

Transforming Manufacturing Operations: Leveraging Data for Bottom-Line Impact

Post Graduate Certificate Programme in
**Manufacturing Management
& Analytics**

by IIM Tiruchirappalli

Batch - 04



Marketing Partner

jaro education

ABOUT IIM TIRUCHIRAPPALLI



Features among
the Top 2% of Business
Schools globally

AACSB

Business
Education
Alliance
Member



among IIMs in
NIRF India Rankings 2025



in NIRF India Rankings
2025 (Overall Management
Category)



BT-MDRA India's
Best B-Schools 2025



among top B-schools in
India by MBAUniverse.com
Ranking 2024

Established in 2011, the Indian Institute of Management Tiruchirappalli (IIMT) is among the fastest-growing second-generation IIMs, featuring a state-of-the-art campus spread over 175 acres in Tamil Nadu. The institute has earned its reputation as a premier management institution, dedicated to creating and disseminating management knowledge. IIM Trichy boasts 54 faculty members with strong academic and industrial experience.

Faculty members hail from leading management educational institutions in India, such as IIMs and IITs, as well as esteemed foreign universities. The institute offers a range of programmes, including its flagship Post Graduate Programme in Management (PGPM), Post Graduate Programme in Human Resource Management (PGPM-HR), Post Graduate Programme in Business Management (PGPBM) for working professionals, and the Doctoral Programme in Management (DPM).

The institute's commitment to excellence is reflected in its accreditations. IIM Trichy holds the prestigious accreditation from the Association of MBAs (AMBA) and is a member of the Association to Advance Collegiate Schools of Business (AACSB), underscoring its adherence to global standards in management education.

The Executive Education and Consultancy (EEC) Centre furthers IIM Trichy's mission to reach aspiring executives, considering their time and location constraints. These e-learning programmes enable IIM Trichy to venture into the online Executive Education space, focusing on delivering contemporary, conveniently accessible, and affordable quality management education.



PROF. PAWAN KUMAR SINGH

**Director,
Indian Institute of Management Tiruchirappalli**

Indian Institute of Management Tiruchirappalli (IIMT) is the 11th IIM established by the Government of India in 2011 and has now completed its 15-year milestone. Tiruchirappalli is a vibrant city widely known for its art and culture, which dates back thousands of years. Today, the city is a hub for educational institutions, scholastic centres, and modern industries. Our institute is transcending to new heights and stands true to its motto: 'Gyaanam Anantam', which means 'Knowledge is Infinite'. Continuous learning is the foundation for better value creation, and IIMT aspires to instill in its students an unceasing desire to learn. The institute proudly embraces the responsibility of shaping students into the leaders of tomorrow—catalysts of change for the betterment of society. IIMT operates from its sprawling state-of-the-art campus spread over 175 acres of land, situated about 11 km from Tiruchirappalli International Airport.

Our mission is to nurture a learning environment that assimilates, disseminates, and creates knowledge of global standards, thereby adding value to society and the nation. Starting the journey with an intake of 84 students, today we host over 900 students and offer diverse programmes such as the Post Graduate Programme in Management (PGPM); Post Graduate Programme in Management - Human Resources (PGPM-HRM); Doctoral Programme in Management (DPM); Executive Doctoral Programme in Management (EDPM); and Post Graduate Programme in Business Management (PGPBM) for working executives. The Executive Education & Consulting wing at IIM Trichy offers both short- and long-duration programmes, Faculty Development Programmes, and e-learning courses specially designed to enhance the skills and knowledge of corporate managers. Through a carefully designed curriculum, we shape our students into future leaders with a deep understanding of their fields. We also strive to create dynamic and innovative entrepreneurs who can bring positive changes to society.

Our strength lies in our faculty members and dedicated staff. Our faculty possess the highest levels of innovation and interactive teaching skills. They not only impart knowledge but also instill the core values and ethos of the invincible Indian culture. We foster a spirit of inquiry in our students, encouraging them to challenge existing paradigms for fruitful learning. High-quality research is an integral part of the IIMT culture. Our thoughtfully created Learning Resource Centre provides faculty and research scholars with an exquisite academic ambience to nurture ideas and produce world-class research output. IIM Tiruchirappalli has expanded its horizons by entering into various collaborations with academia and industry. We have signed academic cooperation agreements with reputed institutions worldwide. Through projects like 'Make a Difference', we inculcate social and national commitments in our students.

