| Semester | Code | Module Title | Credits | C/E/O | GPA/NGPA |
|---|---|---|---|---|---|
| 5 | MA3014 | Applied Statistics | 2 | E | GPA |

| Hours/Week | | Pre-requisites/Co-requisites | Evaluation (%) | |
|---|---|---|---|---|
| Lecture | Tute/Lab | | CA | WE |
| 2 | 0 | MA1024 | 30 | 70 |

**Learning Outcomes**

After the successful completion of this course students should be able to

- Calculate a range of statistics and summarize the properties of statistical distributions related to the analysis of data
- Analyze data and interpret results to derive conclusions by choosing appropriate statistical tests
- Evaluate the real-world problems using probability, statistics and statistical modelling

**Syllabus Outline**

- Discrete distributions (Negative Binomial, Geometric, Hypergeometric)
- Continuous distributions (Exponential, Gamma, Chi-Square, Fisher's F-distribution)
- Confidence intervals for means, proportion(s) and variance(s)
- Hypothesis testing on means, proportions and variances
- Contingency tables, Chi-square test of association and Goodness-of-fit test of distributions.
- Simple linear regression
- Introduction to sampling techniques