About IIT Kharagpur

Kharagpur - a dusty town tucked away in the eastern corner of India, famous until 1950 as home to the longest railway platform in the world - became the nursery where the seed of the IIT system was planted in 1951. IIT Kharagpur started its journey in the old Hijli Detention Camp in Eastern India, where some of the country's great freedom fighters toiled and sacrificed their lives for India's independence. Spurred by the success of IIT Kharagpur, four younger IITs sprouted around the country in the two following decades, and from these five came thousands of IITians, the brand ambassadors of modern India. It was the success of this one institution at Kharagpur that wrote India's technological odyssey.

The Institute takes pride in its relentless effort to provide the best platform for both education as well as research in the areas of science and technology, infrastructure designs, entrepreneurship, law, management, and medical science and technology. IITKGP is not just the place to study technology, it is the place where students are taught to dream about the future of technology and beam across disciplines, making differences enough to change the world.

Program Features/ Structure

Classroom lectures – **80%**

Numerical / Problem solving, Case study and Activity – **20%**

Program Schedule and Venue

5 Days, 18 – 22 May 2020 (9:30 AM – 5.30 PM)

IIT Kharagpur –

Dept. of Industrial and Systems Engg.

Program Fee

Nil for AICTE-QIP sponsored participants

For others - INR 20,000/- (Twenty thousand) **+ GST** @18% per participant

Who will benefit (Eligibility)

M.Tech /M.Sc /MS / PhD students; Researchers from R&D organizations.

Last day of Registration

12

May 2020

Accommodation

Accommodation will be provided to the AICTE- QIP sponsored participants at the campus Guesthouse. For other participants, the same will be provided on chargeable basis as per rule.

How to Apply

Use the link: **https://erp.iitkgp.ac.in/CEP/courses.htm** to apply ONLINE.

Signup → Login → Profile Fillup → Choose a Program → Apply Now

Payment if applicable is to be done **ONLINE** after getting short listed for the program.

Contact Us

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AICTE QIP

QUALITY IMPROVEMENT PROGRAMME

Indian Institute of Technology Kharagpur 2020

APPLICATION OF FORECASTING METHODS IN ENGINEERING AND BUSINESS PROBLEMS

5 Days
18 – 22 May 2020

Introduction / Overview

Forecasting has become an important tool in determining when an event can occur so that appropriate actions can be taken. Perhaps forecasting is considered as the first step in any planning process. Hence forecasting is receiving increasing attention in today's competitive business world. Over the years, forecasting has reached its maturity through significant theoretical developments in estimation and prediction coupled with powerful computing facilities. Its importance is well-acknowledged in the areas such as engineering, sales, finance, transport, telecommunications, supply chains, logistics, defense, product development, R&D, seismology, weather, land use, politics and so on. Presently, forecasting methods have developed to the point where it is a professional discipline having its own body of knowledge and skills.

Program Objectives

The course would help the academicians as well as practicing managers and research professionals to learn the vast techniques of forecasting applied in the modern world for predicting the various future events that are likely to happen in a system. The program is aimed at giving the participants a holistic view of modern forecasting methods thereby covering the prerequisites for making a good forecast. Once the participants have completed the workshop, they will be able to identify the best forecasting technique for a specific systemic problem and to refine the data and test for the assumptions before proceeding to the actual forecasting.

What you will learn

Program Content

- Overview of demand forecasting
- Using components of a time series
- Forecasting using exponential smoothing models
- Use of different regression models in forecasting
- Stationary time series forecasting models
- Testing for the assumptions in time series forecasting
- Use of Box-Jenkins forecasting Models
- Non-linear stochastic forecasting models
- Causal forecasting using system dynamics
- Forecast accuracy measurement
- Improving forecast with subjective judgement

About the Faculty

Dr. Biswajit Mahanty

Dr. Biswajit Mahanty is a Professor in the Department of Industrial and Systems Engineering, Indian Institute of Technology (IIT) Kharagpur, India. He has obtained his B.Tech (Hons) degree in Mechanical Engineering, and his M.Tech and Ph.D. degrees in Industrial Engineering and Management - all from IIT Kharagpur. He has carried out about 20 industrial consulting projects and 7 sponsored research projects. His areas of research include operations management, system dynamics and simulation, operations research and software project management. He has, to his credit, a large number of publications in peer-reviewed international journals of repute. He has also taught in the School of Management at AIT, Bangkok as a visiting faculty member.

Co-Coordinators

Dr. Balagopal G Menon

Dr. Balagopal G Menon is an Assistant Professor in the Department of Industrial and Systems Engineering, Indian Institute of Technology Kharagpur, India. He was a post-doctoral researcher to Energy Institute, The University of Texas at Austin, United States; and a visiting research fellow to the Salford Business School, University of Salford, Manchester, United Kingdom. His areas of research include energy systems modeling and management, forecasting, system dynamics and simulation, operations management and applied econometrics. He has 9 international publications to his credit.

Dr. Jitesh J Thakkar

Dr. Jitesh J. Thakkar is an Associate Professor in the Department of Industrial and Systems Engineering, Indian Institute of Technology (IIT) Kharagpur, India. He has published 60 research papers in the leading SCI/SCOPUS listed International Journals in the areas of Lean & Sustainable manufacturing, Supply Chain Management, Quality Management, Small and Medium Enterprises and Performance Measurement. He has, to his credit, a large number of publications in peer-reviewed international journals of repute. He is on the Editorial Board of five international journals.