We take pride in who we are. While we do not rest on past accomplishments, we constantly seek innovative ways to realize our vision of becoming a leading management institution with a significant impact on business and society. We believe the institute has the potential to transform into one of the best world-class management schools in India. We invite every stakeholder in society to join us on this journey of spreading value-based management education.

PROGRAMME DIRECTORS



DR. M. VIMALA RANI

Dr. M. Vimala Rani is currently working as an Assistant Professor in the area of Operations Management & Decision Sciences at IIM Tiruchirappalli. She brings with her rich academic experience, having served as an Assistant Professor at the Indian Institute of Technology (IIT) Kharagpur for nearly six years, and at the Amrita School of Business, Bangalore for about one year. She earned her Ph.D. in Operations Management from the Indian Institute of Science (IISc), Bangalore, where she was awarded a Gold Medal and the Best Ph.D. Thesis Award by the IISc Council. Following her doctoral studies, she worked as a Research Associate at the Department of Management Studies, IISc. She also holds an M.E. in Software Engineering from Anna University, Chennai, and a B.E. in Computer Science and Engineering from Madurai Kamaraj University, Madurai.

Her research contributions have received recognition at several international conferences, including the Highly Commended Paper Award by Emerald and the Best Research Paper Award. In addition, two of her doctoral scholars secured second place in the Doctoral Dissertation Competition at the 15th Annual International Conference on IEOM (Singapore) and the 10th North American Conference on IEOM (Orlando, Florida, USA). At IIM Tiruchirappalli, she teaches courses such as Introduction to Decision Science and Operations Research for Managers, while in her previous academic roles, she taught courses including Quantitative Techniques – I, Spreadsheet Modelling and Programming for Business, Production and Operations Management, and Supply Chain Management. Her research interests span mathematical and heuristic optimization for management-related problems, IoT and blockchain applications in port logistics and supply chain management, humanitarian supply chain optimization, and clinical decision support systems in mental healthcare.



**PROF. SRIKRISHNA MADHUMOHAN GOVINDALURI**

Dr. Srikrishna Madhumohan Govindaluri holds a Ph.D. in Industrial Engineering (Operations Research) from Clemson University, United States, and an M.Tech. from NIT Nagpur, India. He brings with him over 18 years of teaching experience across reputed institutions worldwide. Before joining IIM Tiruchirappalli, he served as a faculty member at Sultan Qaboos University (Oman), IIM Indore (India), Ramapo College of New Jersey (USA), and Georgia Southern University (USA). His research contributions are extensive in the areas of multicriteria decision making, supply chain management, and process quality. Over the years, he has taught a wide range of courses across undergraduate, postgraduate, and doctoral programmes in operations management, in addition to conducting several management development programmes.



GROWTH OPPORTUNITIES IN THE INDIAN MANUFACTURING INDUSTRY

India's manufacturing sector has been evolving and growing rapidly over the last few years driven by various factors like positive investment sentiment, robust demand, policy support and resource advantages.

POLICY SUPPORT

- ▶ India's government aims to achieve 25% GDP share from Manufacturing Industry by 2025
- ▶ Production Linked Incentive Schemes for Electronics Manufacturing
- ▶ Initiatives like 'Make in India' and 'Atmanirbhar Bharat' transforming India into a Global Manufacturing Hub
- ▶ 100% FDI in through automatic routes in multiple sectors
- ▶ Large scale investments in Green Technology

RESOURCE ADVANTAGE

- ▶ Access to rich natural resources- Metals, Minerals, Solar Insulation, Cotton, etc.
- ▶ Increasing share of young working population
- ▶ Access to homegrown technology and superior IT capabilities

ROBUST DEMAND

- ▶ Increasing domestic and export markets with a bulging middle class
- ▶ Robust internal demand by government for building Smart cities
- ▶ Increased demand for Electronics because of "all things" virtual during lockdown

INVESTMENT GROWTH

- ▶ Investments by Large Contract Manufacturers like Foxconn, and Pegatron Investments in Lithium-Ion Battery
- ▶ Manufacturing to Support Growth in Electric Vehicle Industry
- ▶ Investments by large banks, Venture Capital and Private Equity firms in Indian Manufacturing Startups

