भारतीय प्रबन्धन संस्थान तिरूचिरापल्ली
Indian Institute of Management Tiruchirappalli

IIM TRICHY
ज्ञानम् अनन्तम्

Post Graduate Certificate Programme in

ADVANCED INFRASTRUCTURE PROJECT MANAGEMENT

Earn IIM Certification ▎ **IIM Campus Immersion** ▎ **Live Weekend Sessions**

IIM Alumni Status

NATIONAL INSTITUTIONAL RANKING FRAMEWORK

AACSB Business Education Alliance Member

ASSOCIATION OF AMBAs ACCREDITED

About IIM Tiruchirappalli

Indian Institute of Management Tiruchirappalli (IIM Trichy) is the eleventh IIM and was instituted on 4th January 2011. Tiruchirappalli is a city known for its prominence in education, spirituality, art and culture and IIM Trichy tends to benefit from this. IIM Trichy is functioning from its sprawling state-of-the-art campus spread over 175 acres of land on Trichy-Pudukottai highway, about 11 km from Tiruchirappalli International Airport.

MOULDING EXCELLENCE - HEART OF OUR BEING

IIM as a name has steadily become synonymous with excellence in management education and has established a benchmark for unwavering quality in India. IIM Trichy aims to find its own footing in developing competent professionals for the industry and doing quality research in India.

Hard work, Perseverance, Passion and Integrity are some of the virtues necessary to attain success. IIM Trichy boasts about a collection of eminent faculty and motivated students which form its backbone. Students are selected after a thorough screening process and IIM Trichy takes excellent care in ensuring an optimal student-teacher ratio to encourage better learning and to impart appropriate guidance.

GUIDING STAR

"Knowledge is endless" is a motto that has strongly governed IIM Tiruchirappalli.IIM Trichy holds strong values which it imparts to its students, primary amongst which is an unceasing desire to learn. It also firmly believes that the foundation of value creation lies in the path of continuous learning.

The institute recognizes the fact that its students would be the catalyst of change for the betterment of the future and hence, takes great responsibility in shaping them into leaders of tomorrow. IIM Trichy understands and gives students complete freedom to decide upon their academic gradient based on their work experience and academic background as well as their appetite for challenges, providing them with an environment conducive in enhancing their learning experience.
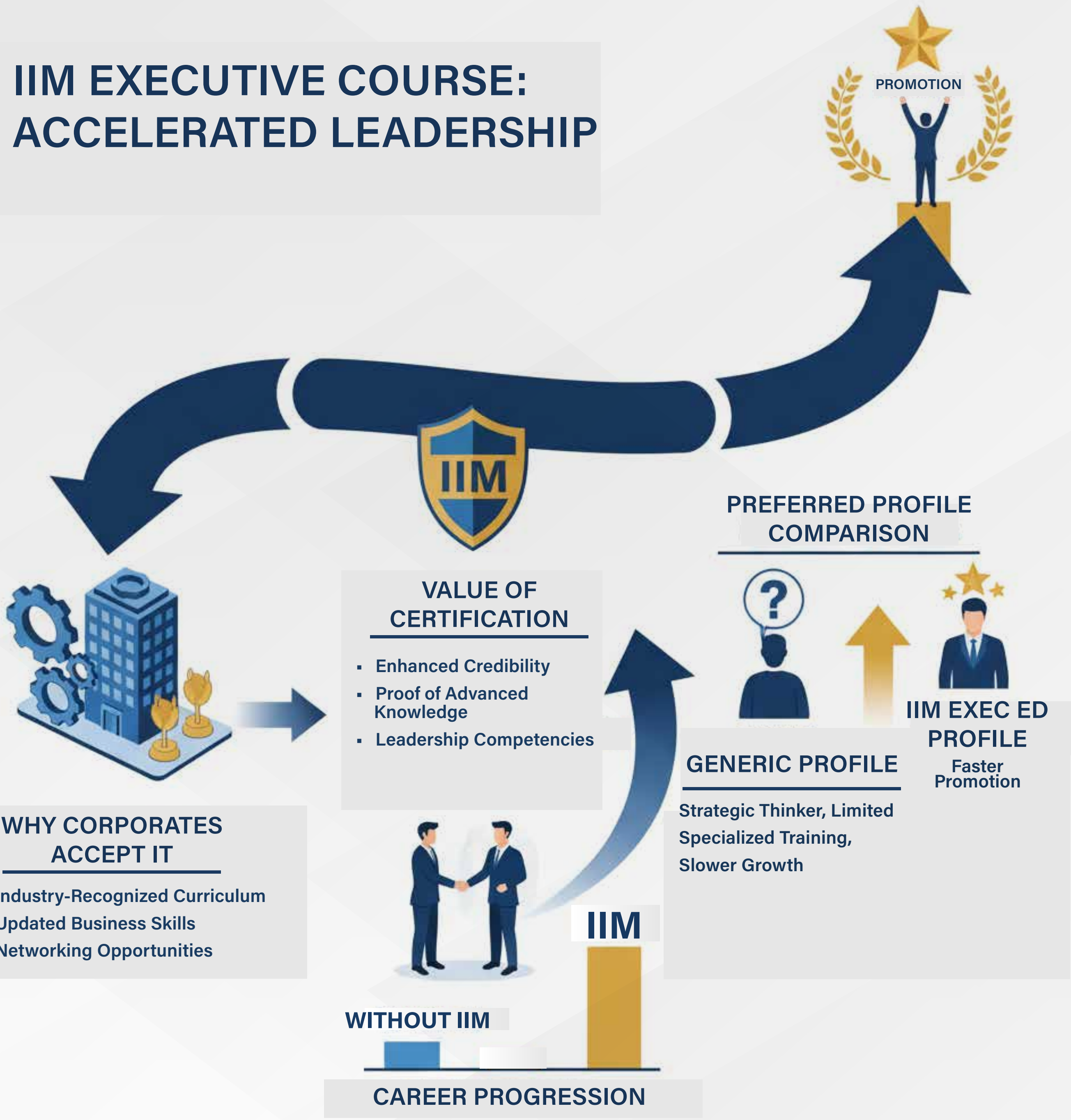
NIRF Rank 2025 – 16th

