

## **PROGRAMME OUTCOMES**

Students will develop a comprehensive understanding of statistical and mathematical methodologies through a diverse and rigorous curriculum. They will master foundational concepts in probability and distribution theory, including discrete and continuous distributions, and learn to apply these concepts in practical scenarios. Proficiency in various sampling techniques and statistical computing with tools such as MINITAB, R and SPSS will be emphasized, equipping students with the skills to handle complex data analysis tasks. Advanced topics such as stochastic processes, linear algebra, and real analysis will deepen their theoretical knowledge, while statistical methods and parametric and non-parametric tests will enhance their ability to draw meaningful inferences from data.

The curriculum also includes specialized areas like industrial statistics & reliability theory, bio-statistics, and actuarial sciences, preparing students to tackle specific challenges in these fields. Students will explore multivariate analysis, Bayesian inference, and information theory, providing a broad toolkit for analyzing and interpreting complex datasets. Practical applications will be emphasized through experimental design, operations research techniques, and understanding inventory and queuing theory. By integrating these diverse areas, students will be equipped to analyze data, model systems, and make informed decisions in a wide range of professional contexts.