

# Research Proposal.

Functional analysis is a branch of mathematical analysis which studies the transformation of functions and their algebraic and topological properties.

An important part of functional analysis is the extension of the theory of measure integration and probability to infinite dimensional spaces.

## Concept of functional Analysis

Functional analysis is a methodology that is used to explain the working of a complex system. The basic idea is that the system is viewed as computing a function.

## Aims and objectives

It aims to study normed linear spaces and some of the linear operators between them and give some application of their use. The normed linear spaces which are complete metric spaces are especially important and the first part of the course is an introduction to the theory of Lebesgue integration with the aim of providing examples of complete spaces normed linear spaces of integrable function.