## M. Tech Earth System Science

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

- 1. Attain a comprehensive understanding of the foundational principles underlying Earth Science, encompassing geological, atmospheric, and oceanographic phenomena.
- 2. Acquire a diverse skill set encompassing fundamental, methodological, and computational aspects of Earth Science, fostering opportunities for advanced education and employment in Research & Development and Industry sectors.
- 3. Develop technical expertise in various facets of Earth Science, including data collection methodologies, basic and advanced analysis techniques, quality assurance protocols, and interpretation of outcomes across diverse application domains.
- 4. Cultivate the ability to collaborate and integrate knowledge with allied fields such as machine learning, artificial intelligence, and information technology, facilitating innovative approaches to address complex Earth Science challenges and opportunities.

## **Program Outcomes (PO)**

- 1. Demonstrate a comprehensive grasp of the foundational principles and concepts across various domains within Earth Science.
- 2. Identify and analyze significant challenges within Earth Science, employing solution-oriented approaches to address them effectively.
- 3. Exhibit innovative thinking skills conducive to conducting advanced research in Earth Science, pushing boundaries and exploring new avenues of inquiry.
- 4. Develop proficient communication skills to articulate complex scientific concepts, methodologies, and findings both orally and in written form, facilitating effective dissemination of ideas within scientific communities and beyond.