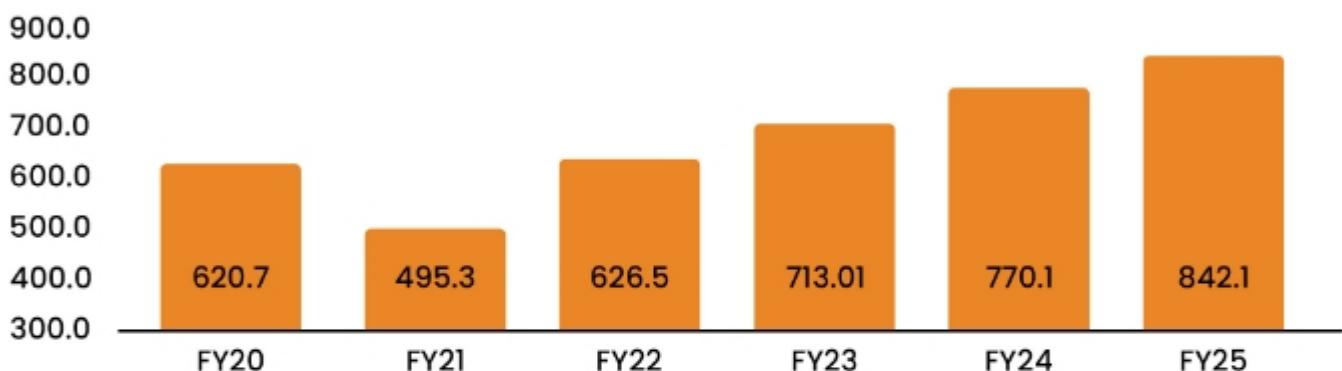
PROJECTIONS IN MANUFACTURING

India is the third most sought-after manufacturing destination in the world and has the potential to export goods worth **US\$ 1 trillion by 2030.**

*IBEF

MARKET SIZE

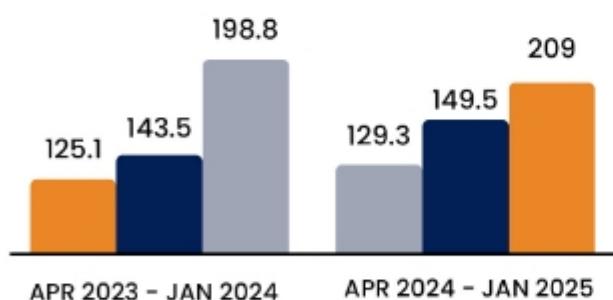
Quarterly estimate of GVA at current prices (US\$ billion)
(Quarter 1)



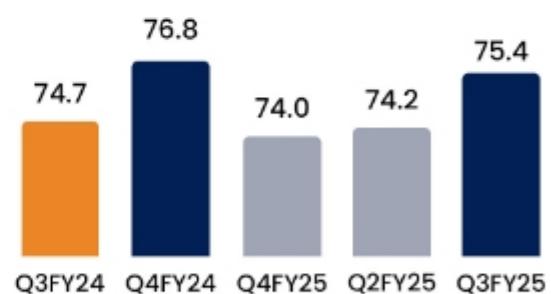
KEY TRENDS

Annual Growth Rate of IIP (%) at Sectoral level

■ Mining ■ Manufacturing ■ Electricity



Capacity Utilization in Manufacturing Sector (%)



GOVERNMENT INITIATIVES



Make in India



Skill India



National
Manufacturing Policy

In today's data-driven landscape, manufacturing firms operate within intricate systems comprising interconnected processes. Despite this complexity, a significant portion of the data generated within these processes remains untapped, representing a missed opportunity for informed decision-making. In this era, where analytics reign supreme, the imperative to extract insights from this data, both at micro and macro levels, has become undeniable.

Manufacturers are perpetually challenged to deliver superior quality products and services to clients while concurrently enhancing productivity and cost efficiency. This challenge has only intensified in the current environment. Moreover, the nature of data collected in manufacturing environments markedly differs from that in other sectors, necessitating tailored approaches to address these disparities.

Enterprises in the manufacturing domain are compelled to adapt and adopt strategies that effectively harness analytics' power. This paradigm shift forms the crux of the Post Graduate Certificate Programme in Manufacturing Management and Analytics by IIM Tiruchirappalli which is tailored for working professionals aspiring to ascend into managerial roles within their organizations. This programme offers a comprehensive understanding of fundamental concepts, techniques, and tools pivotal for proficiently managing manufacturing systems through analytics.

