

**Shree Swami Vivekanand Shikshan Sanstha Kolhapur,
DATTAJIRAO KADAM ARTS, SCIENCE AND COMMERCE COLLEGE,
ICHALKARANJI**

Course Outcomes

Nuclear and Particle Physics (Paper-XIII)

B.Sc. III (PHYSICS)

.....

Graduate students will have knowledge of how modern science tries to answer the big questions about the universe. In addition to this, students will have learned about how new ideas go from fundamental research to actual utilization in everyday life, in the way that nuclear physics is used in medicine. In elementary particle physics we research the smallest building blocks of the universe to understand unanswered questions about dark matter, antimatter and the origin and evolution of the universe. Within astro-particle physics there is the study of elementary particles in the universe by use of telescopes, to understand and explain unsolved phenomena. In high energy nuclear physics we research the behavior of nuclei under extreme conditions, especially the quark-gluon plasma that existed for about one microsecond after the Big Bang.

Course Outcomes:-

1. Acquire knowledge in the content areas of nuclear and particle physics, focusing on concepts that are commonly assessed on the physics exams like NET, SET, GATE, JEST, TIFR etc.
2. Develop and communicate analytical skills in subatomic physics.
3. Develop familiarity with nuclear and particle physics, facilitating informed decisions as students pursue research projects, internships, careers, and graduate study.
4. Learn about topics of interest independently, and subsequently organize and present information to each other and to a group, at an appropriate level for their target audience.