





Post Graduate Certificate Programme in Operations Management (OMP) (Batch 04)

11 Months | Blended | ₹2,25,000 + GST

#### **Director's Message**



Dr. Bhimaraya Metri Director, IIM Nagpur

I take pleasure in welcoming you to IIM Nagpur (IIMN). IIMN was established in 2015 as the first of the third generation IIMs, by the Ministry of Education, Govt. of India. Its location in Nagpur, the Orange City, makes IIMN equidistant from the major metropolises – Delhi, Chennai, Kolkata, and Mumbai – in terms of travel time by air. Since its inception, IIMN has attracted talented faculty members with commendable experience in research and teaching.

Faculty members at IIMN are engaged in management consultancy, research, training and industry collaboration for creating and disseminating cutting-edge knowledge. Its location at the very centre of industrial activity offers IIMN a natural advantage, enabling greater connections and partnerships with businesses across sectors in SEZ and MIDC-designated zones. IIMN's unwavering focus on pioneering exceptional industry partnerships to lead the way in providing real-world experiences, prepares our programme participants for life bringing 'corporate into classrooms' to hone relevantly skilled talent for the ever-evolving corporate world. One of the first premier institutions in the country to seamlessly make the shift from physical to online over the past year, IIMN is well-equipped to conduct Executive Education Programmes (EEPs) for executives from public and private sector undertakings. Keeping the New Education Policy (NEP) 2020, digitalisation and lifelong learning in mind, IIMN has launched online certificate programmes for skilling-reskilling-upskilling the executives in highly specialised areas of management. We anticipate that these programmes would enable executives to fully realise the opportunities ahead in a digitally disruptive world. With its unique advantages, IIMN is an exciting place to learn, grow, and be the 'champions of change'. We welcome you to join our IIMN community of faculty, staff, students, and alumni who are shaping the future of work.

#### **Operations: Past, Present & Future**

Operations Management is what gives an organisation the power to act, to create value for its customers, shareholders, and the business ecosystem.

Growing out of the industrial revolution of the late 1800s, Operations Management has gone through some major evolutions – more than ever in the recent past.

# **PAS I** (1970s – mid-1990s)

- Shift of Focus From Cost to Quality
- Volume Manufacturing
- Assembly Lines
- Scientific Management
- Labour Productivity Improvements
- Layout
- Queuing Theory
- Production Control
- Usage of Computers to Perform Routine Tasks
- Material Requirement Planning (MRP)
- Manufacturing Resource Planning (MRP-II)

#### • Mass Customisation through Internet and Integration

(mid-1990s *–* mid-2010s

- E-business
- Just-in-Time (JIT)
- Re-order Point (ROP)
- Mathematical Model
- Simulation Model
- Heuristic Method
- Optimised Production Technology (OPT)
- Total Quality Management (TQM)
- Supply Chain Management (SCM)

## FUTURE id-2010s – beyond

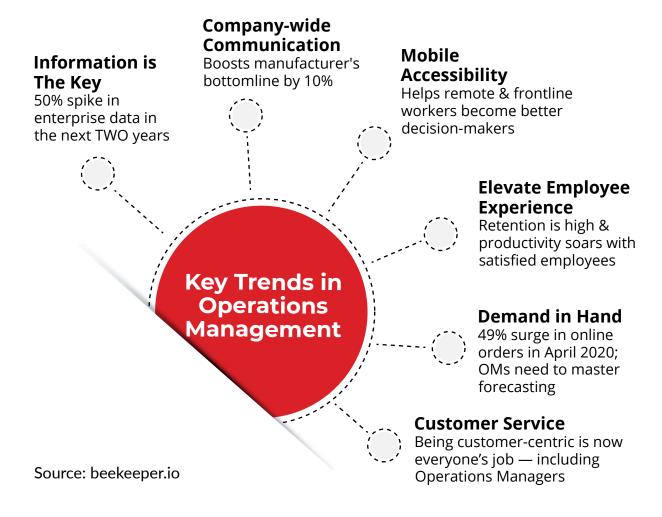
- Intensive Communication
- Internet of Things (IOT)
- Enterprise Resource Planning (ERP)
- Mathematical Modelling
- Agile Manufacturing
- Knowledge Management
- Customer Relationship Management (CRM)
- Total Quality Management (TQM)
- Six Sigma
- Lean Manufacturing
- Green Manufacturing and SCM
- Artificial Intelligence