Career-Boosting Roadmap

IIM EXECUTIVE COURSE: ACCELERATED LEADERSHIP

PROMOTION

IIM

VALUE OF CERTIFICATION
- Enhanced Credibility
- Proof of Advanced Knowledge
- Leadership Competencies

PREFERRED PROFILE COMPARISON

IIM EXEC ED PROFILE
Faster Promotion

GENERIC PROFILE
Strategic Thinker, Limited Specialized Training, Slower Growth

WHY CORPORATES ACCEPT IT
- Industry-Recognized Curriculum
- Updated Business Skills
- Networking Opportunities

IIM

WITHOUT IIM

CAREER PROGRESSION

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Course Objectives

The objective of an Advanced Infrastructure Project Management course is to equip participants with the knowledge and skills to effectively plan, execute, and manage large-scale infrastructure projects. The course typically focuses on key aspects such as project lifecycle management, risk assessment, budgeting, stakeholder engagement, and ensuring project sustainability. It also aims to provide insights into best practices for meeting regulatory requirements, managing resources, and optimizing project timelines, ensuring that participants are well-prepared to lead and deliver complex infrastructure projects successfully.

Planning	Execution	Risk
Budgeting	Stakeholders	Sustainability
Compliance	Resources	Timeline

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Why will organizations give promotions?

Mastery of End-to-End Project Lifecycle

Organizations seek leaders who can handle all stages of infrastructure projects from planning and feasibility to execution and sustainability.
Example: A Project Engineer who learns to manage timelines, budgets, and resources through tools like Microsoft Project and Primavera P6 can be promoted to Project Manager, leading multi-crore infrastructure initiatives with confidence.

Proficiency in Digital Tools & Emerging Technologies

Infrastructure projects are rapidly integrating BIM, GIS, IoT, and AI for monitoring, predictive maintenance, and real-time decision-making. Companies prefer professionals who can implement these tools for efficiency.
Example: An Assistant Manager using BIM-based project simulations to reduce design errors and cost overruns demonstrates measurable value, leading to a faster promotion into Planning or Technology Lead roles.

Proven ROI for the Employer

Promoting a certified professional means promoting someone who can reduce delays, optimize budgets, improve compliance, all of which save the company money.
Example: If an employee applies project risk control methods learned from the programme and saves ₹1 crore in a highway expansion project, the organization has a clear financial justification to reward them with a promotion.

Strategic Thinking & Decision-Making Skills

Senior management positions demand decision-makers who think strategically, not just operationally. This programme blends analytical frameworks with strategic case studies from global projects.

Example: After applying portfolio management techniques learned in the course, a mid-level manager aligns multiple ongoing projects with corporate goals a capability that earns recognition and promotion to Programme Director.

Exposure to Sustainability & ESG-Driven Infrastructure

Modern infrastructure organizations are judged on sustainability and ESG compliance. Leaders who can integrate green practices gain organizational trust.

Example: A professional implementing ESG reporting and sustainable procurement models post-certification can lead the organization's sustainability initiatives and move up to ESG Project Lead or Sustainability Director roles.

Industry Recognition & IIM Brand Advantage

A certification from IIM Tiruchirappalli signals advanced managerial capability and credibility. Organizations often associate this with leadership readiness.

