DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Invites Applications for

Three-Day Short Term Course
on

Supply Chain Optimization & Analytics (SOA 2025)

SEPTEMBER 22nd to 24th, 2025
(Hybrid Mode)

Registration Deadline: 10th September, 2025

INTRODUCTION

In today's competitive business environment, companies are looking for ways to become cost-effective and responsive. The purpose of this course is to deepen our understanding of how supply chains can be managed in a data-driven environment. Many business organizations have realized the role of supply chain analytics in cost savings through data-driven planning and management of supply chain activities efficiently and effectively. A marginal reduction in the operating cost of the supply chain of an organization could provide a substantial benefit. The objective of this course is to equip academicians and practitioners with the concepts and practices of supply chain management and learning data analytics techniques that can be leveraged to improve a better coordination with the suppliers and customers of their organization to augment total value addition. The course also aims to discuss case studies and hands-on exercises so that participants can identify supply chain inefficiencies and learn methods for performance improvement.

OBJECTIVES OF THE COURSE

- To introduce the participants to the key issues of supply chain management and supply chain analytics.
- To expose the participants to the recent developments in theories, principles, and practices in the field of supply chain analytics.
- To enable the participants to equip with different tools and techniques of supply chain analytics.

LEARNING OUTCOMES

At the end of the course, the participants would be skilled in identifying the inefficiencies in their supply chain, different solution techniques to supply chain problems, and using of different analytical tools and techniques to design appropriate supply chain strategies based on the competitive nature of the industry.

WHO WILL BENEFIT (ELIGIBILITY)

- The course is designed for middle-level managers, executives and engineers who are practicing or involved in material planning, manufacturing, marketing, supply chain, logistics and related areas.
- Faculty members and academicians who teach and research in supply chain management, logistics, transportation, data analytics, and related areas.
- Students (UG/PG/PhD) who wish to pursue research in emerging issues of supply chain are highly encouraged to attend this course.

PROGRAM FEATURES/STRUCTURE/PEDAGOGY

The three-day course consists of online classroom discussions, case studies and hands-on exercises. The course will cover different innovative tools for supply chain improvement. Case study will focus on supply chain best practices and learning from the successes and the failures of organizations towards achieving an efficient and effective supply chain. Soft copy of the course materials and Certificate of Participation will be provided to the registered participants.

WHAT YOU WILL LEARN – PROGRAM CONTENT

- Fundamentals and overview of supply chain analytics and modelling
- Making strategic, tactical, and operational decisions through supply chain analytics
- Predictive models in supply chain analytics
- Prescriptive models in supply chain analytics
- Managing supplier relationships and strategic sourcing decision
- Supply chain network design and optimization
- Managing supply chain risks through analytics
- Emerging trends and future of supply chain analytics (AI/ML)

PROGRAM SCHEDULE, VENUE, & IMPORTANT DATES

Program Dates: September 22nd to 24th, 2025.

Mode: Hybrid (Online/Offline)

Venue: via **Online** Platform for Online participants & **IIT Kharagpur Campus** for Offline participants.

Accommodation: The accommodation for Offline participants will be made available on payment basis at the **IIT Kharagpur guest house**. Currently the approximate room charges are **Rs. 1500 + GST** per day for a double occupancy room, and **Rs. 2000 + GST** per day for a single occupancy room. These rates are subject to revision based on the latest institute norms.

Registration Deadline: **September 10th , 2025**.

PROGRAM FEE

The per participant course fee for this course is as follows:

