



## भारतीय प्रबंध संस्थान रोहतक

### INDIAN INSTITUTE OF MANAGEMENT ROHTAK

मैनेजमेंट सिटी, दक्षिण बायपास, NH 10, सुनारिया, रोहतक, हरियाणा, भारत-124010  
Management City, Southern Bye Pass, NH 10, Sunaria, Rohtak, Haryana, India-124010

#### **Sub – Welcome to the Online Executive Education Programme in Lean Operations Management**

Dear Participants,

Greetings from IIM Rohtak!

Indian Institute of Management Rohtak welcomes you to the 50-hour online course on ‘Lean Operations Management’.

As scheduled, the programme will commence on 22<sup>nd</sup> May 2022 and will culminate on 02<sup>nd</sup> October 2022.

The program aims to impart essential knowledge of core as well as advance concepts of Operations Management to the participants and familiarize them with tools and techniques necessary to analyse and solve common business problems. The program is designed by experienced faculty at IIM Rohtak, and delivered by both academic and industry practitioners using case studies, hands on exercises and real business contexts.

We believe that this programme is going to take the participants through a unique learning experience in the coming weeks.

The Information brochure comprising programme objectives, day-wise session schedule and faculty profile is being shared with you.

We wish you a pleasant and fruitful interactive learning experience.

Best wishes,

IIM Rohtak



# भारतीय प्रबोध संस्थान Indian Institute of Management Rohtak

## Online Executive Education Programme in Lean Operations Management

### Executive Education

**Programme Coordinator**

Prof. Dheeraj Sharma

**Faulty Incharge (s)**

Prof. Aditya Kumar Sahu &  
Prof. Ashwani Kumar

# OPERATIONS MANAGEMENT



## Course Objectives

Operations Management (OM) deals with the management of productive resources in a cost-effective manner for both manufacturing and service enterprises. In a typical organization, the Operations department controls more than 50% of people and assets employed by the enterprise. It covers almost all of the real value-added activities including process design, production, service delivery and management of the supply chain activities. Therefore, 'Competing through Excellence in Operations' is the new winning paradigm for the enterprises.

This course shall equip managers with concepts, techniques and tools related to

- Designing core operational capabilities.
- Analyzing the processes and systems.
- Improving performance of organizations by applying them to a broad range of application domains.

## Pedagogy

A combination of cases, exercises, lectures, and hands-on practice using various tools will be used