Example: Many companies use institutional credentials as promotion benchmarks. An employee earning a post graduate certificate from IIM Trichy naturally stands out in appraisal cycles for Leadership Development Tracks or Deputy General Manager promotions.
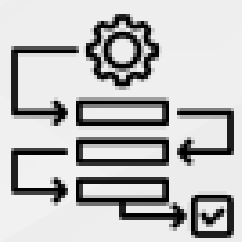
Why Organizations Trust This Certification

Backed by IIM Tiruchirappalli A Premier Management Institution

Organizations recognize the academic and professional credibility of the Indian Institutes of Management (IIMs).

Example: A certification from IIM Tiruchirappalli, known for its excellence in management education and industry integration, assures employers that participants have undergone rigorous training aligned with real business challenges. This recognition makes the certification immediately credible during appraisals, promotions, and hiring.

Curriculum Designed to Match Industry Standards

The programme is structured around the latest industry practices including project risk management, financial modeling, and digital transformation in infrastructure.

Example: When a certified professional applies modern tools like BIM, Primavera P6, or Microsoft Project, the organization benefits from reduced project delays and improved ROI. Hence, companies see this certification as directly relevant to operational success.

Practical Learning Approach with Real-World Application

The course emphasizes case studies, simulations, and capstone projects, ensuring that learners can apply theory to real project environments.

Example: An employee who completes a capstone project on smart infrastructure management can directly implement similar methodologies in the organization's ongoing projects, proving the course's applied value and making it highly accepted by senior leadership.
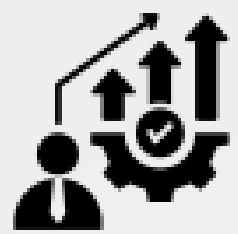
Trained by Industry-Experienced Faculty and Experts

The involvement of IIM faculty with practical industry experience assures organizations that participants are mentored by thought leaders who understand both academic rigor and business realities.
Example: Faculty members with experience in decision sciences and project governance related analytics, which organizations find extremely valuable in leadership roles.

National and Global Career Recognition

Being a Post Graduate Certificate from an IIM, it holds value not only in India but also among multinational firms and global infrastructure consultancies.
Example: Professionals applying to companies like L&T, GMR, or international project firms find the certification accepted as proof of leadership and technical competence in project management standards such as PMBOK or PRINCE2.

Creates Measurable Business Impact

Organizations value programmes that yield tangible outcomes such as cost optimization, risk reduction, and faster delivery.
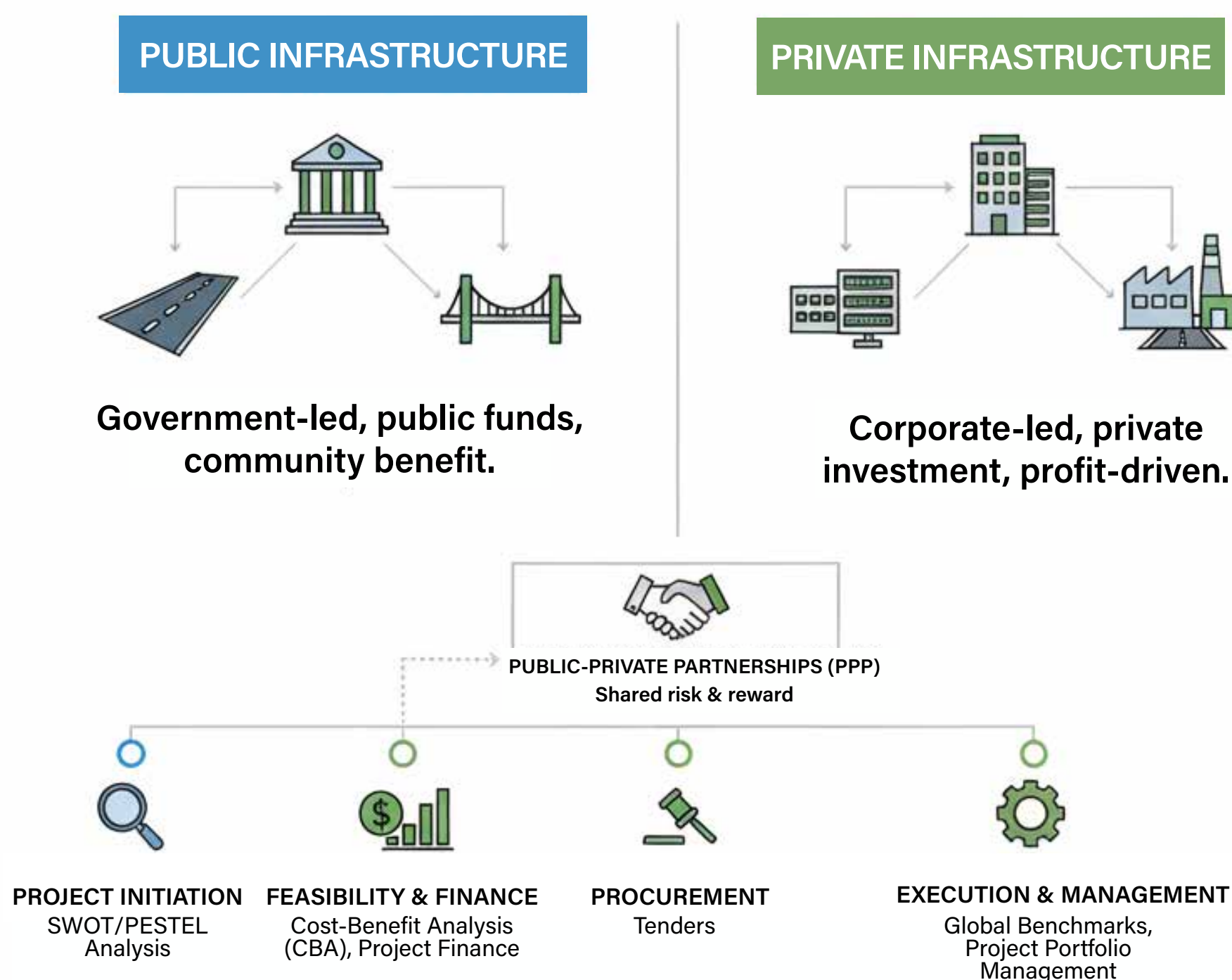**Example:** A certified professional implementing Earned Value Management (EVM) from the course helps the company maintain financial control and deliver projects on time — a visible ROI that reinforces trust in the certification.