Through a blend of hands-on exercises, practical applications, and case studies, participants are equipped with the quantitative reasoning skills essential for gleaning actionable insights. These insights are poised to revolutionize various facets of manufacturing operations, including planning processes, operational efficiency, yield optimization, and future performance projections. Ultimately, the programme is carefully designed to deliver tangible bottom-line benefits, positioning participants as adept navigators in the dynamic landscape of manufacturing management and analytics.



Programme Highlights

1 Year of Hybrid Learning

171 hours of engagement including one in-campus module

Experienced faculty of IIM Tiruchirappalli and Industry Experts

Exposure to Industry 4.0 Tools and Capstone Projects

Executive Education Programme Alumni Status - IIM Tiruchirappalli

3 Days of Campus Immersion

Hands-on Experience in various Software Tools for Manufacturing Analytics

Rigorous Pedagogy filled with Case Studies, Group Projects, and Simulations



KEY TAKEAWAYS

- ▶ Build expertise by absorbing real-life cases from global repositories
- ▶ Play simulation games (virtual and in physical mode during campus immersion module)
- ▶ Learn new age tools to analyse manufacturing problems
- ▶ Work in peer groups apply concepts/frameworks/tools and techniques for resolving the real-life problem



KEY LEARNING OUTCOMES

At the end of the programme, participants should be able to:

- 01 Gain conceptual knowledge on the various facets of manufacturing management.
- 02 Apply relevant tools and techniques for solving a variety of problems using data in the context of manufacturing.
- 03 Learn about types and sources of data and information, and relate to statistical concepts.
- 04 Develop an understanding of how to use appropriate software and interpret the results.
- 05 Obtain insights for making effective decisions.



PROGRAMME CONTENT

The programme is organized into the following modules, equipping the participants with the necessary models, tools and application knowledge to enhance their professional capabilities.

Spreadsheet Modelling

- ▶ Basic Excel Functions
- ▶ Data Selection and Subsetting
- ▶ Advanced Excel Functions

Analytics for Decision Making – I

- ▶ Descriptive Analytics
- ▶ Data Visualization and Dashboards
- ▶ Normal Distribution, Sampling, Hypothesis Testing
- ▶ Linear Regression

Operations Research for Prescriptive Analytics

- ▶ Basics of Linear Programming and Optimization
- ▶ Binary Integer Programming for Yes-or-No Decisions
- ▶ Resource Allocation
- ▶ Workforce Scheduling and Staffing
- ▶ Network Optimization Problems

Production and Operations Management

- ▶ Process Analysis and Improvement
- ▶ Materials Management
- ▶ Sales and Operations Planning
- ▶ Supply Chain Management
- ▶ Project Management

Productivity Management

- ▶ Work Study
- ▶ Process Mapping and Analysis
- ▶ Theory of Constraints
- ▶ Process Improvement and Re-engineering
- ▶ Discrete Event Simulation

Quality Control & Assurance

- ▶ VOC, CTQ, TQM
- ▶ Quality Tools – Basic and New
- ▶ Design Thinking in Manufacturing Quality
- ▶ Lean and Six Sigma

PROGRAMME CONTENT

Manufacturing Strategy

- ▶ Operating System Design
- ▶ Capacity Strategy
- ▶ Process Technology Strategy
- ▶ Supply Chain Strategy
- ▶ Servitization Strategy

Management of Manufacturing Systems

- ▶ Layout Design
- ▶ Job Scheduling
- ▶ Performance Management
- ▶ Maintenance Management
- ▶ Cost Accounting and Purchase Management

Analytics for Decision Making - II

- ▶ Risk Analytics
- ▶ Decision Analysis using Simulation
- ▶ Multiple-Criteria Decision Making
- ▶ Benchmarking and Evaluation

Modern Manufacturing Practices

- ▶ Agile Manufacturing
- ▶ Additive Manufacturing
- ▶ Sustainable Manufacturing Practices
- ▶ Industry 4.0 Tools
- ▶ People Practices in Manufacturing

Note: This is an indicative list of course topics and is subject to change as per IIM Tiruchippalli's discretion.