eMDP on “Lean Operations Management Batch II					
(Session Time: 7:15 P.M-10:05 P.M)					
Session No.	Date	Topic	Case	Reading	Faculty Name
<b><u>Module 1: Lean Operations Management Fundamentals</u></b>					
01-02	22/05/2022 (Sunday)	Introduction to case methods and brief history of Operations Management	Kanpur Confectioneries Private Limited (A)		Dr S K Pandey/ Dr. Aditya K. Sahu
03-04	29/05/2022 (Sunday)	Lean Operations: Introduction to Toyota Production System History, Philosophy and Applications across various sectors and domains, MUDA (8 type of Waste), MURI, MURA	A case study of lean, sustainable manufacturing, Journal of Industrial Engineering and Management		Dr. Anurag Tiwari
05-06	05/06/2022 (Sunday)	Diagnostics Tools/ Financial tools for Lean, Linking Operations with Finance (ROIC tree)		Will be shared by the faculty before the session, if any	Dr. Sachin Kamble (VF)
07-08	12/06/2022 (Sunday)	Analysis of Operations System-System and process view of organization, process mapping, flowcharting, Measuring and improving the process (Application of Little’s law)		Will be shared by the faculty before the session, if any	Dr. Mahamaya Mohanty
09-10	19/06/2022 (Sunday)	Process Management, Value analysis, Value stream mapping		Will be shared by the faculty before the session, if any	Dr. Sachin Kamble (VF)
11-12	26/06/2022 (Sunday)	Designing Product layout, Process Selection, manufacturing process and facility Layout	Executive Shirt Co., Inc. HBS		Dr. Anurag Tiwari
13-14	03/07/2022 (Sunday)	Capacity Planning	Sequoia Airlines		Dr. Peeyush Pandey
<b><u>Module 2: Continuous Improvement, Waste elimination</u></b>					
15- 16	10/07/2022 (Sunday)	Lean Model and 5S, SMED, Kaizen, Poka yoke, Kanban, Andon, Comparison of all card based System		Will be shared by the faculty before the session, if any	Dr. Priyank Sinha
<b><u>Module 3: Customer Focused Quality</u></b>					
17-18	17/07/2022 (Sunday)	Defining Quality, Quality control and Management, History and Trends, Contribution of Quality Gurus	A Note on Quality: The Views of Deming, Juran, and Crosby ( <a href="http://iibf.erciyes.edu.tr/ilkey/sqc/The%20Views%20of%20Deming,%20Juran%20and%20Crosby.pdf">http://iibf.erciyes.edu.tr/ilkey/sqc/The%20Views%20of%20Deming,%20Juran%20and%20Crosby.pdf</a> )	Principles and Contributions of Total Quality Management (TQM) Gurus on Business Quality Improvement (Link: <a href="https://mpr.ub.uni-muenchen.de/77282/1/MPRA_paper_77282.pdf">https://mpr.ub.uni-muenchen.de/77282/1/MPRA_paper_77282.pdf</a> )	Dr. Peeyush Pandey
19- 20	24/07/2022 (Sunday)	Philosophies and frameworks for Quality management, 7 QC tools	Case: Using Pareto Analysis to Focus on Reliability Improvement at NTPC		Dr. C. P. Garg
21- 22	31/07/2022 (Sunday)	TQM in industries: relevance, analysis, and directions		Will be shared by the faculty before the session, if any	Dr. Abhishek Singh (Industry Expert)
23- 24	07/08/2022 (Sunday)	Performance Management, Supplier Partnership, Baldrige criteria, ISO		Will be shared by the faculty before the session, if any	Dr. Abhishek Singh (Industry Expert)
25- 26	14/08/2022 (Sunday)	Quality Function Deployment, Failure Mode and Effect Analysis	Applying Quality Function Deployment Techniques in Lead Production Project Selection and Assignment	Principles and Contributions of Total Quality Management (TQM) Gurus on Business Quality Improvement	Dr. Ashwani Kumar
27- 28	21/08/2022 (Sunday)	Statistical Process Control		Will be shared by the faculty before the session, if any	Dr. Amol Singh

29- 30	<b>28/08/2022 (Sunday)</b>	SERVQUAL, Service Gap Model, BSC Framework	Windigo: IIMA case		Dr. Rama Shankar Yadav
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31-32	<b>04/09/2022 (Sunday)</b>	Six Sigma and its implementation steps Recognize and Define Phase, Measure Phase, Analyze phase part 1	Implementation of the Lean Six Sigma framework in non-profit organisations: A case study. Total Quality Management & Business Excellence 23, no. 3-4 (2012): 431-447.	Lean Six Sigma implementation: modelling the interaction among the enablers. Production Planning & Control, 29(12), pp.1010-1029	Dr. Mahamaya Mohanty
33-34	<b>11/09/2022 (Sunday)</b>	Analyze Phase part 2, Improve and Control Phase, DMADV	Implementation of continuous improvement based on Lean Six Sigma in small-and medium-sized enterprises. Total Quality Management & Business Excellence 27, no. 3-4 (2016): 309-324.	In pursuit of implementation patterns: the context of Lean and Six Sigma. International Journal of Production Research, 46(23), pp.6679-6699.	Dr. Mahamaya Mohanty
<b><u>Module 5: Lean and Sustainability</u></b>					
35-36	<b>18/09/2022 (Sunday)</b>	Lean Supply Chains and Lean evaluation framework		Will be shared by the faculty before the session, if any	Industry Expert (Dr. Pawan Taneja)
37- 38	<b>25/09/2022 (Sunday)</b>	Lean Accounting (Material Flow Cost Accounting)	Case: Implementation of Material Flow Cost Accounting (MFCA): the case of an Indian small and medium-sized enterprise (SME)	R1: Walz, M., & Guenther, E. (2021). What effects does material flow cost accounting have for companies?: Evidence from a case studies analysis. Journal of Industrial Ecology, 25(3), 593-613. R2: Sahu, A. K., Padhy, R. K., Das, D., & Gautam, A. (2021). Improving financial and environmental performance through MFCA: A SME case study. Journal of Cleaner Production, 279, 123751.	Dr. Aditya K. Sahu
<b><u>Module 6: Integrative project exercise</u></b>					
39-40	<b>02/10/2022 (Sunday)</b>	Presentations	Presentations		Dr. Ashwani Kumar