Programme Topics in Detail

Module 1 : Introduction to infrastructure projects and Project Financial analysis

▶ **Introduction to infrastructure project management**
- Introduction to infrastructure projects and infrastructure project management
- Public and private infrastructure projects
- Global benchmarks in infrastructure project management
- Overlap of project management and general management principles

▶ **Financial approach to project portfolio management & project finance**
- Project proposal financial analysis for selection
- Cost-benefit analysis (CBA), Public Private Partnerships
- Nature of infra project and selection procedures
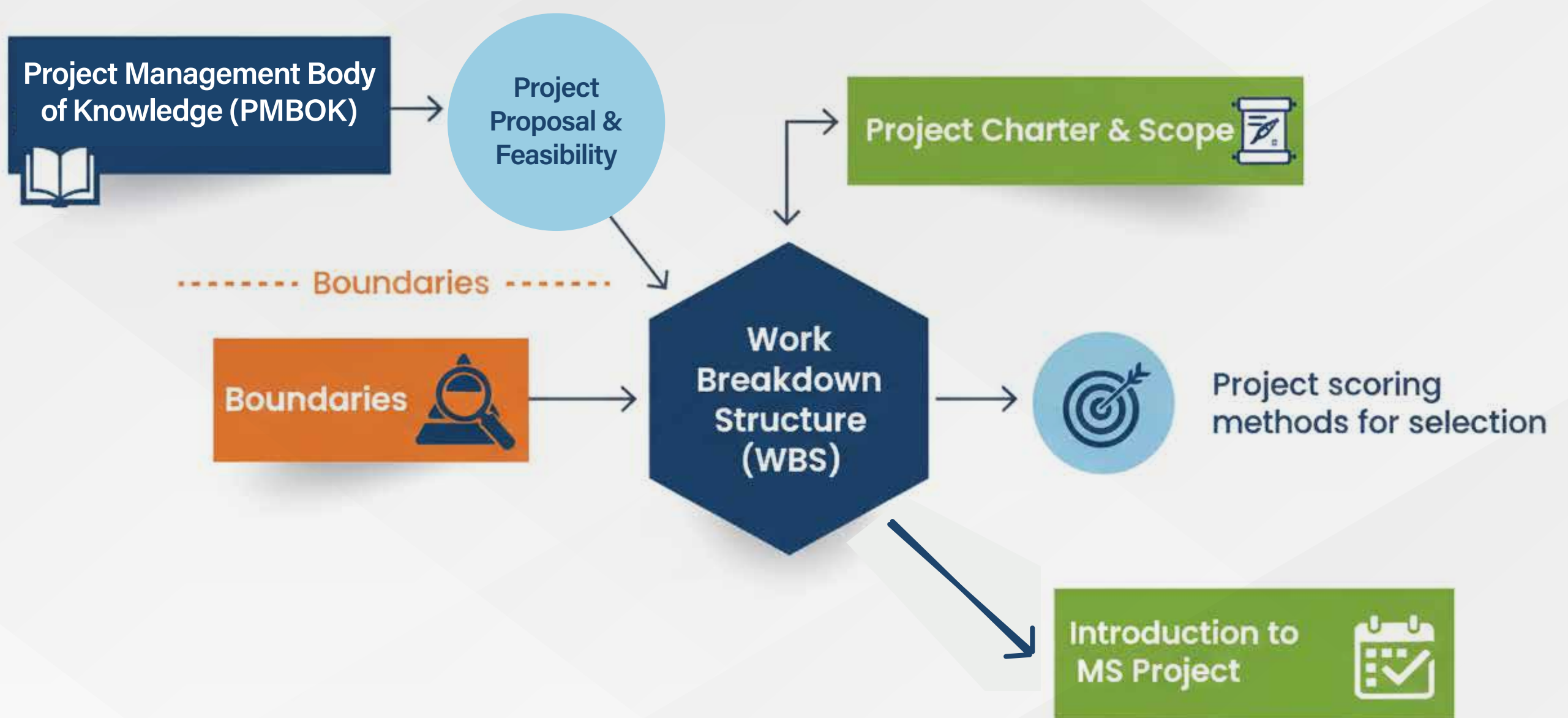- SWOT/PESTEL Analysis
- Tenders