(Source: researchgate.net)

## **Need for Skilled Operations Management Professionals**

Times are changing more quickly than we can adapt. In the aftermath of COVID-19, organisations lean more than ever on Operations Managers to see through the recovery and run them more efficiently. As an Operations Manager, you play a lead role in shaping the future of an organisation.

- Globally, one-third of new jobs in management will be for Operations
- Projected job growth for office and operations managers is 6% from 2018-2028 (source: zippia.com)



There is high demand in almost every industry for Operations Managers in the Indian market, supported by economic growth, globalisation, increased competition, and the 'Make in India' initiative. Therefore, upskilling yourself with evolving domain knowledge and requisite skills with a contemporary programme like IIM Nagpur's Post Graduate Certificate Programme in Operations Management (PGCPOM) will help you stay relevant in the industry and go up the corporate ladder.



Amidst Industry 4.0, manufacturing and operations are more digitally aligned than ever before. Various business functions are more integrated, data-led, and insight-driven. This systemic industry-shift has necessitated an upgrade in contemporary knowledge and skills in the domain of operations management.

The Post Graduate Certificate Programme in Operations Management (PGCPOM) is designed for operations professionals to enable them to take tactical and operational decisions in alignment with the organisational strategy. The programme unravels key issues relevant for operations managers such as "What should be the operations strategy given a corporate strategy?"; "How to improve process and supply chain performance on various dimensions (Quality, Efficiency, Timeliness, Customisability)?"; "How to apply analytics in day-to-day operations of a firm?"; "How to incentivise various stakeholders in the supply chain for effective alignment?"; and "How to plan and execute projects (such as infrastructure development, IT, R&D, etc.) in an effective manner?"

#### **Programme Highlights**



Capstone Project and Business Simulation



Chamber Consulting by IIM Nagpur Faculty



3-day Campus Immersion



IIM Nagpur Alumni Status

#### **Learning Outcomes**



Understand key issues pertaining to Operations Management



Recognise the role of Operations Management in ensuring sustainable competitive advantage



Acknowledge the need for alignment of operations with overall strategy and other functional areas



Create and apply metrics to track and improve operational performance



Appreciate advances in OM such as Operations Analytics & Industry 4.0

### **Programme Curriculum**

	Topics	Subtopics
1)	Operations Strategy	Performance Dimensions, Alignment with the Overall Strategy
		Alignment of Operations Management with other Functional Areas
2)	Process Flow and Capacity Analysis	Process Flow Diagram, Bottleneck, Uncertainty
۷)		Volume Variety, Product Process Matrix
	Sourcing and Supply Chain Coordination	Planning: Aggregate, Materials, Bill of Material, Capacity, Sales and Operations, Master Production Schedule
3)		Coordination, Sourcing Issues, Procurement, Supplier Development, Make or Buy Decision
		Supply Chain Contracts; Simulation Game
	Project Analysis	Feasibility Analysis, Project Financing, Project Contracts
	Project Planning and Risk	Work Break-down Structure, Levelling, Project Simulation, Network Analysis, Critical Chain Approach, Project Risk
4)	Project Execution and Control	Tracking, Crashing, Earned Value Analysis
	Project Strategy	Portfolio Management, Project Leadership, Management of Change, Role of Communication, Managing Culture, Management of Project Teams
	Inventory Management	Economic Order Quantity, Continuous, Periodic Review, Newsvendor, Channel