## Programme Coordinator



**Name of Faculty: Prof. Dheeraj Sharma**

**Current Post held:** Director

**Employment Record/Experience:**

**Prof. Dheeraj Sharma** (Director, IIM Rohtak) is a marketing professor and writer. He has taught at numerous educational institutions including University of North Texas, Louisiana Tech University, University of Winnipeg, Ball State University, Athabasca University and IIM Ahmedabad. Prof. Sharma has a doctoral degree with a major in marketing and a double minor in psychology and quantitative analysis from Louisiana Tech University. His primary research interests are “relationships” in business domain. He explores relationships in the context of Workforce motivation (different levels of employees in an organization), behavioral channel theory (relationship between channels and organizations), international marketing strategy (cross-cultural relationship such as between brands across national boundaries), personal selling, brand management (relationship between consumers and brands), social media management (Human to Human Relationships), and ethics (Relationship between individual, organization and society). As a doctoral candidate, Dr. Sharma was Robert B. Toulouse Doctoral Fellow and Graduate School Doctoral Fellow. He is a member of who’s who of American professionals. He has conducted/participated in training programs and engaged in consulting assignment(s) with ICI Paints, Duncan Holdings LLC, Globe Rangers LLC, Hero Cycles Ltd, First Merchants Bank of America, Ambuja Cements, Mahindra and Mahindra, Tata Motors, Tata Teleservices Ltd, Tata Housing, Exide batteries, Central Warehousing Corporation, Life Insurance Company, Employee State Insurance Corporation, PGIMER, Vodafone, Alkem Pharma, Zydus Pharma, Watson Pharma, Colgate Palmolive, KPMG, Price Waterhouse Cooper, JK Fenner, Bajaj Auto, Cadbury, Punjab Milkfed among others. Prof. Sharma has been involved in consulting projects or/and executive training with several multinational corporations such as, He has conducted/participated in training programs and engaged in consulting assignment(s) with ICI Paints, Duncan Holdings LLC, Globe Rangers LLC, Hero Cycles Ltd, First Merchants Bank of America, Ambuja Cements, Mahindra and Mahindra, Tata Motors, Tata Teleservices Ltd, Tata Housing, Exide batteries, Central Warehousing Corporation, Life Insurance Company, Employee State Insurance Corporation, PGIMER, Vodafone, Alkem Pharma, Zydus Pharma, Watson Pharma, Colgate Palmolive, KPMG, Price Waterhouse Cooper, JK Fenner, Bajaj Auto, Cadbury, Punjab Milkfed among others. Dr. Sharma continues serve on boards and advisory boards of many organizations including central government appointed independent director on IRCTC (Indian Railways) and Punjab Government appointed independent director on Punjab State Cooperative Milk Producers Federation Limited. His expert views have been cited in many major international newspapers including Business Standard, Economic Times, Times of India, DNA, The Tribune, The Hindu, Asian Age, Vancouver Sun, Calgary Herald, Edmonton Journal, Montreal Gazette, National Post, CTV National News, among others.

