ECONOMETRIC MODELLING

PROF. SUJATA KAR
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IIT Roorkee

TYPE OF COURSE : New | Elective | PG
COURSE DURATION : 8 Weeks (23-Aug' 21 - 15-Oct' 21)
EXAM DATE : 23 Oct 2021

PRE-REQUISITES : Any graduates with basic mathematical knowledge or mathematics till 12th standard.
INTENDED AUDIENCE : MA (economics) & MBA
INDUSTRIES APPLICABLE TO : Companies that are into data analytics or market research would value this course.

COURSE OUTLINE :
This course is designed to give the students an exposure to the basic concepts of econometrics. However, the basic content also attempts to cover parts of time series analysis. The course is structured to be primarily theoretical with an aim to provide an understanding of the mechanism, mathematics and economics behind the tools and techniques used. The concepts will be explained with examples using mostly MS Excel.

ABOUT INSTRUCTOR :
Dr. Sujata Kar is an Assistant Professor with the Department of Management Studies, IIT Roorkee. She is an economist by training with BSc (Hons.) in Economics from University of Calcutta, MA in Economics from Jawaharlal Nehru University and PhD from IIT Kanpur. She has more than 9 years of teaching experience in several public and private academic institutions in India. She has published research papers in various national and international journals.

COURSE PLAN :
Week 1: Introduction
Week 2: Overview of Classical Linear Regression Model
Week 3: Multiple regression analysis and diagnostic tests
Week 4: Statistical inference and hypothesis testing
Week 5: Univariate Time Series Modelling
Week 6: Models with Binary Dependent and Independent Variables
Week 7: Multivariate Models
Week 8: Modelling Long Run Relationships