



IMA
BHUBANESWAR

FDP
FACULTY
DEVELOPMENT
PROGRAMME

“FINANCIAL TIME SERIES ANALYSIS USING PYTHON”

13 - 15 October, 2023

Programme Directors

Prof. Santanu Das & Prof. Sougata Ray

(For registration click [here](#))

OBJECTIVES

The basic objective of this FDP is to expose the participants to various time series models and analyzing the data. This course also provides an understanding of the algorithms behind each of these models and their applicability based on the type of data.

CONTENT

- Understanding distribution of time series data
- Testing for normality
- White noise – meaning and tests
- Unit Root and their testing (ADF Test, PP Test)
- Univariate return modelling - AR, MA and ARMA models
- Identifying and testing AR, MA and ARMA models
- Univariate volatility modelling (ARCH, GARCH, EGARCH, GJR- GARCH models)
- Cointegration – meaning, test
- Multivariate return modelling – VAR and VECM
- Multivariate volatility modelling – EWMA, BEKK
- Dynamic Time series modelling – TVP VAR, DCC GARCH

PEDAGOGY

The teaching methodology will be through discussions and supplemented by hands-on applications on real time data. The entire course will be conducted in Python. There will be 4 sessions every day each of 1.5 hours. Participants will carry out a mini project of analyzing any financial data and the presentation will be made by the participants on the last day, last session of the FDP.

FOR WHOM

Faculty members, research scholars and students of post graduate courses in finance, economics, mathematics and statistics.

BLOOMBERG LAB

IMI Bhubaneswar has a fully functional Bloomberg Lab for access to high quality data and analytics. All participants will have complimentary access to these terminals during the FDP.

ABOUT PROGRAMME DIRECTOR

Dr. Santanu Das is an Associate Professor in the Finance area at International Management Institute, Bhubaneswar. His teaching expertise includes financial econometrics, portfolio management, Portfolio Analytics using R, Fixed Income Analytics, Advanced Data Analytics using R/ Python. Prior to joining IMI Bhubaneswar he had worked with Birla Institute of Technology, Mesra, Ranchi and Indian Institute of Information Technology Allahabad and Jaipuria Institute of Management, Indore with a total teaching experience of more than 20 years. He was also deputed from BIT Mesra as Finance Officer to State Project Facilitation Unit (SPFU), Jharkhand under TEQIP-II project of Govt. of India for 6 months from December 2009 to June 2010. He is on the reviewer's list of Asian Review of Accounting (Emerald Publishers), International Business Review (Elsevier), Paradigm (IMT Ghaziabad) and Emerging Markets Review (Elsevier). He has published papers in peer reviewed journals including International Journal of Managerial Finance, Managerial Finance, Heliyon, Global Business Review, Transnational Corporations Review, International Resource Management Journal etc. He has conducted many MDPs for executives of NTPC, NALCO, Retiring Servicemen of Defence, IMFA etc. He has also served as resource person in the time series analysis workshop conducted by IIIT Allahabad and conducted in-house FDPs on times series analysis using R, Risk Modelling and Portfolio Optimization and Econometric Analysis. He has done his FPM from IIM Kashiipur, PhD from Birla Institute of Technology, Ranchi and MBA (Finance) from R.D. University, Jabalpur.

Prof. Sougata Ray is presently working with the International Management Institute, Bhubaneswar as Assistant Professor in the area of Finance & Economics. Has a rich experience of more than 20 years in Academics & Industry. His Doctoral thesis investigates the issues of over-indebtedness in the microfinance sector in India. He is also the recipient of the Erasmus Mundus Scholarship by European Union for Doctoral Research at University of Porto, Porto, Portugal for the period 2013-2015. He has worked as Research Associate on a collaborative research project on Ethnic Diversity in India with Royal Melbourne Institute of Technology (RMIT), University, Australia (Nov 2017 to April 2018) and as Project Director / Principal Investigator for IMPRESS, ICSSR funded project titled “Climate Change Impact and Self-Help Adaptation Strategies in the Sunderbans Region of West Bengal” (Aug 2019 – Sep 2021). He has done PhD from School of Business, Amrita Vishwa Vidhyapeetham; MA (Economics) from Annamalai University; PGDM from Amrita Vishwa Vidhyapeetham and B.Sc (Economics) from Calcutta University.

FEE

Faculty members – Rs 12000 + 18% GST

PhD/ MPhil scholars – Rs 5000 + 18% GST

Industry – Rs 20000 + 18% GST

International faculty/ student – USD 200 + Applicable GST

Accommodation at campus:

Limited accommodation is available in the Institute guest house on a chargeable basis. The charges are mentioned below (including all meals):

Single AC (Non AC) – Rs 2500 (Rs 1800) per day + 18% GST

Double AC (Non AC) – Rs 2000 (Rs 1500) per day + 18% GST

Fee is payable in advance by way of local cheque/DD in favor of “International Management Institute” payable at Bhubaneswar or through direct electronic fund transfer to IMI Bank Account, as per following details:

Bank Name: Indian Bank
Bank Address: 159, Bapuji Nagar, Bhubaneswar, Dist. Khurda, Orissa-751009
Branch Name: Bhubaneswar Bapuji Nagar (Main)
Account No.: 50071252726
Account Type: Current Account
Account Holder's Name: International Management Institute, Bhubaneswar
IFSC Code: IDIB000B803
Swift Code: IDIBINBBMAS

Please mention the programme name while making payment through electronic fund transfer.

ABOUT IMI BHUBANESWAR

International Management Institute (IMI) Bhubaneswar, established in 2011, is a young institute which achieved the coveted position of 67th rank in National Institutional Ranking Framework (NIRF) 2023 conducted by Ministry of HRD, Govt. of India. IMI Bhubaneswar currently offers Post Graduate Diploma in Management (PGDM), PGDM (Part Time) and FPM (equivalent to Ph.D.) programmes which are approved by AICTE. The flagship PGDM programme is accredited by NBA (National Board of Accreditation) and has got equivalence from AIU (Association of Indian Universities). IMI Bhubaneswar is accredited with AMBA (Association of MBAs) and NAAC (National Assessment and Accreditation Council). IMI programs are also accredited and recognized by United States Board for Education Standardization (USBES), USA. The institute is a member of European Foundation for Management Development (EFMD), Association of Management Development Institutions in South Asia (AMDISA) and Association of Indian Universities (AIU). IMI Bhubaneswar has endeavoured to create international alliances through its tie-ups with EGADE Business School, Mexico City, Mexico; Sichuan Academy of Social Sciences (SASS), Chengdu, China; ESC Rennes, France; and Manhattan Institute of Management (MIM), NY, USA. IMI Bhubaneswar organises three international conferences every year in collaboration with international partner institute to provide an ecosystem for global learning, opportunities for international level student exchange, research collaborations, and opportunities to interact with global leaders. The institution is also regularly coming out with SCOPUS indexed conference anthologies published by Palgrave Macmillan. The institute has been consistently ranked high in various surveys of Management Schools. In NIRF 2023, IMI Bhubaneswar has been rated higher than many IIMs on parameters like corporate linkages, intellectual capital, Infrastructure etc. by various reputed ranking agencies. The institute has been awarded the Business Excellence Award in the world, The Bizz by Worldcob, USA. Placements have been 100% since inception.

CONTACT

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