MATH–211

MATHEMATICS   Credit Hour: 3

Type: Compulsory

Course Objectives

The Course is designed to polish the numerical calculation skills of the Students so as to develop basis of statistics. In addition, it will also strengthen their skills to utilize in selection tests like GRE and GAT general.

Course Contents

- Sets, Subsets
- Type of Sets, Rational Numbers
- Real Numbers and Real Line
- Introduction of Complex Numbers
- Addition, Subtraction, Multiplication and Division of Complex Numbers
- Simultaneous equations
- Introduction to linear equations
- Solution by Substitution / Elimination Method
- Introduction to Matrices
- Addition, Subtraction, Multiplication of Matrices
- Determinants
- Cramer Rule
- Introduction to Quadratic Equations
- Solve Quadratic Equations by completing Square, Factorization and Quadratic Formula
- Introduction to sequences and series
- Arithmetic an harmonic sequences
- Application to sequence and series
- Equation of straight line
- Circle, area and circumference of the circle
- Area and perimeters of different shapes

Course Outcomes

Students will be able to revise their previously learned mathematic skills and apply later in learning statistics on advance level.

Recommended Books:

Campbell, H. G., & Spencer, R.E. (1974). Finite Mathematics. (1st ed). New York: Macmillan

Hacussler, E.F., & Paul, R. S. (2010). Introductory mathematical analysis for the business, economics, and the life and social sciences. (13th ed). New Jersy: Prentice Hall.