

## **FOURTH SEMESTER SE**

### **ECO-SE-4014: Data Analysis**

#### **Course Description:**

This course discusses how data can be summarized and analysed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of statistical softwares like SPSS/PSPP to analyse data.

#### **Course Outline:**

1. Data entry in softwares like MS-Excel, SPSS/PSPP
2. Univariate frequency distributions. Measures of central tendency: mean, median and mode; arithmetic, geometric and harmonic mean. Measures of dispersion: range, mean deviation and standard deviation, skewness and kurtosis.
3. Bivariate frequency distribution. Correlation and regression. Rank correlation.
4. Estimation of population parameters from sample data. Unbiased estimators for population mean and variance.

#### **Readings:**

1. P.H. Karmel and M. Polasek (1978), *Applied Statistics for Economists*, 4th edition, Pitman.
2. M.R. Spiegel (2003), *Theory and Problems of Probability and Statistics* (Schaum Series).