



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 & Six Sigma

Dear Participants,

Greetings from IIM Rohtak!

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

As scheduled, the programme will commence on August 06, 2023 and will culminate on 03rd December 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 & Six Sigma**

Executive Education

Faulty Incharge

Prof. CP Garg

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

e-MDP on "Lean Operations Management & Six Sigma Batch V					
(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	06/08/2023 (Sunday)	Introduction to case methods and brief history of Operations Management	Case: Narayana Health: An Innovative Health Care System in India		Dr. CP Garg
03-04	12/08/2023 (Saturday)	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. Aditya Sahu
05-06	13/08/2023 (Sunday)	Designing Product layout, Process Selection, manufacturing process and facility Layout	Executive Shirt Co., Inc. HBS		Dr. Anurag Tiwari
07-08	20/08/2023 (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 Insure IT		Dr. Harshit Kumar Singh
09-10	27/08/2023 (Sunday)	Process Management, Value analysis, Value stream mapping	Case: kristan Cookies Company (A) Harvard		Dr. Amol Singh
11-12	03/09/2023 (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. Vaneet Bhatia
13-14	09/09/2023 (Saturday)	Capacity Planning	Case: Erins Energy Plan		Dr. Amol Singh
15-16	10/09/2023 (Sunday)	Lean Model and 5S, SMED, Kaizen, Poka yoke, Kanban, Andon, Comparison of all card based System		Will be shared by expert before the session	Mr. Manoj S Nair (IE)
17-18	17/09/2023 (Sunday)	TQM in industries: relevance, analysis, and directions		Will be shared by expert before the session	Mr. A S Chakravarthy (IE)
19-20	24/09/2023 (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 - Background Note - Faculty & Research - Harvard Business School (hbs.edu))	Principles and Contributions of Total Quality Mangement (TQM) Gurus on Business Quality Improvement (Link: https://mpr.aub.uni-muenchen.de/77282/1/MPRA_paper_77282.pdf)	Dr. Amol Singh
21-22	01/10/2023 (Sunday)	Philosophies and frameworks for Quality management, 7 QC tools	Case: Using Pareto Analysis to Focus on Reliability Improvement at NTPC		Dr. CP Garg
23-24	07/10/2023 (Saturday)	Performance Management, Supplier Partnership, Baldrige criteria, ISO	SOURCING DECISION: CHOOSING THE RIGHT SUPPLIER		Dr. CP Garg
25-26	08/10/2023 (Sunday)	Quality Function Deployment, Failure Mode and Effect Analysis	Case: Quality control at Grass Unlimited (Faculty will share before the session)		Dr. Ujjwal Nag

27- 28	15/10/2023 (Sunday)	Statistical Process Control	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
29- 30	22/10/2023 (Sunday)	SERVQUAL, Service Gap Model, BSC Framework	Case 1: Seeking reliable services: a case of natural gas distribution utility [Emerald] Case 2: Performance measurement in a Lean organization: the case of the Wiremold company [Emerald].		Dr. Rama Shankar Yadav
31-32	29/10/2023 (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 organizations: 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. Peeyush Pandey
33-34	05/11/2023 (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. Ujjwal Nag
35-36	19/11/2023 (Saturday)	Lean Supply Chains and Lean evaluation framework	Case: Lean Supply chain		Dr. Ashwani Kumar
37- 38	26/11/2023 (Sunday)	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) (Faculty will share before the session)	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 Sahu
39-40	3/12/2023 (Sunday)	Presentations	Presentations		Dr. CP Garg

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. 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. 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.



Chandra Prakash Garg is Assistant Professor 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, India. He has more than 10 years of experience including academics and industry.



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. 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. Vaneet Bhatia holds PhD from the Indian Institute of Management Raipur in the area of Finance. He is an MBA in Banking & Insurance from the University Institute of Applied Management Sciences, Panjab University, Chandigarh. He secured the third rank in his MBA. He is UGC-JRF in Management, SAS base certified programmer and has qualified JAIIB. He is currently pursuing actuarial sciences from the Institute of Actuaries of India. Dr Bhatia has close to 7 years of teaching and industrial experience. Before joining IIM Rohtak, Dr Bhatia worked with the Jindal School of Banking & Finance for about 5 years. He also worked as a probationary officer in Vijaya Bank (now Bank of Baroda) for 2 years. His research interests fall under the domain of corporate finance and financial economics. He has published several papers in peer-reviewed national and international journals.



Dr. Ujjwal Nag is a Visiting Assistant Professor in the Operations Management area at the Indian Institute of Management, Rohtak. He earned his PhD in Operations & Supply Chain Management from Birla Institute of Technology and Science, Pilani, Rajasthan in 2023. Before that, He pursued Executive General Management Program from IIM Bangalore during 2016-2017. He completed his Masters in Automated Manufacturing System from Birla Institute of Technology, Ranchi in 2005. His research is centred on developing Sustainable Products and Services in a Circular Economy aligned with supply chain. His articles are published in the Journals such as Journal of Cleaner production ('A' Category), Journal of Engineering Design (IF - 2.4), International Journal of Logistics Research and Application IF - 5.992). His one of the research established circular supply chain with PSS business model in Automotive Industry driven by the Circular Product Design, Circular Services, Reverse Flow and Circular Value Marketing. He also developed PSS for Wind Turbine OEMs in the context of Circular Economy and proposed a framework to elicit value requirement for Circular Products and Services. Before joining PhD program, he served various firms in India in various capacities for 12.5 years. His experience was in procurement, Engineering and Construction, Sustainable Operations, and Virtual Plant. He worked with MECON Limited (Ranchi), Tata Steel Limited (Jamshedpur and Kalinganagar). He was also a consultant to SMEs at Bihar.