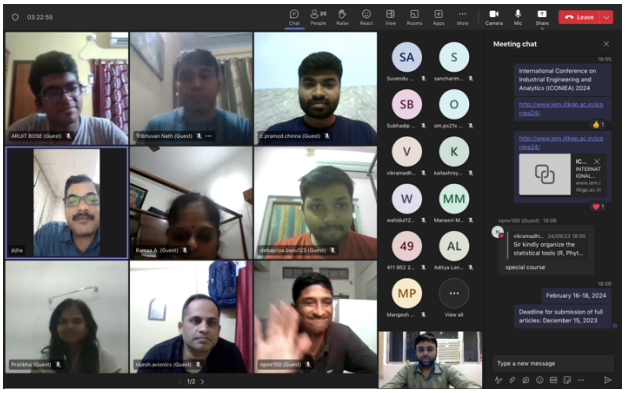
- For participants from industry/corporate/companies – **Rs. 14,000/- (Rupees Fourteen Thousand only)** inclusive of 18% GST. An additional **25% discount** per applicant on the course fee will be applicable for Group registration of **5 or more** candidates from the industry/corporate/companies only.
- For faculty and academicians from different educational institutions – **Rs. 8,000/- (Rupees Eight Thousand only)** inclusive of 18% GST. Valid ID proof, issued by organization is mandatory at the time of registration.
- For students (UG/PG/PhD) – **Rs. 3,000/- (Rupees Three Thousand only)** inclusive of 18% GST. Valid ID proof, issued by organization is mandatory at the time of registration.

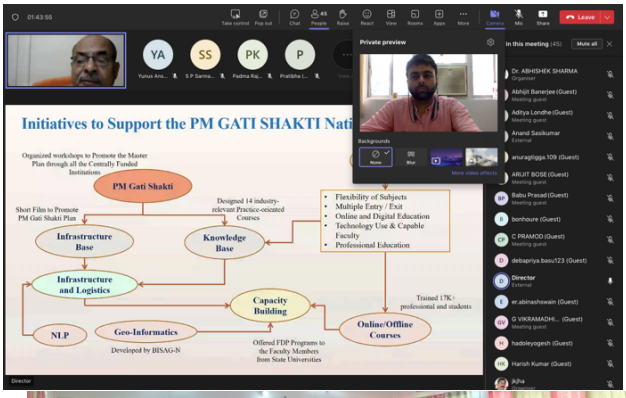
HOW TO APPLY

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

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

SIMILAR COURSES CONDUCTED BY ISE IN PAST





The Department of Industrial and Systems Engineering (ISE) at IIT Kharagpur has previously organized similar courses on supply chain management, optimization, and analytics. These courses saw enthusiastic participation from industry leaders like Adani Power, TCS Kolkata, Tata Steel, EY India, and Shyam Steel Industries, as well as from renowned academic institutions including IIM Indore, IIT Bombay, FMS Delhi, IIM Shillong, ISM Dhanbad, Jadavpur University, Calcutta University, BITS Pilani, NIAMT, Assam University, and the University of Hyderabad.

ABOUT THE FACULTY COORDINATORS

- **Dr. Abhishek Sharma (Principal Coordinator)**

  Dr. Abhishek Sharma is an Assistant Professor at IIT Kharagpur in the Department of Industrial & Systems Engineering. Previously, he has served as faculty at IMT Business School Dubai and School of Management & Entrepreneurship, IIT Jodhpur in Operations and Supply Chain Management areas. He is PhD from IIM Rohtak in operations area and Bachelor of Technology graduate in Chemical Engineering from NIT Srinagar. His research interests include behavioural operations, social preferences in supply chain management, channel coordination & supply chain contracts, multi-channel supply chains, green supply chain, etc. His research work has been published in several reputed academic journals such as Computers & Industrial Engineering, Journal of Business and Industrial Marketing, Journal of Cleaner Production, International Game Theory Review, among others.

- **Prof. J. K. Jha (Co-Coordinator)**

  Dr. Jha is an Associate Professor in the department of Industrial and Systems Engineering at Indian Institute of Technology Kharagpur. He obtained his PhD from IIT Kanpur where he worked in the area of Supply Chain Management. He graduated in Production Engineering from BIT Sindri and completed

his MTech in Industrial Management from IIT (BHU) Varanasi. His main areas of teaching and research include Operations Research, Statistical Decision Modeling, Facility Planning, Supply Chain Optimization and Logistics Planning. He published/presented more than fifty papers in international journals and conferences, and his publications appeared in the leading journals like Journal of the Operational Research Society, Applied Mathematical Modelling, Computers & Industrial Engineering, International Journal of Production Research, Journal of Manufacturing Systems, Journal of Cleaner Production, etc. He is serving as an Editorial Board Member of International Journal of Industrial Engineering: Theory, Applications and Practice. He has been associated with several projects from various sponsoring agencies. He organized short-term courses on Facility Planning, Service Science, Quantitative Decision modeling, and DATA Analytics with SAS.