PROGRAMME FRAMEWORK



PEDAGOGY

- ▶ **Hybrid mode delivery:** The programme combines in-campus and synchronous learning.
- ▶ **Synchronous learning classes:** Spread over 57 weeks with 3 hours of contact time per week.
- ▶ **Pedagogical approach:** Mix of lectures, case-based discussions, and hands-on exercises.
- ▶ **Participant engagement:** Requires reading course materials, assimilating content, and active participation in discussions.
- ▶ **Software exposure:** Participants will utilize tools such as Microsoft Excel, Minitab, GAGE Pack, etc., for analytical problem-solving in manufacturing.
- ▶ **Course evaluation:** Each module will include assessments. Additionally, participants must complete a capstone project to showcase their understanding of the programme's concepts.



PROGRAMME DETAILS

Duration

1 Year | 171 hours of engagement including one in-campus module (Conditional on conducive environment)

Mode of Delivery

Device-to-Device (D2D) mode

SCHEDULE

Session Timings: Sunday, 2:15 pm – 5:30 pm



Application Closure Date | Closing Soon

Commencement Date | 11th January 2026

Campus Immersion (Mandatory)

One Campus Visit for a total of three days

ELIGIBILITY CRITERIA

- Bachelor's Degree, with at least 50% marks or equivalent CGPA [45% in case of the candidates belonging to SC/ST/PWD] awarded by a) Universities incorporated by an act of the central or state legislature in India or other educational institutions established by an act of Parliament or b) institutions declared to be deemed as a University under Section 3 of the UGC Act, 1956, or c) possess an equivalent qualification recognized by the Ministry of HRD, Government of India.
- Minimum post-qualification experience of 1 year is required.
- Reservations will be provided to eligible candidates as per Government of India norms.

ADMISSION CRITERIA

- The selection will be based on the candidate's profile evaluation and if required on select cases personal interview through video conferencing or Skype.

WHO SHOULD ATTEND?

- Working professionals or aspiring executives desiring to take up managerial roles in the organization leveraging manufacturing analytics should take up this programme.

FEE STRUCTURE

Application Fee - INR 2,500/-

Total Programme Fee

(Excluding Application Fee)

INR 2,11,000/- + GST

Instalment Pattern

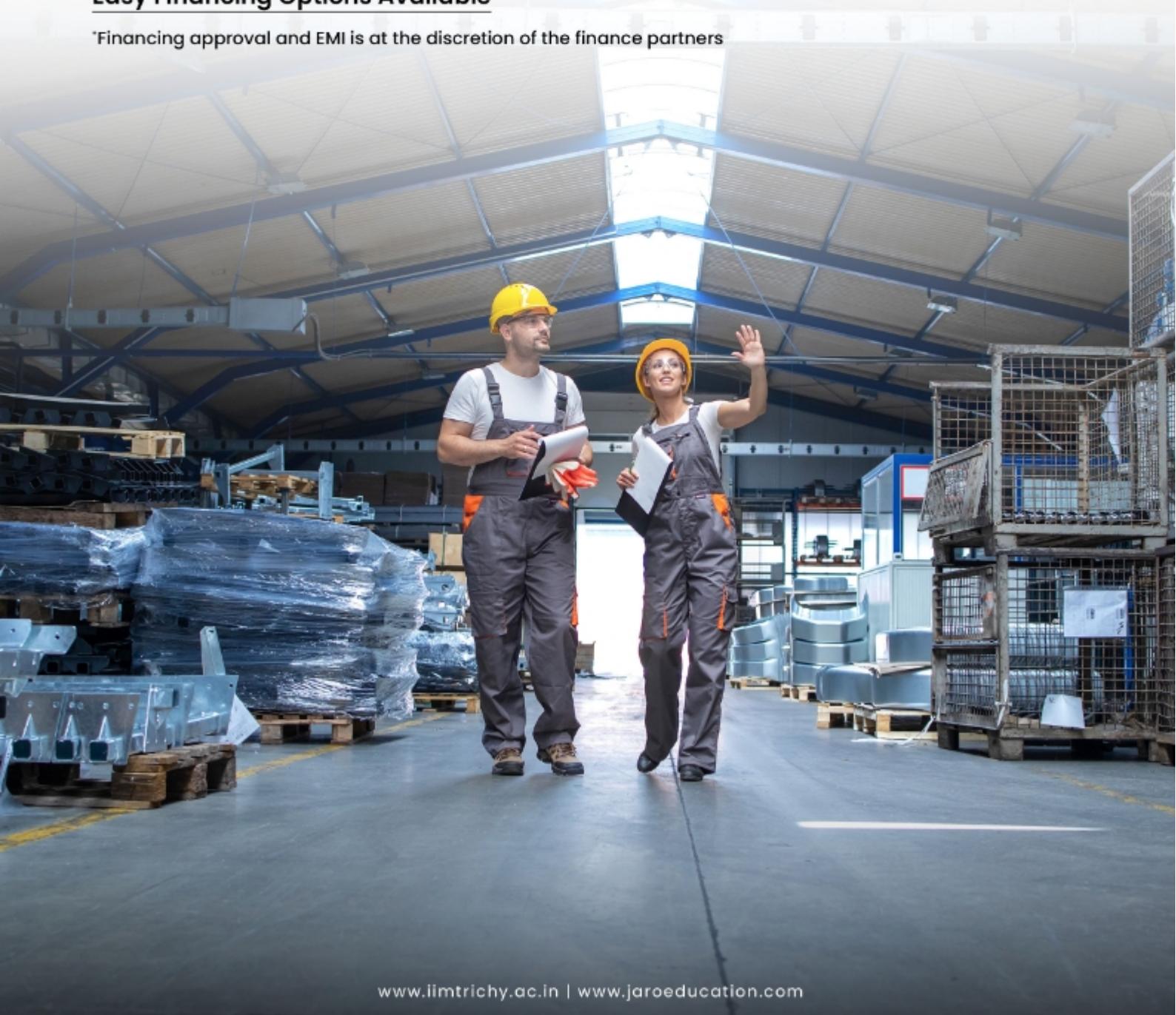
Instalment I : INR 80,000/- + GST
(As mentioned in the offer)