PUBLIC INFRASTRUCTURE

Government-led, public funds, community benefit.

PRIVATE INFRASTRUCTURE

Corporate-led, private investment, profit-driven.

PUBLIC-PRIVATE PARTNERSHIPS (PPP)
Shared risk & reward

PROJECT INITIATION
SWOT/PESTEL Analysis

FEASIBILITY & FINANCE
Cost-Benefit Analysis (CBA), Project Finance

PROCUREMENT
Tenders

EXECUTION & MANAGEMENT
Global Benchmarks, Project Portfolio Management

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Module 2: Project Initiation and Planning

▶ **Project Initiation and Planning**

- Project Management Body of Knowledge (PMBOK)

- Project Proposal & Feasibility

- Project Charter & Scope

- Boundaries

- Work Breakdown Structure (WBS)

- Project scoring methods for selection

- Introduction to MS project

The charts, graphs, and visuals in this brochure are for illustrative purposes only
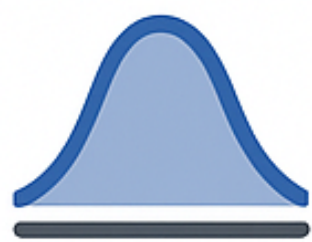
Module 3: Statistical Models and Methods

▶ **Statistical Models and Methods in Infrastructure Project**
- Exploratory data analysis & summary statistics
- Introduction to probability and sampling distributions
- Hypothesis testing (t-tests, χ^2, ANOVA)
- Regression
- Diagnostics & model fit
- Time-series basics

Exploratory data analysis & summary statistics

Introduction to probability and sampling distributions

Hypothesis testing (t-tests, χ^2, ANOVA)

Regression

Diagnostics & model fit

Time-series basics

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Module 4: Project Planning

▶ **Project prerequisites**

- Project success criteria

- Triple bottom line

- Needs analysis

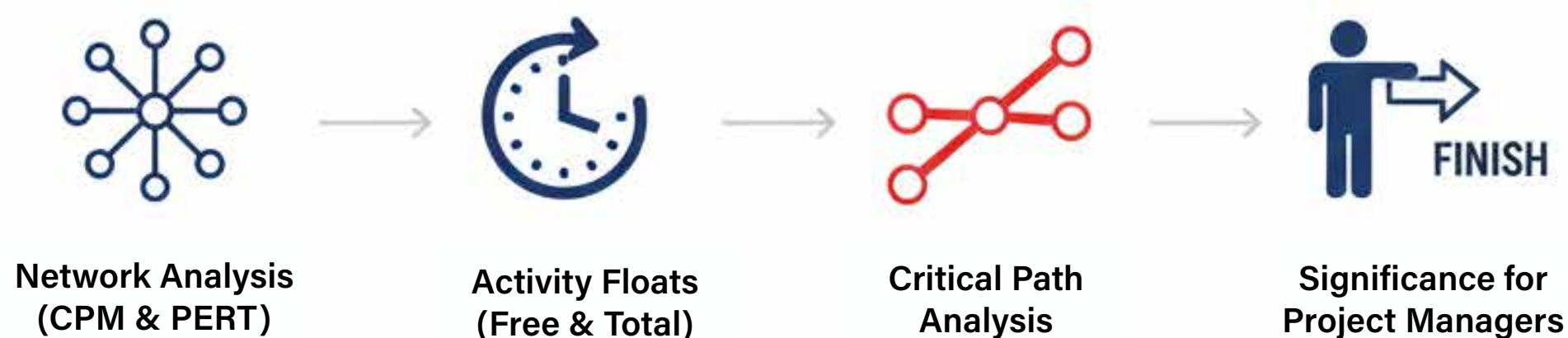- Stakeholder analysis

- Engagement and communication plans

▶ **Project schedule planning**

- Network Analysis through CPM and PERT

- Activity Floats & their significance

- Free Float & Critical Path

- Significance of Critical path for Project Managers

PROJECT PREREQIUITES

Triple Bottom Line → Need Analysis → Stakeholder Analysis & Communication → Project Criteria