## Faculty Profile



**Dr. S. K. Pandey** is an Associate Professor in the area of Marketing and Dean Research and Executive Education at IIM Rohtak. He is also the editor of Emerging Economies Case Journal from Sage publications. Dr. Pandey has published extensively in reputed journals such as Journal of Retailing and Consumer Services, International Journal of Retail and Distribution Management, International Journal of Market Research, Australasian Marketing Journal, Marketing Intelligence and Planning, Event Management, Journal of Cleaner Production and International Journal of Conflict Management. Dr. Pandey's earned the outstanding paper award in the Marketing Management Association Conference at Chicago in 2010. He has over 20 years of teaching experience with more than 16 years of Post Ph.D. experience of teaching MBA students. Dr.

Pandey has been trained in case pedagogy by Richard Ivey School of Business, Kelley School of Business and IIM Ahmedabad Professors through various Faculty Development Programmes. He is also actively engaged in training and providing consultancy to leading corporates. Some of the leading organizations include Indian Police Services, Haryana Police Services, Life Insurance Corporation, Punjab National Bank, Power Grid Corporation, and Indian Oil Corporation.



**Dr. Amol Singh** is a faculty in the area of Operations Management at IIM Rohtak. Prior to this he worked with Institute of Management Technology Ghaziabad (IMT Ghaziabad). He did his Ph.D. in Industrial Engineering from Indian Institute of Technology, Roorkee in 2006. He received MHRD fellowship for full time Ph. D. Research work at IIT Roorkee. His teaching interests are Project Management, Project Planning & Control, Operations Management, and Quantitative Techniques. He has conducted several long duration e-MDP programmes on Project Management & Project Management with Microsoft Project and MDP programmes on Operations & Supply chain Management. He has published

several research papers in International Journals and conferences. His research work appeared in International Journals like, International Journal of Project Management, Benchmarking an International Journal, Journal of Multi-criteria decision Analysis, Journal of Cleaner Production, International Journal of Integrated Supply Management, International Journal of Disaster Risk Reduction, Competitiveness Review, Journal of Purchasing and Supply Management, Journal of Modelling in Management, The International Journal of Advanced Manufacturing Technology Procedia Engineering, International Journal of Modelling in Operations Management, International Journal of Simulation Modelling, etc. and in International Conferences like POMS, MATADOR., DAAAM, SIMTECH etc.



**Dr. Ashwani Kumar** is a faculty in the area of Operations Management at Indian Institute of Management Rohtak. He has awarded doctorate in operations management from Department of Management Studies, IIT Roorkee, Roorkee, India. He was awarded MHRD fellowship for doctoral Program. He has completed Masters in Production and Industrial Engineering. He has five years of experience in academics. He has published more than 15 research papers in reputed journals and conferences encompassing A\*/A in ABDC, SCI, SSCI, ABS, Scopus, and ESCI indices. He is also reviewer of many reputed journals.



**Dr. Mahamaya Mohanty** is a faculty of Operations and Supply Chain Management area. She has done her Ph.D. from Indian Institute of Technology Delhi, India. She has received her Master of Technology (M.Tech) degree in Computer Science and Information Technology from College of Engineering and Technology (CET), Bhubaneswar, Odisha and earned Bachelor of Engineering (B.E) in Information Technology from College of Engineering Bhubaneswar (CEB). She has 08 years of teaching and research experience, worked as a faculty of Computer Science and IT in various institutes in India, prior to her full-time Ph.D. from the Department of Management Studies, Indian Institute of Technology Delhi. She has expertise in a

variety of fields such as artificial intelligence, data analytics, operations research, logistics management system, and multi-criteria decision making. Her research has appeared in various reputed international journals like Transportation Research Part D: Transport and Environment, Journal of Modelling in Management, Management of Environmental Quality: An International Journal, and Journal of Management Analytics. She has been certified by Consultancy Development Centre (CDC), An Autonomous Institution of DSIR, Ministry of Science and Technology Govt. of India as a Technical Consultant.