Instalment II : INR 65,500/- + GST
(Before Term II 5th April 2026)

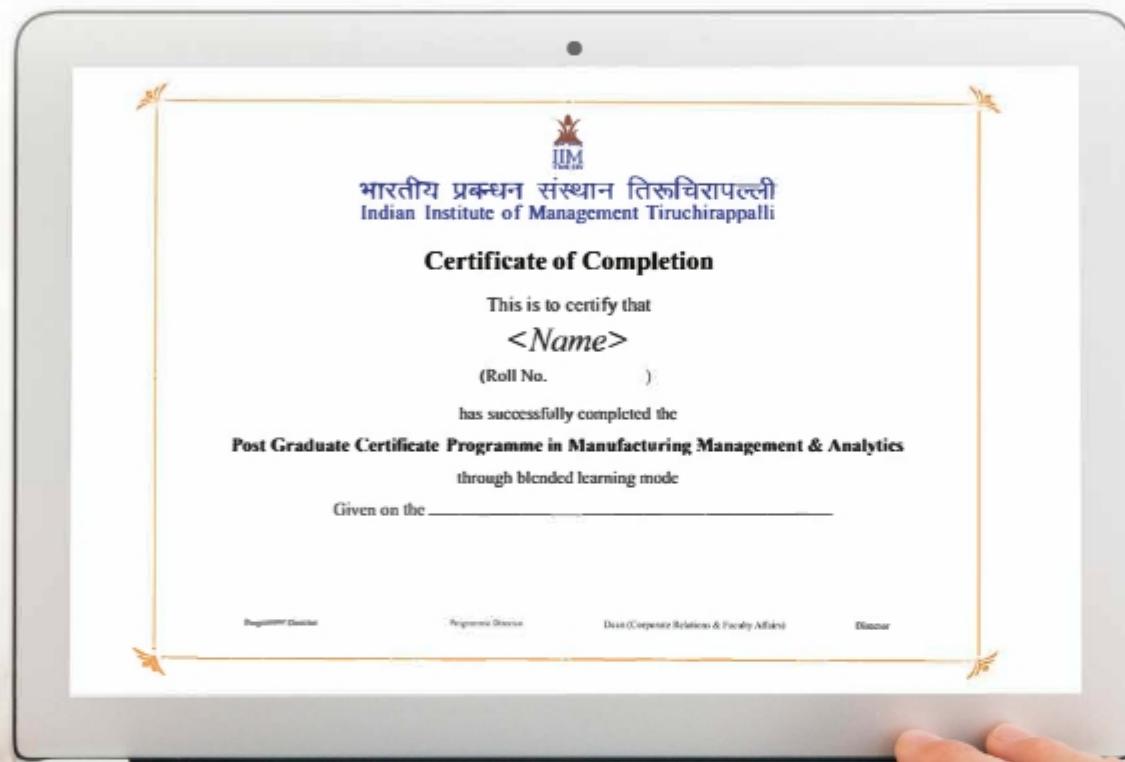
Instalment III : INR 65,500/- + GST
(Before Term III 5th August 2026)

