



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 16th October 2022 and will culminate on 26th February 2023.

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

Faulty Incharge (s)

Prof. Amol Singh

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 III					
(Session Time: 7:15 P.M-10:05 P.M)					
Session No.	Date	Topic	Case	Reading	Faculty Name
Module 1: Lean Operations Management Fundamentals					
01-02	16/10/2022 (Sunday)	Introduction to case methods and brief history of Operations Management	Case: Value added operations at Lands' End		Dr. Amol Singh
03-04	23/10/2022 (Sunday)	Lean Operations: Introduction to Toyota Production System History, Philosophy and Applications across various sectors and domains, MUDA (8 type of Waste), MURI, MURA	Case In Point: Toyota Production System - Lean Production and JIT Prototype		Dr. Ashwani Kuamr
05-06	30/10/2022 (Sunday)	Diagnostics Tools/ Financial tools for Lean, Linking Operations with Finance (ROIC tree)	Kaffee Kostuum: A Dilemma in Retail Financials by Robert N. Boute, Jan A. Van Mieghem (Emerald Cases)		Dr. Neha Gupta
07-08	06/11/2022 (Sunday)	Analysis of Operations System-System and process view of organization, process mapping, flowcharting, Measuring and improving the process (Application of Little's law)	Case: Disability Insurance Claims Handling at InsureIT	M. Hammer, Reengineering work: Don't automate, obliterate. HBR. 68(4), 104–112 (1990)	Dr. Harshit Kumar Singh
09-10	13/11/2022 (Sunday)	Process Management, Value analysis, Value stream mapping	Case: Kristen's Cookis Company (A) (Harvard)		Dr. Amol Singh
11-12	20/11/2022 (Sunday)	Designing Product layout, Process Selection, manufacturing process and facility Layout	Executive Shirt Co., Inc. HBS		Dr. Anurag Tiwari
13-14	27/11/2022 (Sunday)	Capacity Planning	Case: Erin's Energy Plan		Dr. Amol Singh
Module 2: Continuous Improvement, Waste elimination					
15- 16	4/12/2022 (Sunday)	Lean Model and 5S, SMED, Kaizen, Poka yoke, Kanban, Andon, Comparison of all card based System	Case: How to read a plant fast	Malcom baldrige evaluation framework	Industry Expert Dr. Abhishek Singh (Britannia Industries Limited)
Module 3: Customer Focused Quality					
17-18	11/12/2022 (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 (http://iibf.erciyes.edu.tr/ilkay/sqc/The %20Views%20of%20Deming,%20Juran%20and%20Crosby.pdf)	Principles and Contributions of Total Quality Mangement (TQM) Gurus on Business Quality Improvement (Link: https://mpr.ub.uni-muenchen.de/77282/1/MPRA_paper_77282.pdf)	Dr. Ashwani Kumar
19- 20	18/12/2022 (Sunday)	Philosophies and frameworks for Quality management, 7 QC tools	Case: Using Pareto Analysis to Focus on Reliability Improvement at NTPC		Dr. Ashwani Kumar
21- 22	25/12/2022 (Sunday)	TQM in industries: relevance, analysis, and directions	Implementation of TQM in manufacturing Industries in the Kingdom of Saudi Arabia		Dr. Mahamaya Mohanty
23- 24	01/01/2023 (Sunday)	Performance Management, Supplier Partnership, Baldrige criteria, ISO	Structural model for analysis of key performance indicators for sustainable manufacturer–supplier collaboration: A greydecision-making trial and evaluation laboratory-based approach		Dr. Ashwani Kumar
25- 26	08/01/2023 (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	15/01/2023 (Sunday)	SERVQUAL, Service Gap Model, BSC Framework	Case 1: Windigo: IIMA case Case 2: Performance measurement in a Lean organization: the case of the Wiremold company [Emerald]		Dr. Rama Shankar Yadav

29- 30	22/01/2023 (Sunday)	Statistical Process Control	Case Study: Five star fasteners		Dr. Peeyush Pandey
Module 5: Lean and Sustainability					
31-32	29/01/2023 (Sunday)	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	5/02/2023 (Sunday)	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
Module 5: Lean and Sustainability					
35-36	12/02/2023 (Sunday)	Lean Supply Chains and Lean evaluation framework	Case: How to read a plant fast	Will be shared by the faculty before the session, if any	Industry Expert Dr. Abhishek Singh (Britannia Industries Limited)
37- 38	19/02/2023 (Sunday)	Lean Accounting (Material Flow Cost Accounting)	Case: 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.	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.	Dr. Aditya Sahu
Module 6: Integrative project exercise					
39-40	26/02/2023 (Sunday)	Presentations	Presentations		Dr. Amol Singh

Faculty Profile



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. 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.



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. 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. Harshit Kumar Singh holds a PhD from the Indian Institute of Management Ahmedabad in the area of Information Systems. Prior to joining his doctoral program, he has worked in the industry for three years as a Software Developer. He had completed his Bachelor's in Computer Science & Engineering from the National Institute of Technology Patna. His Ph.D. thesis investigates the challenges of large-scale adoption of work-from-home on organizations. His research interest includes IS competencies, motivational information systems with a focus on gamification and digital engagement. His teaching interests include Management Information System (MIS), Managing Software and Project Enterprises, Gamification Technology and Business, Data Structure and Algorithms and Theories of Information System.



Dr. Neha Gupta is a Visiting Assistant Professor in the domain of Finance. Prior to joining IIM Rohtak, she was associated with School of Business, Woxsen University, Hyderabad in capacity of Assistant Professor. She has completed her doctoral degree from Birla Institute of Technology and Science (BITS), Pilani. Her thesis deals with understanding the dynamics of financial crises. She has also obtained her M.Sc. (Tech.) in Finance and M.Sc. (Hons.) in Physics from BITS, Pilani. As a part of her dual degree, she has interned with Credit Suisse, Pune as a Market Risk Quality intern. Her research work has been presented at both national and international conferences such as World Finance Conference (2021), Doctoral Consortium at IIT Bombay (2020), Indian Finance Conference (2019), PAN-IIM (2019) and Conference on Macroeconomics and Finance, IGIDR (2019).