Instrumentation and Control Engineering programme educational objectives (PEOs)

1. To Provide Students with the strong foundation in Mathematical, Scientific and Engineering fundamentals necessary to formulate, solve and analyze engineering problems related to industry and research.
2. To impart the state of the art technology to the students in the field of Instrumentation and Control Engineering.
3. To promote innovation, invention and entrepreneurship by enabling the students to transform their ideas to proof-of-concepts for high-tech applications.
4. To provide opportunity for the students to work as part on multidisciplinary project.
5. To inculate in the student's professional and ethical attitude, Communication skills and the lifelong learning skills needed for the successful professional career.

Instrumentation and Control Engineering Programme Outcomes (POs)

Instrumentation and Control Engineering Graduates will be able to:

PO1 Apply the knowledge of mathematics, science, engineering fundamentals, and instrumentation and control engineering to the solution of complex engineering problems.

PO2 Identify, formulate, review research literature, and analyze complex instrumentation and control engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 Design solutions for complex instrumentation and control engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4 Use research based knowledge and research methods including design of

experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5 Create, select, and apply appropriate techniques, and modern engineering and IT tools including prediction and modeling to complex instrumentation and control engineering activities with an understanding of the limitations.

PO6 Apply reasoning informed by the contextual knowledge to assess society, health, safety, legal and cultural issues and the consequent responsibilities relevant to the instrumentation and control engineering practice.

PO7 Understand the instrumentation and control engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8 Apply ethical principles and commit to instrumentation and control ethics and responsibilities and norms of the engineering practice.

PO9 Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 Communicate effectively on complex instrumentation and control engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11 Demonstrate knowledge and understanding of instrumentation and control engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12 Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in broadest context of technological change.