**Dr. Peeyush Pandey** is a faculty in the area of Operations Management at Indian Institute of Management Rohtak. He has completed Fellow Program in Management (FPM) from the Indian Institute of Management Indore. Prior to his doctoral degree, Dr. Pandey has completed his M.Tech. in Industrial Management from Indian Institute of Technology, BHU, Varanasi. He holds a B.Tech degree in Computer Science from Krishna Institute of Engineering and Technology, Ghaziabad. His thesis work "Workforce scheduling in retail store: Models and solution approaches" deals with a largely unexamined topic on workforce scheduling and hence is expected to

contribute substantially to the field. His research articles, book chapters and case studies are published in many peer reviewed journals. Presently, his papers are under review in some of the top rated journals. His papers have been accepted for presentation at various top rated international and national conferences like INFORMS, POMS, EUROMA, SOM etc. He was among the few participants all over the world who was offered grant from ELAVIO -2016, held in Cali, Columbia.



**Dr. Priyank Sinha** is a faculty in the Operations area at Indian Institute of Management Rohtak. He is a PhD in Operations Research from Indian Institute of Technology, Kanpur and holds ME in Manufacturing Systems Engineering from Birla Institute of Technology and Sciences, Pilani. Prior to joining IIM Rohtak, he has worked as an Assistant Professor Jaipuria Institute of Management, Indore. His research interest includes supply chain risk, disruption; network optimization; process optimization, etc.



**Dr. Aditya Kumar Sahu** is an Assistant Professor in the Operations Management area at the Indian Institute of Management (IIM) Rohtak. He has finished his PhD in the area of Operations Management & Decision Sciences from IIM Kashipur. He completed his Master's degree in Industrial Engineering and Management from the Indian Institute of Technology (Indian School of Mines), Dhanbad in 2016. He also holds a Bachelor of Engineering degree in Electronics and Telecommunication engineering. He is passionate about deploying better operations inside the factory using effective tools and techniques to satisfy the customer's requirements. He has scholarly publications in various reputed international journals such as Production

Planning & Control, Journal of Cleaner Production and Australasian Marketing Journal. He has also reviewed several articles for reputed journals.



**Dr. Anurag Tiwari** is Assistant professor in the area of Operations Management at Indian Institute of Management Rohtak. Before Joining IIM Rohtak, he has served as a faculty in Symbiosis Institute of Business Management at Symbiosis International University, Nagpur. He worked as a Post-Doctoral Fellow in Industrial Engineering and Management at Yuan Ze University, Taiwan. He did his Ph.D. in Information Management from Yuan Ze University Taiwan in 2016. He also has a B. Tech.in Electronics and Communication from Uttar Pradesh Technical University. His areas of research interest have been Supply Chain Management, Logistics Management, Optimization, Scheduling and Evolutionary Search Method. He has published articles in journals and conferences of international repute.



**Dr. Chandra Prakash Garg** is a faculty in the area of Operations Management at Indian Institute of Management Rohtak. He has awarded doctorate in operations management from Department of Management Studies, IIT Roorkee, Roorkee, India. He was awarded Junior Research Fellowship (JRF) and National Eligibility Test (NET) by University Grant Commission, India. He has completed Masters in Math and MBA. He has more than 8 years of experience including academics and industry. He has published more than 25 research papers in reputed journals and conferences encompassing A\*/A in ABDC, SCI, SSCI, ABS, Scopus, and ESCI indices. He chaired technical sessions in various conferences and workshops. He is also the editorial member and reviewer of many reputed journals.



**Dr. Rama Shankar Yadav** is a faculty in the area of Human Resource Management at Indian Institute of Management Rohtak. He has completed Fellow Program in Management (FPM) from Indian Institute of Management Ahmedabad. He worked as an HR Manager with Tata Motors for two years before joining his doctoral studies. Prior to IIM Rohtak, he was teaching at Banaras Hindu University, Varanasi. Dr. Yadav is also serving as an Associate Editor for Indian Journal of Human Relations and Indian Journal of Social Science Researches.