NOC:Introduction to Statistical Hypothesis Testing - Video course

NPTEL

http://nptel.ac.in

Chemical Engineering

COURSE OUTLINE

Hypothesis testing is concerned with statistical testing of postulates (usually concerning parameters) in an empirical way, i.e., from data. It is an important subject and step in all spheres of data analysis. The course aims at providing the basics of hypothesis testing with emphasis on some commonly encountered hypothesis tests in statistical data analysis such as in comparisons of averages, testing for variability, proportions and significance testing in regression analysis.

COURSE DETAIL

Sl No.	Topics
1.	Introduction
2.	Foundations of Hypothesis Testing
3.	Hypothesis Testing in Data Analysis
4.	Construction of Confidence Regions and Advanced Concepts.
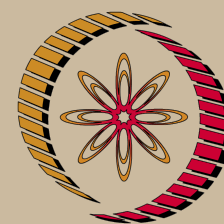
Pre-requisites:

Basic course in probability and statistics

Additional Reading:

1. Douglas C. Montgomery and George C. Runger (2010). Applied Statistics and Probability for Engineers. Fifth Edition. John Wiley & Sons.
2. Babatunde A. Ogunnaike (2009). Random Phenomena ¸ Fundamentals and Engineering Applications of Probability & Statistics.

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