## **Programme Curriculum**

	Topics	Subtopics	
5)	Quality Management	Quality, Dimensions of Quality, Design for Quality, Six Sigma, Design for Six Sigma, Total Quality Management, Total Productive Maintenance  Process Control Charts, Capability  Value Stream Mapping, Drum-Buffer-Rope, Theory of Constraints	
	Lean Management	Lean, Waste, Toyota Production System, Just-in-Time (JIT)  JIT Cycle, Single Minute Exchange of Die, Kaizen, Kanban, Lean Six Sigma	
	Industry 4.0	Digital transformation, Challenges, Performance Improvement	
6)		Levels of Industry 4.0, Role of Blockchain, Digital Twin and Additive Manufacturing (3D printing) in Improving Operations and Supply Chain	
7)	Operations Analytics	Descriptive, Correlation, Covariance, Hypothesis Testing, Sample vs Population, Analysis of Variance  Predictive, Regression, Forecasting Techniques, Artificial Intelligence/Machine Learning  Prescriptive, Linear Programming, Non-linear Programming	
8)	Sustainable Operations	Triple Bottom Line Approach to Sustainability, Green Operations	
		Green Quality, Socially Responsible Operations	
9)	Capstone	Capstone Project	

#### **Pedagogy**

The teaching approach will be highly interactive, leverage technology, and deploy diverse pedagogical tools and techniques, including concept-oriented discussion sessions delivered through industry-focused cases, simulations, and activities.

#### **Programme Delivery**

Sessions will be conducted via a state-of-the-art Interactive Learning (IL) platform and delivered in Direct-to-Device (D2D) mode that can be accessed by learners on their Desktop, Laptop, or Tablet.

Chamber consulting would be available in a phased manner to identify, analyse and intervene on a real-life problem in the field of operations management. These problem(s) can be from areas such as project management, Lean/Six Sigma or operations/supply chain that the participant is either facing at his/her organisation or is interested in exploring.



#### **Schedule**

2 online sessions (90 minutes each)

Day & Timing: Sundays: 12:15 PM to 03:15 PM

#### **Duration**

11 Months



#### **Campus Immersion**

A 3-day in-campus module at IIM Nagpur scheduled between the middle and end of the programme.

The in-campus modules are subject to the conditions that prevail at that point in time. These conditions pertain to the pandemic or other unavoidable reasons. In case the in-campus module is not confirmed due to the in-campus situation, the same will be included in the total number of online sessions.

#### **Eligibility Criteria**

- Diploma (10+2+3) or bachelor's degree or equivalent (10+2+3 or 10+2+4) or 2-year master's degree or equivalent from a recognised university (UGC/AICTE/DEC/AIU/State Government) in any discipline
- Minimum 2 years of work experience\* after completion of qualifying education
- Participants who fulfil the above criteria and are not currently working, are also eligible to apply for the programme

\*Internships and trainee experiences will not be considered as full-time work experience.

#### **Who Should Attend?**

Practitioners in manufacturing, project management, services, or logistics sectors and people aspiring to be a part of these sectors.

#### **Admission Criteria**

Participants would be selected from corporate nominations and self-sponsored individual applicants based on their overall profiles and credentials.

#### **Attendance Criteria**

A minimum of 75% attendance is a prerequisite for the successful completion of the programme.



#### **Assessment & Evaluation**

- The evaluation methodology is at the discretion of IIM Nagpur faculty. The methodology includes online exams, written tests, assignments, and any other component as decided by IIM Nagpur faculty.
- The programme may require participants to work on individual/group assignments and/or projects. The main objective of such assignments/projects will be to help the participants apply their conceptual learning in the programme to actual organisational decision scenarios.

Disclaimer: All certificate images are for illustrative purposes only and may be subject to change at the discretion of IIM Nagpur.



#### **Certification & Alumni Status**

- Students who successfully complete the programme and fulfil all the prescribed requirements will be awarded a 'Certificate of Completion'.
- Successful candidates will also be granted IIM Nagpur Alumni status.

#### **Programme Directors**



Prof. Rama Papi Reddy Annapureddy

Prof Papi Reddy is a faculty in Production and Operations area. Before joining IIM Nagpur, he was involved in designing and developing AI/ML-based solutions at the R&D division of Mphasis Ltd., known as NextLabs. Prior to his doctoral studies, he was working with HPCL in their Aviation Services Facility, Chennai.



