

ONE WEEK SHORT TERM COURSE

On **FORECASTING MODELS WITH APPLICATION OF SOFTWARES**

January 03-07, 2018

ABOUT THE COURSE

This course is about econometric methods and its applications for estimating the unknown parameters of economic relationships. The course focuses on both the statistical reasoning underlying the methodologies and the practical considerations involved in using those methods on real data with statistical packages. The course will mainly deal with the forecasting models of time series econometrics and neural network techniques. The course aims to empower the UG and PG students about the new dimensions of business analytics where participants would be able to practically apply the forecasting modeling for the real behavior captured through vast information. These theoretical and hand on practice about forecasting models will help the participants to get better opportunities in the upcoming field of business analytics. Moreover, the understanding of time series econometrics through software is very useful for research scholars working on econometric modeling. The course has equal weightage of neural network, which is very important technique to predict the complex stock market prices.

COURSE CONTENTS

- Basics of Structural Econometrics
- Time series analysis – trend and seasonality;
- Serial correlation – concepts, tests and corrections
- The problem of non-stationarity – tests and corrections
- Mathematics: Stochastic Modeling and Optimal Control of Engineering Systems
- ARCH, GARCH Models for volatility
- VAR, Co-integration Analysis: Johansen and ARDL Approach
- Basic Knowledge of Neural Networks
- Applications of Neural Networks
- Essential mathematics for applied sciences
- **Software Applications: EViews, STATA, MATLAB**

COURSE OUTCOMES

After course completion, delegates will be able to

- To apply the mathematical reasoning for estimation of economic models
- To develop the theoretical insights for model fitting to the economic behavior
- To apply the techniques of time series econometrics in research work
- To make hand on practice on neural network models which have applications for business analytics

WHO SHOULD ATTEND

- Under Graduate/Post Graduate Students who are interested in Business Analytics
- Research Scholars
- Faculty Members from Colleges, Universities and Institutes
- Industry Personnel

IMPORTANT DATES

Last date of registration: 27-12-2017

Announcement of Selection: 28-12-2017

SEATS: Limited seats are available. The selection will be based on first come first basis.

COORDINATING DEPARTMENTS

Department of Humanities and Social Sciences equips students with the knowledge and social skills that help them successfully manage people and technology. The department provides research facilities in the areas of Economics, Management, Finance, Psychology and English.

The Department of Mathematics, NIT Kurukshetra, a well-known center for education and research in Mathematics, has dynamic faculty with research interest in the area of fluid dynamics, numerical analysis, quantum algebra and special function, robotics and control theory, differential geometry and summability theory etc.

PATRON

Padam Shree Dr. Satish Kumar

Director, NIT Kurukshetra

COURSE CONVENERS

Prof. Kiran Mor, (HOD, HSS),

Dr. Ashwani (HSS)

COORDINATORS

Dr. Naveen Kumar (Mathematics)

Dr. Geeta Sachdeva (HSS)

Dr. Shabnam (HSS)



DEPARTMENT OF HUMANITIES &
SOCIAL SCIENCES (HSS) AND
MATHEMATICS

National Institute of Technology
Kurukshetra-136119 INDIA

ABOUT THE INSTITUTE

National Institute of Technology Kurukshetra as a premier institute of the country, has emerged as a center of higher education and research. The academic programs of the Institute cover a wide range of science, social science and engineering disciplines. The Institute offers seven UG, PG, and Ph. D. programs in above mentioned disciplines.

NIT Kurukshetra has good infrastructural and research facilities in emerging areas. The faculty of the Institute has academic exposure of repute international institutions and notable achievements in technology development, patents, high quality research output, consultancy and professional awards/recognitions.

REGISTRATION FEES

Category	Without Accommodation	With Accommodation
UG/PG Students	1000	2500
Research Scholars	1500	3000
Faculty Members	5000	7000
Industry Personnel	6000	9000

Address for sending Registration Form

Dr. Ashwani, Assistant Professor,
Department of Humanities and Social
Sciences,
National Institute of Technology,
Kurukshetra

E-mail: stcfmas@gmail.com

M: 8901422745

REGISTRATION FORM

NAME:

DESIGNATION:

ORGANISATION:

ADDRESS FOR CORRESPONDENCE:

HIGHEST EDUCATIONAL QUALIFICATION:

E-MAIL ID:

CONTACT INFO:

ACCOMODATION REQUIRED (YES/NO):

IF YES, SPECIFY THE DATES

MODE OF PAYMENT (**DD or SBI COLLECT**):

DD*

DD NO:

DATE:

AMOUNT:

BANK:

SBI COLLECT**

Signature

***In favor of** Director, National Institute of Technology, Kurukshetra” payable at Kurukshetra

**For SBI collect: Follow the Guidelines