

SUMMER SCHOOL ON RESEARCH METHODOLOGY: APPLICATIONS OF ECONOMETRICS AND STATISTICS

May 23-29, 2016

Department of Humanities and Social Sciences
National Institute of Technology Durgapur

In Collaboration with

The Indian Econometric Society (TIES)



AN OVERVIEW OF SEVEN DAYS WORKSHOP

The Department of Humanities and Social Sciences, National Institute of Technology Durgapur is going to organise a “Summer School on Research Methodology: Applications of Econometrics and Statistics” in collaboration with **The Indian Econometric Society (TIES)** during May 23-29, 2016. The applications of Statistics and Econometrics are becoming increasingly important for analysing the problems of different sectors like Industry, Agriculture to the Service sector e.g. Health, Education, Public Finance, Banking and Insurance etc. The applications of these analytical tools by using software have made a revolutionary transformation. The schedule of the workshop is aimed at a topic wise brief discussion on theory followed by thorough practical sessions. The workshop is proposed to give a thorough exposure to the Cross Section, Time Series and Panel data analysis, and the related econometric tools. The participants will get a good training on some popular and important softwares like STATA and E-views, and will learn how to conduct data analysis by using the softwares. By the end of the programme they will be able to develop their conceptual clarity and practical knowledge to run the software for analysis and interpreting the data for their research.

ABOUT NIT DRGAPUR

National Institute of Technology Durgapur, commonly known as NIT Durgapur, was established by an act of parliament in 1960, a fully funded premier autonomous institute of National Importance under the Ministry of Human Resource Development (MHRD), Government of India, is engaged in higher education and research. The Institute awards UG, PG and Doctorate degrees.

ABOUT HSS DEPARTMENT

Since inception of the Institute the department has been catering its service to all the students of UG, PG and Ph.D courses. Besides teaching, the faculty members are actively engaged in research activities in the fields of Economics, Management and English Literature. The department had organized International Conference on Business and Information in 2012, 2014 and 2016, in collaboration with Emporia State University, USA and IEEE (Jointly with DMS & DCA), and International Conference on Literature to Cinema in 2013.

ABOUT TIES

The Indian Econometric Society (TIES) is one of the oldest and largest body of professional econometricians and quantitative economists with members from all over India and abroad. TIES provides a forum for economists, mathematicians and statisticians, and regularly organises training programmes to promote the development of econometric methodology and techniques.

HOW TO APPLY

Interested Participants may send their filled in Application forms to the email id: programs.hss@nitdgp.ac.in on or before 5th May 2016. Selected candidates will be intimated by 7th May 2016 and they have to be registered by depositing their registration fees on or before 15th May, 2016. Participants are expected to have basic knowledge of Statistics and Econometrics.

RESOURCE PERSONS

Prof. N. N. Sarkar
Economic Research Unit
Indian Statistical Institute, Kolkata

Prof. B. Kamaiah
School of Economics
University of Hyderabad

Prof. P. Basu (Retired)
Department of Humanities & Social Sciences
Indian Institute of Technology Kharagpur

Prof. S. Sen Roy
Department of Statistics
University of Calcutta

Prof. S. K. Bhaumik
Centre for Economic Studies and Policy
Central University of South Bihar

Dr. S. Majumder
Sundarban Mahavidyalaya
University of Calcutta

S. Roy
St. Xavier's College, Kolkata
University of Calcutta

REGISTRATION AND ACCOMMODATION

Registration Fee: Rs 2000/- for Students, Research Scholars & Faculties and **Rs 5000/-** for Industry Executives. Participants will be provided fooding and accommodation (on request only for outside participants) within the institute campus on sharing basis.

Chairman, Organising Committee: Prof. Partha Pratim Sengupta (09434788045)

Contact Details: Madhabendra Sinha (9378068608), Ujjal Protim Dutta (09093757967), Dept. of HSS (0343-2754480) or E-mail: programs.hss@nitdgp.ac.in

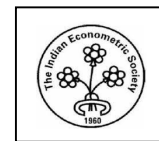
SUMMER SCHOOL ON RESEARCH METHODOLOGY: APPLICATIONS OF ECONOMETRICS AND STATISTICS

May 23-29, 2016

Department of Humanities and Social Sciences
National Institute of Technology Durgapur

In Collaboration with

The Indian Econometric Society (TIES)



COURSE STRUCTURE OF THE SEVEN DAYS WORKSHOP*

(Theory and Application by using Software)

- **Introductory Statistics:** Correlation and Regression, Probability Distribution, Statistical Inference.
- **Basic Econometrics:** Single and Multiple Linear Regression analysis, Estimation, Model Specification, Diagnostic Testing: Heteroscedasticity, Multicollinearity, Autocorrelation.
- **Econometric Analysis with Cross Section Data:** Method of Primary Data Collection, Econometric Models with Cross Section Primary Data, Dummy variable, Models with Qualitative Data: Logit, Probit, Tobit, Multinomial Logit, Truncated Tobit etc.
- **Time Series Econometrics 1:** Deterministic and Stochastic trend, Unit root tests and Regression Residuals, ARMA models, Auto-correlation and Partial Auto-correlation function, Box-Jenkins methodology, Model Selection and Forecasting, Transfer Function Models, VAR Analysis, Estimation and Identification, Granger causality, Impulse response functions, Variance decompositions, Structural VAR models.
- **Time Series Econometrics 2:** Co-integration and Error Correction Models, ARCH, GARCH Model, Dynamic Simultaneous Equations Models, Structural Change with unknown change point, Estimation of Models with Structural Change, Tests for Seasonality, Estimations of Regime switching Models. Estimation of Distributed-lag Models, Adaptive Expectation model, Stock Adjustment model, Polynomial distributed lags and Causality.
- **Panel Data Econometrics:** Balanced and Unbalanced panel, Fixed Effect and Random Effect Model, diagnosis test, Panel Unit Root tests, Panel Co-integration model tests, Dynamic Panel Model.

**The Course Structure is subject to last minute change depending on the availability of Resource Persons.*