PROJECT SCHEDULE PLANNING

Network Analysis (CPM & PERT) → Activity Floats (Free & Total) → Critical Path Analysis → Significance for Project Managers

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Module 5: Cost and Resource Optimisation in Infrastructure Projects

▶ **Economic Decision Analysis for Infrastructure Projects**

- Cost Estimation and Budgeting

- Artifacts of determining a budget
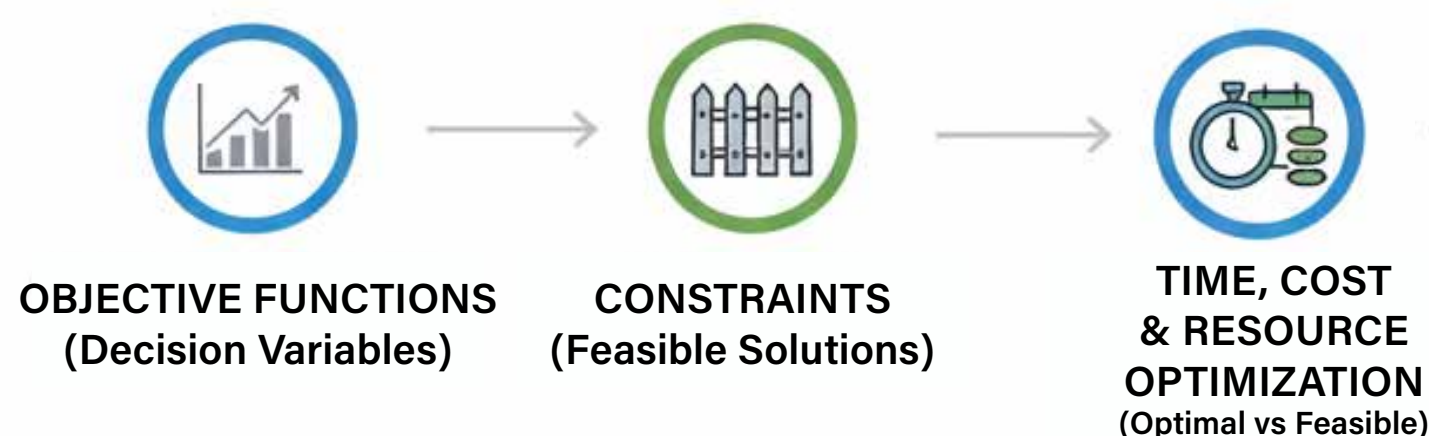
- Methods of cost estimation

- Cost estimation process

▶ **Optimization Basics and Models for Resource Allocation**

- Objective functions and decision variables

- Constraints and feasible solutions

- Optimal vs feasible solutions

- Introduction to time, cost and resource optimization

ECONOMIC DECISION ANALYSIS FOR INFRASTRUCTURE PROJECTS

COST ESTIMATION
(Methods & Process)

BUDGETING
(Artifacts)

PROCUREMENT
(Scope, Boundaries)

OPTIMIZATION BASICS AND MODELS FOR RESOURCE ALLOCATION

OBJECTIVE FUNCTIONS
(Decision Variables)

CONSTRAINTS
(Feasible Solutions)

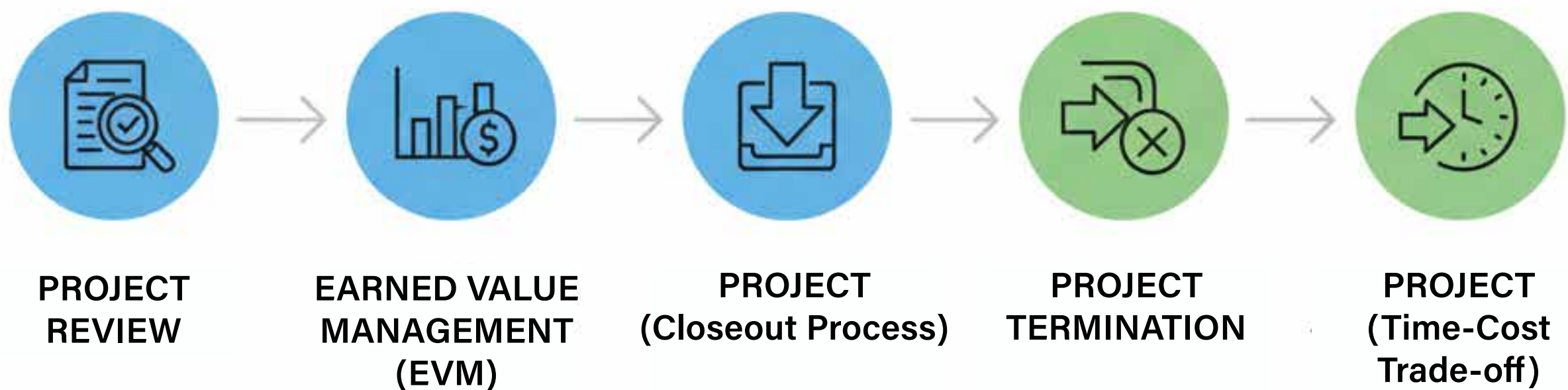**TIME, COST & RESOURCE OPTIMIZATION**
(Optimal vs Feasible)

