



INDIAN INSTITUTE OF MANAGEMENT ROHTAK

Management City NH-10 Southern Bypass, Sunaria, Rohtak-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 1st Jan, 2022 and will culminate on 21st May, 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 प्रबंध 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

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.

(Session Time: 7:15 P.M-10:05 P.M)					
Session No.	Date	Topic	Case	Reading	Faculty Name
<u>Module 1: Lean Operations Management Fundamentals</u>					
1-2	01/01/2022 (Saturday)	Introduction to case methods and brief history of Operations Management	Kanpur Confectioneries Private Limited (A)		Dr. Aditya K. Sahu
3-4	08/01/2022 (Saturday)	Lean Operations: Introduction to Toyota Production System History, Philosophy and Applications across various sectors and domains, MUDA (8 type of Waste), MURI, MURA	Lean Manufacturing in Practice Lean Manufacturing in Practice A CaseStudy of Toyota Motors Company IJCSMS International Journal of Computer Science & Management Studies, Vol. 13, Issue 05, July 2013	Robert W. Hall (2004) Lean" and the Toyota Production System, <i>Association for Manufacturing Excellence</i>	Dr. Ashwani Kumar
5-6	15/01/2022 (Saturday)	Diagnostics Tools/ Financial tools for Lean, Linking Operations with Finance (ROIC tree)		To be updated by VF	VF (Dr. Sachin Kamble)
7-8	22/01/2022 (Saturday)	Analysis of Operations System- System and process view of organization, process mapping, flowcharting, Measuring and improving the process (Application of Little's law)	Executive Shirt Co., Inc., HBS # 696071		Dr. Aditya K. Sahu
9-10	29/01/2022 (Saturday)	Process Management, Value analysis, Value stream mapping		To be updated by VF	VF (Dr. Sachin Kamble)
11-12	05/02/2022 (Saturday)	Designing Product layout, Process Selection, manufacturing process and facility Layout	ABC Shipyard: The facility layout Ivey Publishing W16803-PDF-ENG		Dr. Anurag Tiwari
13-14	12/02/2022 (Saturday)	Capacity Planning	Navagaon State Printing Press (Case: IIMA)	Note on Capacity Planning (IIMA)	Dr. Mahamaya Mohanty
<u>Module 2: Continuous Improvement, Waste elimination</u>					
15- 16	19/02/2022 (Saturday)	Lean Model and 5S, SMED, Kaizen, Poka yoke, Kanban, Andon, Comparison of all card based System	The Development of a Kanban System: A Case Study	Card-based production control: a review of the control mechanisms underpinning Kanban, ConWIP, POLCA and COBACABANA systems	Dr. Priyank Sinha

Module 3: Customer Focused Quality

17-18	26/02/2022 (Saturday)	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 Management (TQM) Gurus on Business Quality Improvement (Link: https://mpira.ub.uni-muenchen.de/77282/1/MPRA_paper_77282.pdf)	Dr. Peeyush Pandey
19- 20	05/03/2022 (Saturday)	Philosophies and frameworks for Quality management, 7 QC tools	Using Pareto Analysis to Focus on Reliability Improvement at NTPC	Total quality management in Indian industries: relevance, analysis and directions	Dr. C. P. Garg
21- 22	12/03/2022 (Saturday)	TQM in industries: relevance, analysis, and directions		<i>Will be shared before the session by the expert, if any</i>	Industry Expert (Dr. Abhishek Singh)
23- 24	26/03/2022 (Saturday)	Performance Management, Supplier Partnership, Baldrige criteria, ISO	Supplier Selection at Honda <i>Will be shared before the session by the faculty</i>	Factors Influencing Total Quality Management	Dr. C. P. Garg
25- 26	02/04/2022 (Saturday)	Quality Function Deployment, Failure Mode and Effect Analysis	Quality function deployment in healthcare: a literature review and case study	Reading: What and how about quality function deployment (QFD). International journal of production economics, 46, pp.575-585.	Dr. Mahamaya Mohanty
27- 28	09/04/2022 (Saturday)	Statistical Process Control	Case1 : Quality Control at Grass, Unlimited, Case2: Improving service time at Dav's Burgers <i>Will be shared before the session by the faculty</i>		Dr. Amol Singh
29- 30	16/04/2022 (Saturday)	SERVQUAL, Service Gap Model, BSC Framework	Windigo	Sharma, D., Pandey, S. K., and Gupta, A. (2021) Prioritization of SERVQUAL dimensions for Trade Shows, Event Management Journal.	Dr. S. K. Pandey

				https://doi.org/10.3727/152599521X16106577965116	
<u>Module 4: Six Sigma (DMAIC and DMADV)</u>					
31-32	23/04/2022 (Saturday)	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	30/04/2022 (Saturday)	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
<u>Module 5: Lean and Sustainability</u>					
35-36	07/05/2022 (Saturday)	Lean Supply Chains and Lean evaluation framework		<i>Will be shared before the session by the expert, if any</i>	Industry Expert (Mr. Saurabh Mishra)
37- 38	14/05/2022 (Saturday)	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) <i>Will be shared before the session by the faculty</i>	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
<u>Module 6: Integrative project exercise</u>					

39-40	21/05/2022 (Saturday)	Integrative exercise: Project planning, Project Execution, Project Monitoring & Control, & Report Generation.	Presentations		Dr. Aditya K. Sahu
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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 Associate Professor (Marketing Management Area) at IIM Rohtak. He is also holding the designation of Dean (REE) and Chairperson, Executive Education. Prof. Pandey is an MBA, UGC-NET and Ph.D. in Management from C.S.J.M. University Kanpur. He has a total of 15 years of teaching and research experience during which he has taught at prestigious institutions like FORE School of Management, Delhi Institute of Advanced Studies and Bharati Vidyapeeth's Institute of Management and Research, Delhi. He holds special interest in sales related research and has published many papers in refereed journals of national and international repute. His paper on customer satisfaction in Banks was adjudged the outstanding paper in the Marketing Management Association Conference in Chicago, USA in 2010.



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.