

Academic Session: 2021-2024

PROGRAM OBJECTIVES (POs)

- I. **Disciplinary Knowledge:** Capable of demonstrating good procedural knowledge and systematic understanding of major concepts, theoretical principles and experimental findings in Physics and its different learning subfields and applications.
- II. **Technical Skill:** Acquire the ability to use modern instrumentation and laboratory techniques to design and perform experiments are highly desirable in almost all the fields of physics. Realize the importance of mathematical modeling to understand problems in physical world.
- III. **Critical Thinker and Problem Solver:** Develop a strong analytical skill and will be able to study critically a physics problem, solve the problem using different tools and present the result/conclusion. Develop global competencies in handling the open ended problems belongs to disciplinary fields of physics.
- IV. **Sense of Inquiry:** Capability for asking relevant/appropriate questions relating to the issues and problems in the field of Physics, executing physics experiments, analyze and interpret data/information collected using appropriate methods and report the findings of the experiment to the relevant theories of Physics.
- V. **Digitally Efficient:** Capable of using computers for simulation and computation for better understanding of problems in Physics. Students will be aware of appropriate software for numerical and statistical analysis of data available now days and will be able to retrieve Physics information from e-libraries and other e-sources available using internet.
- VI. **Skilled Project Manager:** Capable of identifying appropriate resources required for a project, and manage a project through to completion, while observing responsible and ethical scientific conduct with safety measurements.
- VII. **Ethical Awareness:** Capable of demonstrating ability to think and analyze rationally and to identify the potential ethical and moral issues in work-related situations, to enhance intellectual property, environmental and sustainability issues, and promoting safe learning and working environment as professional behavior.
- VIII. **National and International Perspectives:** Capable of preparing themselves for their appropriate role in contributing towards the national development and projecting our national priorities at the international level pertaining to their field of interest.
- IX. **Lifelong Learners:** Capable of self-paced and self-directed learning aimed at personal development and for improving knowledge/skill development and re-skilling in all areas of Physics.