Prof. Nikunj Kumar Jain

Prof. Nikunj Kumar Jain is an Associate Professor of Production and Operations Management at IIM Nagpur. He has completed his Fellow Programme in Management (PhD) from IIM Indore and B.Tech (Electrical Engineering) from MANIT, Bhopal. He has previously worked with IMT Ghaziabad, IMI Delhi, and FORE School of Management Delhi. He has cross-functional work experience in a green field refinery project at Bharat Oman Refineries Ltd. Bina, Sagar (M.P.).

He has conducted training programmes on Operations Excellence, Supply Chain Management, Transportation Management, Project Management, Data Analytics, Scientific Rigor, and Statistical Modelling to various industries for middle and senior management. He has also conducted workshops on Structural Equation Modelling and Research Methodology for academicians.

#### **Programme Fees**

Particulars	Amount (₹)*
Processing Fee**	15,000
Total Programme Fees (Excluding Application Fee)	2,25,000

- Collection of all fees will be done by IIM Nagpur. From Application page, participants will be redirected to IIM Nagpur payment portal.
- \*GST as per prevailing rate is applicable and will be collected additionally from the candidate/participant. Current GST rate is 18%.
- \*\*Processing Fee is ₹15,000, which includes ₹2,500 for Application Fee and ₹12,500 for Tuition Fee. In case a participant profile is rejected by IIM Nagpur, Tuition Fee of ₹12,500 will be refunded to the participant.
- During campus visit, participants who want to stay extra nights at IIM Nagpur campus will have to pay additional charges directly to IIM Nagpur. This shall be subject to accommodation availability.

#### **Instalment Schedule**

Instalment	Date	Amount (₹)*
	At the time of application	12,500
ı	Within one week of offer roll out	70,500
II	10 <sup>th</sup> February, 2024	71,000
Ш	10 <sup>th</sup> May, 2024	71,000

<sup>\*</sup>GST as per prevailing rate is applicable.

### **Programme Timelines**

Last Day to Apply	Refer to website
Programme Start Date	26 <sup>th</sup> November, 2023
Programme End Date	November 2024







Established in 2015, the Indian Institute of Management Nagpur (IIM Nagpur) aspires to be a leading management institution that shapes management systems, policy, and governance through high-quality education, research, and industry engagement. Propelled by the pursuit of engaged scholarship, the Institute aims to create value-driven leaders and global managers with strong conceptual foundations and analytical approach, which helps them excel in diverse spheres – be it management, business, policy making, and public administration, to name a few.

IIM Nagpur's aim is to address the needs of a modern India, connecting aspirations and realities to attain benchmarks that are respected internationally. Our motto, सत्यं च स्वाध्याय प्ररवचने च, that is, an inspired journey towards truth through individual reflection and collective discourse, propels our quest to bridge the gap between abstract knowledge and practice.

IIM Nagpur seeks to distinguish itself as an institution that promotes constant industry engagement of a 'problem-solving' nature. Executive Education, therefore, is an important thrust area for the Institute. With an array of programmes designed by a faculty body with a stellar record of research, teaching and industry engagement, the Executive Education programme at IIM Nagpur equips managers and executives with the capabilities to perform effectively in their current roles and take up greater challenges through various stages of their careers.

#### **National Rankings:**

43 <sup>rd</sup>
in NIRF Rankings
2023



TimesPro, the award-winning EdTech initiative of The Times Group, was established in 2013 to cater to the diverse learning needs of Indians with aspirations of career growth.

Taking the rich legacy of trust, knowledge, and learning of The Times Group forward, TimesPro strives to embody the values of Education 4.0 – learner-centric, industry-relevant, role-specific, and technology-enabled – in its executive education programmes.

Ranging across industries and domains, these programmes are curated and offered in collaboration with premier national and global educational institutions to fulfil the aspirations of millions of professionals by equipping them with the right knowledge and skills.





Executive Education Office (EEP Office), IIM Nagpur

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