Easy Financing Options Available*

*Financing approval and EMI is at the discretion of the finance partners



Participants who successfully complete the prescribed programme of study and fulfill all academic requirements will be awarded the **Post Graduate Certificate Programme in Manufacturing Management & Analytics** from IIM Tiruchirappalli.



WORK EXPERIENCE

Above 12 Years

13.6%

8 to 12 Years

21.9%

27.2%

37.2%

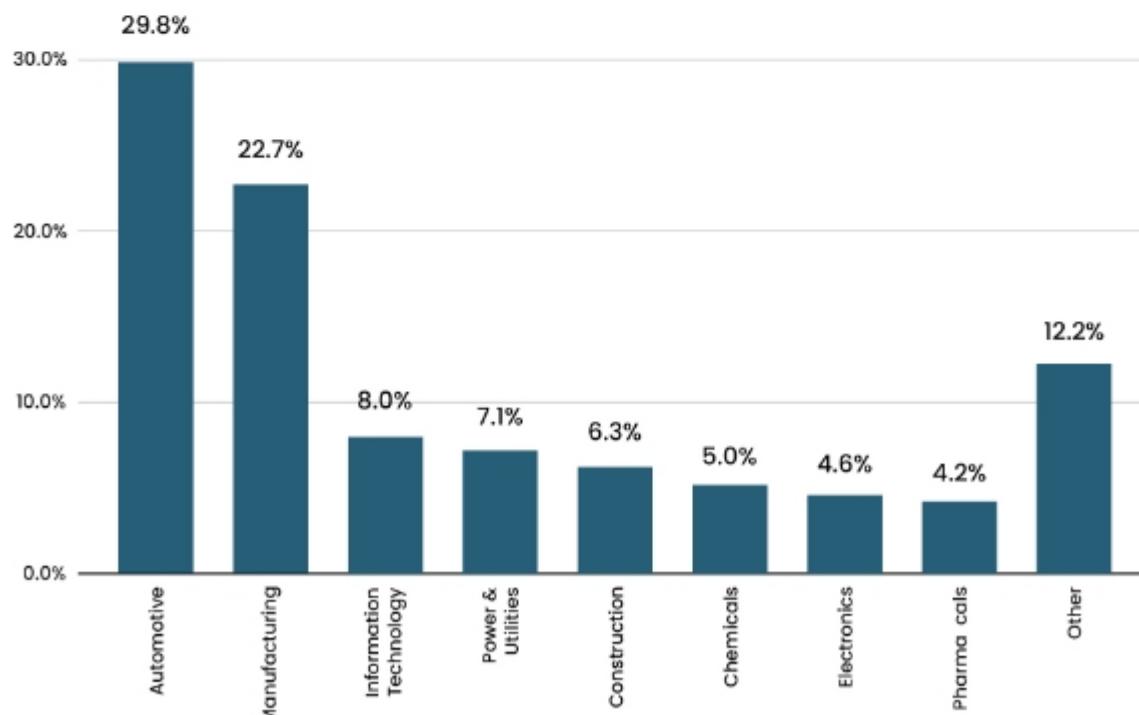
1 to 4 Years

27.2%

4 to 8 Years

37.2%

INDUSTRY WISE BIFURCATION



RECENT BATCH ANALYSIS

TOP COMPANIES WHERE OUR ALUMNI ARE WORKING AT:



TOP PROFILES OF OUR ALUMNI:

- Founder
- CEO
- Director
- General Manager
- Manufacturing Head
- Quality and Projects Head
- Operational Head
- General Manager

NOTE:

- ▶ Past performance records do not guarantee any future opportunities.
- ▶ All company names are trademarks or registered trademarks of their respective holders. Use of them does not imply any affiliation with or endorsement by them.
- ▶ The list is partial.