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Module 6: Project Monitoring and Control

▶ **Project Monitoring and Control**

- Project Review
- Earned Value Management (EVM)
- Project Termination, Closeout Process
- Project Crashing – Time cost trade off
- Project crashing using LP

PROJECT REVIEW → **EARNED VALUE MANAGEMENT (EVM)** → **PROJECT (Closeout Process)** → **PROJECT TERMINATION** → **PROJECT (Time-Cost Trade-off)**

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Module 7: Project Risk Management

▶ **Project Risk Management**

- Project risks: Scope, Time and Cost

- Risk Management Process

- Schedule Risk

- Risk assessment & Risk Analysis

- Risk response & Risk contingency plan

▶ **MS Project Demo**

- Infrastructure case demo using MS Project

PROJECT RISK MANAGEMENT

**PROJECT RISKS
(Scope, Time, Cost)** → **RISK MANAGEMENT PROCESS** → **RISK ASSESSMENT
(Qualitative/ Quantitative)** → **RISK RESPONSE
(Mitigate, Accept, Transfer)** → **CONTINGENCY PLAN**

**Fundamental
Risk Management
Principles**

MS PROJECT DEMO

INFRASTRUCTURE CASE STUDY
(Utilizing MS Project for planning & tracking)

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Module 8: People Aspects in Infrastructure Project Management

▶ **People aspects in infrastructure project management**
- Organizational behaviour
- Teams and change management

ORGANIZATIONAL BEHAVIOR
(Motivation & Culture)

TEAMS
(Collaboration & Leadership)

CHANGE MANAGEMENT
(Adaptation & Communication)

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Module 9: Supply Chain Management in Infrastructure Projects

▶ **Supply chain management**

- Supply chain management concepts in Infrastructure projects
- Materials procurement management
- Contracts management

MATERIALS PROCUREMENT MANAGEMENT

(Sourcing, Logistics & Inventory)

CONTRACTS MANAGEMENT

(Vendor Agreements & Compliance)

DELIVERY & EXECUTION

(Timelines & Quality Control)

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Module 10: Project Excellence

