



औद्योगिक एवं प्रणाली अभियांत्रिकी विभाग

DEPARTMENT OF INDUSTRIAL & SYSTEMS ENGINEERING

Short term Course Proposal for:

School of Logistics, Communication and Waterways SIPARD, AD Nagar, Agartala –
799003, Tripura

Course Name	1. Inventory Management 2. Supply Chain Management and Logistics
Course Date	At convenient dates, mutually agreed by two organizations
No. of contact hours	18 hours (Three-Day) for each course
No. of Participants	30 (for each course)
Instructor(s):	1. Prof. S. P. Sarmah 2. Prof. J.K. Jha 3. Prof. Abhishek Sharma
Instructors' affiliation	Department of Industrial & Systems Engineering, IIT Kharagpur

1. Inventory Management Course

A Brief Overview of the Course

This foundation course on inventory management provides a structured approach to understand the fundamental concepts, tools, and strategies involved in inventory management, along with practical applications and contemporary trends in the field. Adjustments can be made based on the requirements of the participants (introductory, intermediate, advanced level) and the specific focus of the course. The course will facilitate participants to learn how to apply the tools and techniques in real-life industrial/business contexts.

Course Objectives

The specific objectives of the course are:

1. Introduce the fundamentals and significance of inventory management in various industries.
2. Explain relevant mathematical tools, techniques, and methodologies for better inventory management and control.
3. Introduce the management principles, and strategies to address practical challenges in various industries related to inventory control and optimization.

Pedagogy

The pedagogy would be a mix of Lectures, class discussions, case analysis, and Quiz.

Course Outline:

1. **Introduction to Inventory Management:** overview, importance, objectives of inventory management, types of inventory and their significance.
2. **Inventory Cost Analysis:** cost components, such as holding cost, ordering cost, shortage cost, etc., EOQ model, and cost calculations.
3. **Forecasting and Demand Planning:** demand forecasting methods – qualitative and quantitative, time series, etc., forecasting accuracy and methods evaluation.



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4. **Inventory Control Techniques:** ABC analysis, Materials Requirement Planning, etc.
5. **Inventory Optimization:** safety stock, re-order point calculations, risk, uncertainty, etc.
6. **Inventory Management in Supply Chain:** role of inventory in supply chain management, bullwhip effect, etc.

Facilities required for conducting sessions

- A good classroom equipped with computer/laptop, multi-media projector, board, LED pointer, etc.

2. Supply Chain Management Course

A Brief Overview of the Course

This is a foundation course on supply chain management. The purpose of this course is to build our basic understanding of how supply chains can be efficiently and effectively managed in a competitive business environment. The participants will get a comprehensive understanding of the processes involved in managing the flow of goods and services from the point of origin to the final customer. Further, the course aims to equip the participants with the concepts and practices of supply chain management and learning techniques that can be leveraged to improve a better coordination with the suppliers and customers of their organization to augment total value addition.

Course Objectives

The specific objectives of the course are:

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

Pedagogy

The pedagogy would be a mix of Lectures, class discussions, case analysis, and Quiz.

Course Outline:

1. **Introduction to Supply Chain Management:** overview, principles and issues of supply chain management.
2. **Logistics Management:** nature and scope of logistics, logistics decisions: facility location, transportation, inbound and outbound logistics.
3. **Supply Chain Coordination:** procurement, supplier selection and partnership, vendor development.
7. **Managing Inventory in Supply Chain:** bullwhip effect, managing inventory, risk pooling.



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4. **Distribution strategies:** customer service, physical distribution planning, Material handling, Facility and warehousing decision.
5. **Strategic considerations for supply chain:** Porters industry analysis and value chain models, Supply chain management strategies, Logistics strategies and global supply chain management, Measuring effectiveness of supply chain management.

Facilities required for conducting sessions

- A good classroom equipped with computer/laptop, multi-media projector, board, LED pointer, etc.

Consolidated Budget Proposal for above two courses:

	Header	Cost (approx.)
A: Travel (for each course)		
1	<ul style="list-style-type: none">• IIT Kharagpur to Kolkata Airport by Taxi, and• Kolkata Airport to IIT Kharagpur by Taxi	Reimbursement by School of Logistics, Communication and Waterways, SIPARD, AD Nagar, Agartala (as per actual bill)
2	<ul style="list-style-type: none">• Kolkata Airport to Agartala Airport by Air for three persons, and• Agartala Airport to Kolkata Airport by Air for three persons	To be borne/arranged by School of Logistics, Communication and Waterways, SIPARD, AD Nagar, Agartala
3	<ul style="list-style-type: none">• To-and-fro travel from Agartala airport to accommodation by Taxi• local travel between accommodation to training centre by Taxi	To be borne/arranged by School of Logistics, Communication and Waterways, SIPARD, AD Nagar, Agartala
B: Accommodation and Food (for each course)		
1	Accommodation for three persons. Breakfast, lunch, and dinner for three persons during the course days	To be borne/arranged by School of Logistics, Communication and Waterways, SIPARD, AD Nagar, Agartala
C: Course Fee		
1	Course fee (@ Rs. 9,000/- per participant for each course)	Rs. 5,40,000/-
2	Course preparation, e-material, certificate print, and other costs for two courses (@ Rs. 80,000/- for each course)	Rs. 1,60,000/-
Course Fee		Rs. 7,00,000/-
Institute Overhead expenses (@ 20%)		Rs. 1,40,000/-
Total		Rs. 8,40,000/-
GST (@ 18%)		Rs. 1,51,200/-
Final Total		Rs. 9,91,200/- (nine lakh, ninety one thousand two hundred only)



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NOTE:

For each course, if the number of participants is more than 30, an additional fee (all inclusive) of Rs. 12000 per participant will be charged. To make the training programme effective, we suggest that the number of participants should not be more than 30.

Submitted by:

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Dr. S. P. Sarmah

प्राध्यापक / Professor

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