



JECRCTM
UNIVERSITY
BUILD YOUR WORLD

CBCS Based B. Sc. (Pass) - Physics
PROGRAMME OUTCOMES

Department of Physics

Faculty of Sciences

Academic Session: 2021-2024

PROGRAM OBJECTIVES (PO):

PO1: Core competency: The graduates are expected to know the fundamental concepts of Science and other subjects. These fundamental concepts would reflect the latest understanding of the subject and in allied subject areas. Students will learn to investigate, experiment, relate information and draw logical conclusions based on scientific reasoning.

PO2: Disciplinary knowledge and skill: To learn and apply the knowledge in understanding research and addressing practical problems and to apply various scientific methods to address different questions by formulating the hypothesis, data collection and critically analyze the data. The student will be inquisitive about processes and phenomena happening during experiments in laboratories and seeks answers through the research path..

PO3: Skilled communicator: Communicate effectively on various scientific issues with the with society at large, They are expected to read and understand documents with in-depth analyses and logical arguments. Graduates are expected to be well-versed in speaking and communicating their idea.

PO4: Critical thinker and problem solver: Critical thinking and analytical reasoning and the scientific knowledge will help to develop scientific temper that will be more beneficial for the society. The student will be able to draw logical conclusions based on a group of observations, facts and rules.

PO5: Team player: The course curriculum has been designed to provide opportunity to act as team player by contributing in laboratory, field based work, project and industry.

PO6: Moral and ethical awareness: Graduates are expected to be responsible citizen of India and be aware of moral and ethical baseline of the country and the world.. Emphasis be given on academic and research ethics, including fair Benefit Sharing, Plagiarism, Scientific Misconduct and so on.

PO7: Skilled project manager: Graduates are expected to be familiar with decision making process and basic managerial skills to become a better leader by acquiring knowledge about project management, writing, planning, study of ethical standards and rules and regulations pertaining to scientific project operation.

PO8: Digitally literate: The student will acquire knowledge in understanding and carrying out data analysis, use of library search tools, and use of software and related computational work. Students will acquire digital skills and integrate the fundamental concepts with modern tools.

PO9: Environment and sustainability Apply the knowledge of basic science and allied fields to protect environment and to prevent environmental degradation as science graduate, to stay firm on the value systems, of their culture, including their own for a healthy socio cultural environment.

PO10: Lifelong learner: Graduates will acquire the ability to engage independent and self-learning as well as to successfully pursue their career objectives in advanced education and in professional courses, through the use of advanced ICT technique and other available techniques/books/journals for personal academic growth as well as for increasing employability.

PROGRAM SPECIFIC OBJECTIVES (PSOs)

This undergraduate course would provide the specific attributes of physics to the students:

PSO1: To understand the basic laws and explore the concepts of physics, significance of the various physical phenomena and carry out experiments to understand fundamentals of basic physics.

PSO2: To acquire a wide range of problem solving skills, both analytical and technical and to apply them

PSO3: To enhance the student's academic abilities, personal qualities and transferable skills that excel in the competencies and values required for leadership to serve a rapidly evolving global community.