

## **M. S. Astronomy and Astrophysics**

### **Program Educational Objectives (PEO)**

1. Develop an understanding of the broad areas of the research in astrophysics, and the interdisciplinary nature of the subject.
2. Acquire the ability to synthesize information from research literature, and other learning material, and connect it to developments in the field of study.
3. Acquire a level of proficiency in computational tools, analytical and numerical techniques for modeling astrophysical phenomena.
4. Understand the diversity of observational data, the instrumentation and observational techniques used to acquire data, and the role played by data in furthering our understanding of the universe.
5. Obtain the necessary skill sets to actively pursue higher education opportunities and careers in astrophysics and allied fields.

### **Program Outcomes (PO)**

1. Demonstrate a certain level of advanced understanding of the principles, theorems, observational and theoretical techniques that are fundamental to the program of study.
2. Ability to undertake independent research projects, data collection, analysis, and interpretation of results.
3. Ability to critically review, analyse, evaluate, and think about existing knowledge in the field.
4. Develop the capacity to communicate concepts, scientific results, and ideas effectively through oral and written means.