M.Sc. Physics

The M.Sc. Physics program under Choice Based Credit System (CBCS) consists of 20 courses offered in Physics during the four semesters. Five Courses are offered in 1st semester, Six courses in2nd and 3rd semesters and Three courses in 4th semester.

PROGRAMME OUTCOMES (PO) OF M.Sc

PO No.

PO1. Critical Thinking: Ability to engage in reflective and independent thinking. To understand the logical connections between ideas. Identify, construct and evaluate arguments, detect inconsistencies and common mistakes in reasoning, solve problems systematically and identify the relevance
and importance of ideas that reflect on the justification of one's own beliefs and values.

PO2. Effective Communication Skills: Enhanced ability to become concise and confident communicator, read, write and listen with utmost clarity in person and through electronic media and make
meaning of the world by connecting/corroborating people, ideas, books, media and technology.

PO3. Healthy Social Interaction: Socialize and encourage a sense of community and provide a way for the spread and strengthening of social and cultural mores and norms. Through social interactions, individuals reaffirm their commitment to community values.

PO4. Duty bound Citizenship: Inculcation of good citizenship values, democratic values, and responsible behavior. Knowledge of a society's major social, political and legal institutions, the capacity and disposition to participate within those institutions, and an awareness of the rights and obligations that citizenship entails.

PO5. Ethics: Foster ethical learning environments and training in ethics as the common ground for educating individuals on making ethical decisions in the workplace.

PO6. Environment and Sustainability: Understanding of the role of environmental awareness and environmental contexts in achieving sustainable development.

PO7. Self-regulated Life-long Learning: Developing life long, self-directed and independent learning skills by setting up major goals.

PROGRAM SPECIFIC OUTCOMES (PSO) OF MSc PHYSICS

PSO No.

PSO-1 Development of analytic, logical and critical thinking skills through acquired knowledge in major fields and/or branches of Physics. Graduate students will also be able to acquire knowledge about the fundamentals and applications of physical and scientific theories.

PSO-2 Exhaustive and detailed study will enable the students to understand and learn the different branches of Physics such as Quantum Mechanics, Classical Mechanics, Electronics, Plasma Physics, Mathematical Physics, Atomic and Nuclear Physics, Modelling and Simulation, Condensed Matter Physics Physics, Electrodynamics, Nano Science, Energy Science, and Statistical Mechanics.

PSO-3 Post Graduates will be able to sustain intellectual curiosity and enhance their academic knowledge. They will be able to know how to continue to learn not only the areas that are relevant to Physics, but also that are apposite to society.

PSO-4 To equip the students for seeking and searching for suitable careers and avenues at the glob-al platform in theoretical and/or experimental Physics.

PSO-5 Perform basic, applied and collaborative research in the relevant and sustainable topics pertaining to Physics and the allied subjects.

PSO-6 Enhance pedagogical and scientific writing skills through modern methods focusing on asking a strong research question, finding strategies for appropriately investigating the question, analyzing the findings and/or results, and drawing conclusions. This will help students to get into the mindset of always framing and planning investigations.

PSO-7 Enhance National and International competency. Globally competent individuals will be able to examine local, global and intercultural issues, understand and appreciate different perspectives and world views, interact.