HEAR FROM OUR PAST BATCH PARTICIPANTS

“

As a Manufacturing Engineer at AxisCades Technologies, I joined the PGCPMMA at IIM Trichy to expand my knowledge in management. The meticulously planned curriculum and faculty engagement have been outstanding. The comprehensive syllabus, ease of access to recorded sessions, and supportive student coordinators have provided a seamless learning experience. While the programme is still ongoing, it has equipped me with the knowledge to explore diverse areas in management. I highly recommend this programme to those seeking to broaden their career horizons.

”

MR. KARTHIK RAJENDRAN

Manufacturing Engineer
AxisCades Technologies Ltd.

“

Completing IIM Trichy's PGCPMMA through Jaro Education was enriching. The curriculum was well-structured, offering practical insights. The user-friendly online portal and excellent learning support ensured a seamless experience. This programme has equipped me with valuable skills to advance my professional journey, and I'm grateful for Jaro's role in facilitating this opportunity.

”

MR. MUTHEESWARAN M

Operation Engineer
Efficacy

HEAR FROM OUR PAST BATCH PARTICIPANTS

“

Whoever stops learning starts ageing’—this thought has always stayed with me. For me, learning is more than academics; it’s about growth, relevance, and staying future-ready. That’s why discovering this IIMT PGCPMMA was a turning point. I applied immediately, and thanks to Jaro Education, the entire admission process felt effortless. Their continuous support has been invaluable. The classes are truly enriching—some make learning feel smooth, while others push us to think harder and grow stronger. I’m especially excited about the campus immersion—meeting my professors and peers will be the highlight of this journey.

”

MR. SRINIVASAN VIMAL KUMAR

Manager
Ford Motor Private Limited

“

After eight years in manufacturing, I knew it was time to level up—sharpening my ability to make smarter, data-driven decisions. This PGCPMMA came at the perfect moment, opening doors to new possibilities and professional growth. The faculty’s unwavering support and clear guidance made all the difference, turning challenges into learning milestones. Every module was thoughtfully structured, packed with real-world relevance, and truly empowering. Today, I stand more confident, equipped with the expertise to drive impact in my field—this journey has been nothing short of transformative.

”

MR. PRATYUSH CHOURASIYA

Manager – Industrial Engineering
Pandrol Rahee Technology Private
Limited, Hyderabad

About Jaro Education

3,50,000+

Career Transformed

120+

Programs from
Diverse Domains

30+

World's Leading
Academic Partners

23+

Learning Centres across
India, USA & Singapore

18+

Top NIRF Ranked Indian
Institutes & Universities

10+

Top QS Ranked Global
Institutes & Universities



e-India Awards

The Best ICT Enabled
Higher Education
Institute Award



Educational
Excellence Awards

Most Innovation &
Successful online MBA
Program in India



MODI Awards

Outstanding
Contribution in Online
Education



ABP Education
Awards

Best Digital Learning
Innovation Award



World HRD
Congress

National Best
Employer Accolade



World HRD
Congress

Edtech Leadership
Awards



Outlook Business Icon
Awards 2023

India's Most Trusted
Online Higher Education Company



The Business
Awards 2024

Leading Edtech Company
of the Year

Jaro Education is an online higher education company that specialises in executive education, serving as a liaison between the world's leading universities and institutes to create online and technology-driven programmes. The company provides a quality bucket of online executive education programmes catering to domains such as Doctorate & Ph.D., Analytics & Data Science, Management, Finance, etc., from renowned national and international institutions to meet the needs of working professionals. Our goal is to foster the growth of entrepreneurs and professionals at all levels, from entry-level to C-Suite, through world-class executive education programmes.

Career Assistance by Jaro Education

Resume Building

We create ATS-friendly resumes that highlight your skills and achievements.

LinkedIn Optimization

Enhance visibility and connect with the industry leaders.

Career Sessions

Jaro Connect offers expert-led bootcamps on industry trends.

Note: IIM Tiruchippalli and Jaro Education do not guarantee employment or career advancement; career services are provided solely by Jaro Education as guidance to help you manage your career proactively.

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Take the First Step—Connect Today

**IIM Trichy Executive Education
and Consulting office**

📞 0431 -250 5025

✉️ online@iimtrichy.ac.in

🌐 www.iimtrichy.ac.in

Jaro Education – Admission Expert

Mr. Karthikeyyan. S

📞 +91-7397749519

✉️ karthikeyyan@jaro.in

🌐 www.jaroeducation.com

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