

INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR

3-Day Faculty Development Programme on Financial Time Series Analysis using R

March 9-11, 2018

Venue: International Management Institute, Bhubaneswar



International Management Institute (IMI)

IDCO, Plot # 1, Gothapatna, PO: Malipada, Dist: Khurda, Bhubaneswar- 751003, Odisha

Ph: +91 8658006959 E-mail: <u>mdp@imibh.edu.in</u>; <u>santanu@imibh.edu.in</u> Website: www.imibh.edu.in **About IMI:** International Management Institute (IMI) established in 1981, is India's first corporatesponsored Business School. IMI follows international standard curricula, which has been enriched in the past, by its academic collaborations with erstwhile International Management Institute, Geneva; Faculty of Management, McGill University, Montreal, and Manchester Business School, U.K. The school with strong support from the Indian industry has grown into one of the most prestigious business schools in the country and has been consistently ranked amongst the top 15 B-schools in India.

International Management Institute (IMI), Bhubaneswar commenced the classes for the first batch of PGDM (Post Graduate Diploma in Business Management) approved by AICTE on August 2011. The new campus of IMI at Bhubaneswar is dedicated to develop socially sensitive, ethical, value adding leaders and organizations through relevant teaching, research, training and consulting that serve stakeholders' interests.

IMI, Bhubaneswar has world-class infrastructure at the brand new, fully residential 16-acre campus designed by an internationally renowned architect. The aesthetically designed exteriors, wide open spaces and large well appointed classrooms, syndicate rooms, multi-use Auditoriums, state-of-the-art Library & Computer Centre and self sufficient MDP Centre with AC Lecture and Seminar Halls are truly the hallmark of the new campus. In short, with cutting-edge technology blending effortlessly with serene and verdant surroundings, the ambience at IMI, Bhubaneswar is truly outstanding and highly conducive for learning.

Objective: The basic objective of this course is to expose the faculty and scholars working in the field of finance, economics, statistics and mathematics to the various time series models and help them to write research papers. The course will make use of **R Studio** (a free software) for modelling time series.

For Whom: Faculty members involved in teaching and research in time series, PhD scholars in this fileld, PG students of economics, finance, statistics and mathematics.

Pre-requisites: All the participants will be requested to install R Studio (freely downloadable) in their laptops, which they need to bring for the course. In case any participant does not have a laptop, he/she will be provided a PC in the computer lab of IMI Bhubaneswar.

Course Content:

- Understanding Heteroscedasticity and its testing (GQ Test, White Test)
- Autocorrelation testing of return series as well as residuals
- Model diagnostics Residual analysis
- Selecting AR, MA and ARMA models using ACF, PACF, EACF, AIC and BIC criteria
- Constructing AR, MA and ARIMA models (Ljung Box Test)
- Stationarity and Unit Root and their testing (ADF Test, Philips-Peron Test)
- Univariate volatility modelling (ARCH, GARCH models)
- Asymmetric volatility modelling (EGARCH, GJR GARCH)
- Multivariate volatility modelling (BEKK, VAR)
- Spectral Analysis

Course Fees:

Faculty members – Rs 10,000 PhD/ MPhil scholars – Rs 5,000 PG Students – Rs 3,000

The above fees includes learning kit, lunch and refreshments.

In case a participant wishes to stay on the campus, the following rates shall have to be paid additionally:

AC Room single occupancy - Rs 2500/ day

Non-AC Single Room – Rs 1500/ day

AC double room – Rs 1500/ day

Non-AC double room – Rs 1000/ day

Student Hostel – Rs 750/ day

The above charges will include breakfast and dinner from March 8-11, 2018. Applicable taxes shall be levied on the above tariff.

Payment Details:

Demand Draft can be drawn in favour of **International Management Institute** payable at **Bhubaneswar** and should be sent to <u>mdp@imibh.edu.in/santanu@imibh.edu.in</u>, along with the Registration Form.

In case of NEFT/RTGS transfer, the details are as follow:

International Management Institute, Bhubaneswar Allahabad Bank, Account No. 50071252726 IFSC-ALLA0210329, Branch Code- 0329 Bapuji Nagar, Bhubaneswar-751009

In case of RTGS/NEFT transfer, please send an email as well to Programme Executive (mdp@imibh.edu.in) providing the following details: *Name and Designation of the Participant, Bank Name, UTR Number, Date of Transfer, Amount of Transfer.*

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Address and Contact Person:

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