- **Prof. S. P. Sarmah (Co-Coordinator)**

Dr. Sarmah is a Professor in the department of Industrial and Systems Engineering at Indian Institute of Technology Kharagpur. His research work is mainly related to the areas of Logistics and Supply Chain Management, Inventory Management, Reverse Logistics. Most of his research contributions in these areas are the development of novel mathematical/analytical models capturing the real life situation to draw meaningful managerial insights. He has already published many papers in leading International journals such as European Journal of Operational Research, Int. Journal of Production Economics, Computers and Industrial Engineering etc. and successfully completed number of research and consultancy projects. Also currently he is involved with many other projects and conducted number of short term courses for engineering professionals.

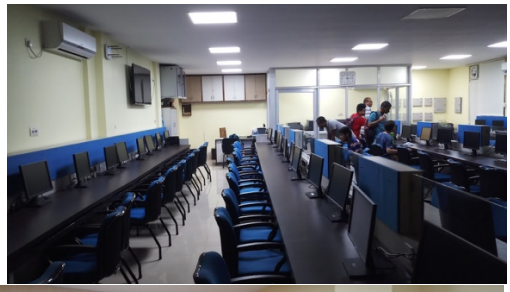
ABOUT IIT KHARAGPUR

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. Indian Institute of Technology Kharagpur (IITKGP) started its journey in the old Hijli Detention Camp in Eastern India, a symbol of the national struggle for freedom, where some of the country's great freedom fighters toiled and sacrificed their lives for India's independence. Indian Institute of Technology Kharagpur is set in a sylvan surrounding about 120 km from the City of Kolkata. 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. Indian Institute of Technology Kharagpur has grown during the last 60 years to become a Centre of Excellence in teaching and research in diverse fields of engineering and technology, and has dedicated itself to fulfill the science and technology ambitions of the resurgent India.

ABOUT DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING (ISE), IIT KHARAGPUR



The Department of Industrial and Systems Engineering (ISE) was established in 1973 as Industrial Management Centre and later elevated to a full-fledged department in the year 1983. The department offers (i) B.Tech (4-year) in Industrial Engineering, (ii) Dual Degree (5-year) - B.Tech. in Industrial Engineering and M.Tech in Industrial Engineering and Management, (iii) Dual Degree (5-year) - B.Tech in Mfg. Science & Engg. and M.Tech in Industrial Engineering and Mangement, (iv) M.Tech (2-year) in Industrial Engineering and Management, (v) Master of Science (MS) and (vi) Doctor of Philosophy (PhD) programmes. In addition, ISE coordinates the Dual Degree (5-year) programme on Quality Engineering Design and Manufacturing with mechanical and industrial electronics verticals.

The department is well known across the world for its excellent research in the fields of Data Analytics, Logistics and Supply Chain Management, Quality Engineering and Process Transformations, Information Systems and E-Business, System Thinking and Policy Planning, Human Factors Engineering and Ergonomics, Safety Analytics and Virtual Reality, and Healthcare Systems. The department has world class laboratories in the above areas of research and teaching.

The students are recruited by industries in Analytics Firms, IT/ Software services, Manufacturing/ FMCG Consultancies and Financial firms. Some of the companies that have recruited the students during last five years include: Finance/Insurance: Deutsche bank, Capital One, American Express, Goldman Sachs, CitiBank, Capital Dynamics, Credit Suisse, HSBC etc. IT/Software services/Consultancy/Analytics: HT media analytics, Essex lake group, JDA, IBM, Oracle, ZS Associates, PWC, Affine Analytics, Axtria, Wipro, Impetus, Cognizant, Egain, TCS, HCL, Infosys, Opera solutions, Deloiite, Ernst and Young, Capgemini, Genpact, Byte Consulting, Sapient, Market RX, Fair Isaac etc. Manufacturing/FMCG/ Ecommerce: Schlumberger, ITC, Bosch, Tata Motors, Tata Steel, Coal India, Maruti and Suzuki, TVS, Hero Motocorp, Danieli, Hindalco, Ispat, Flipkart etc.

CONTACT US

All queries regarding the course may be addressed to the principal coordinator:

- Prof. Abhishek Sharma

  (Principal Coordinator)

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