One Week Short Term Course

On Supply Chain Analytics 16 February 2024 to 22 February 2024



Organized by Department of Management Studies

Program Coordinators

Prof. Gyan Prakash & Dr. Amandeep Kaur



ABV-Indian Institute of Information Technology and Management Gwalior, Gwalior- 474 015 (M.P.) www.iiitm.ac.in

Registration and Fee Details

Applications are to be filled out online through Google form that needs to be uploaded latest by **10th February 2024.** A confirmation mail will be sent to the admitted participants by 12th February 2024.

Link for Registration:

https://forms.gle/AxtJ3eetbXNoTKHD6



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

- For online participants: Rs. 3,000/- (Rupees three thousand only)
- For offline participants without accommodation: Rs. 5,000/- (Rupees five thousand only)
- For offline participants with accommodation: Rs. 8,000/- (Rupees eight thousand only)

Note:

- Accommodation will be provided on a twin sharing basis.
- No TA/DA will be paid to participants

Mode of Payment

Participants are required to transfer the fee amount in the fee amount in the following account through bank transfer/ NEFT/ UPI

Account No: 945210110009380

Account Name: Director, ABV-IIITM, Gwalior Bank Name: Bank of India Branch: IIITM Gwalior Branch IFSC Code: BKID0009462

Important Dates

Registration Opens	10 January2024		
Last date for Application	10 February 2024		
Confirmation to the	12 February 2024		
applicants			
Course dates	16-22 February 2024		

Program Features

- One-week short term course is organized in hybrid (online/offline) mode.
- without• It includes classroom discussions, casebees fivestudies and hands-on exercises with Python,
PowerBI and Tableau.
 - Soft copy of the course materials and Certificate of Participation will be provided to the registered participants

Objective of the Course

The short-term course on Supply Chain Analytics is specifically designed to provide unique view

into the workings of the supply chain and imparts data-driven approaches for supply chain management. 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. 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. Specific objectives of this course are:

- To introduce the participants about 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.
- Empower participants to equip with AI tools and techniques of supply chain analytics

Topics Covered

- Fundamentals of Supply Chain and Data Analytics
- Inventory Optimization and Decision-making
- Demand Forecasting Models
- Statistical tools for Data Analytics
- Descriptive Analytics in Supply Chain
- Predictive Analytics and Forecasting
- Prescriptive Analytics
- AI-driven Supply Chain Management

- Machine Learning and Deep Learning in Supply Chain Optimization
- Data Privacy and AI Ethics
- 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

Target Participants

- The course is designed for middle-level managers, executives and engineers who are practicing or involved in material planning, manufacturing, marketing, supply logistics and related areas.
- and research in supply chain management, 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.

About the Department

The Department of Management Studies (DoMS), ABV-IIITM Gwalior, offers academic programmes such as Ph.D., MBA and Integrated Programme in Management with dual degrees of B. Tech, and M.B.A which aims to inculcate competencies

necessary to address contemporary, complex and business challenges. ABV-IIITM emerging Gwalior secured 11th rank in Best B-School in • Hands-on with Python in Supply Chain Government institute category by IIRF 2023. The department aims to develop holistic and responsible leaders by creating insightful knowledge and transforming human endeavours technology-enabled through management solutions.

About the Institute

Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior (ABV-IIITM Gwalior), is an apex Information Technology (IT) and Management Institute, established by the Government of India. The Institute endeavours to carve young minds through quality teaching and state-of-the-art research and develop them as tomorrow's leaders. The Institute's mandate is to create Information chain, Technology enabled Management solutions. The Institute offers various programmes at Masters • Faculty members and academicians who teach and Doctoral level. Sprawling across 150 lush green acres on the foothills of Gwalior Fort, the Institute is self-contained with basic amenities for all round development of students. The Institute's activities are aimed at developing amongst students an inquisitive mind and a culture of camaraderie and research.

Resource Persons

Many leading resource persons from industry and academic institutions like IITs, IIMs, NITs and IIITs will deliver the lectures.

		Sho	ort Term Course on Supply (Chain	Analytics		
	10:00-11:30AM		11:45-1:15PM		2:00- 3:30PM		3:45-5:15PM
16-02- 2024	Inaugural session, Introduction & Overview		Fundamentals of supply chain and analytics		Inventory Analytics - I: Concepts, Inventory models, Inventory management under uncertainty, Continuous and periodic review system		Inventory Analytics - II: Performance measurement and optimization techniques
17-02- 2024	Fundamentals of Data Analytics (Hands on exercise)		Statistical tools for Data Analytics (Hands on exercise)		Role of data analytics in supply chain management (Use cases and Case studies)	3:30-3:45PM Tea Break	Descriptive Analytics in Supply Chain-I: Data Warehousing and visual analytics
18-02- 2024	Descriptive Analytics in Supply Chain-II: Performance management, dashboards and scorecards (Hands on exercise)	A Tea Break	Predictive Analytics and Forecasting -I: Models and use cases with real-time examples (Hands on exercise)	unch Break	Predictive Analytics and Forecasting -II: Uncertainty and risk management		Role of AI in supply chains, Reinforcement learning, Cognitive supply chain
19-02- 2024	Intelligent decision-making, logistics and warehouse management (Case studies and use cases)	11:30-11:45AM Tea Break	Demand forecasting models: Qualitative and Quantitative methods	1:15-2:00PM Lunch Break	Introduction to machine learning and deep learning in supply chain management (Case studies and use cases)		Machine Learning models in supply chain optimization (Use cases, algorithms, tools, and examples)
20-02- 2024	Machine Learning models in supply chain optimization (Use Cases, algorithms, tools, and examples)		Hands on sessions with Python	1:	Hands on Sessions with Python		Single and multi-echelon inventory optimization
21-02- 2024	Prescriptive Analytics - I: Operations planning, Automated Decision Systems		Prescriptive Analytics - II: Multi-Criterion Decision Making (MCDM) techniques		Prescriptive Analytics - III: Replenishment and procurement Planning, Transportation modeling and analytics		Supply chain 4.0
22-02- 2024	Security issues with data		Data privacy and AI Ethics		Case studies and discussion session		Valedictory function and Certificate distribution

* Structure may vary as per the participants need.