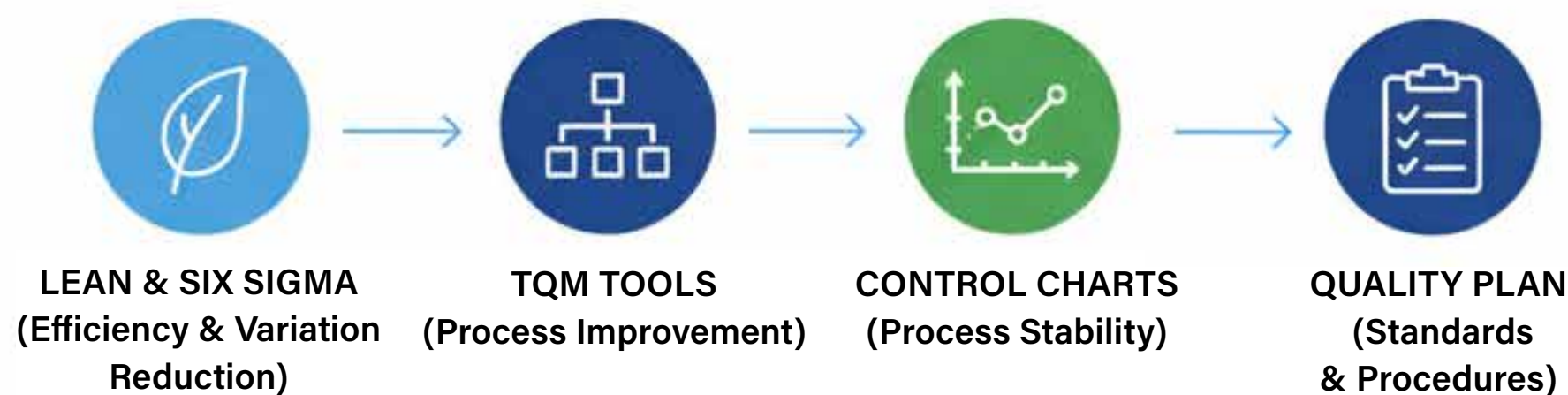▶ **Quality Management**

- Quality management in infrastructure projects
- Lean and six sigma concepts
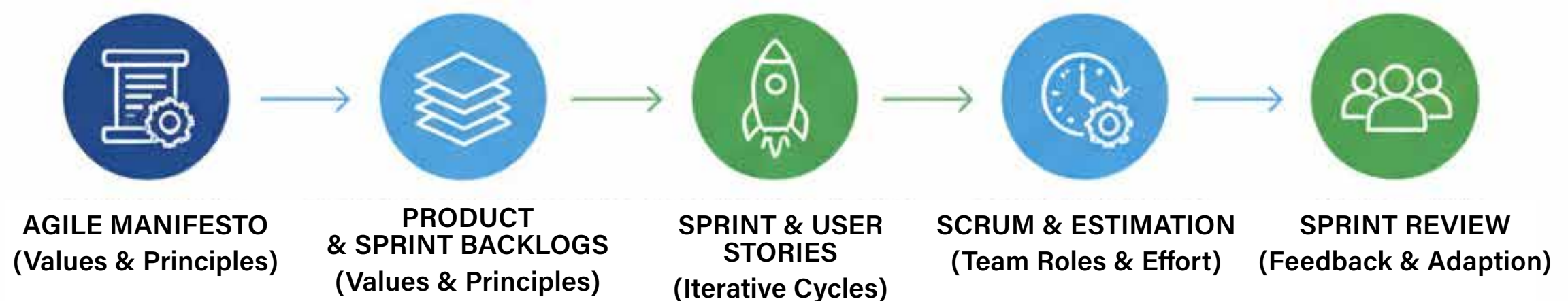- TQM tools & control charts
- Quality management plan

▶ **Agile Project Management**

- Agile versus Waterfall management
- Agile Manifesto
- Sprint, product and sprint backlogs, user stories, sprint review & scrum time estimation
- Agile management team roles

QUALITY MANAGEMENT

LEAN & SIX SIGMA
(Efficiency & Variation Reduction)

→

TQM TOOLS
(Process Improvement)

→

CONTROL CHARTS
(Process Stability)

→

QUALITY PLAN
(Standards & Procedures)

AGILE PROJECT MANAGEMENT

AGILE MANIFESTO
(Values & Principles)

→

PRODUCT & SPRINT BACKLOGS
(Values & Principles)

→

SPRINT & USER STORIES
(Iterative Cycles)

→

SCRUM & ESTIMATION
(Team Roles & Effort)

→

SPRINT REVIEW
(Feedback & Adaption)

The charts, graphs, and visuals in this brochure are for illustrative purposes only

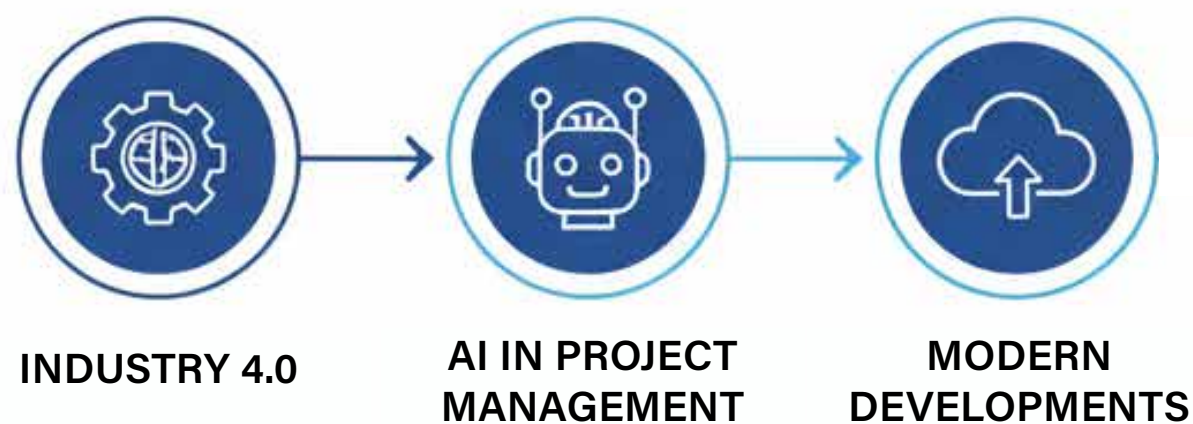# Module 11: Technology Trends in Infrastructure Management

▶ **Technology trends in Infrastructure Management**

- Technology-Enabled Infrastructure Management/ Modern Developments in Project Management
- Industry 4.0
- AI in project management

▶ **Building Information Modelling**

- Principles, functions, and real-world applications of Building Information Modelling within the architecture, engineering, and construction (AEC) industries.
- Hands-on Session on BIM.

TECHNOLOGY TRENDS IN INFRASTRUCTURE MANAGEMENT

INDUSTRY 4.0 → **AI IN PROJECT MANAGEMENT** → **MODERN DEVELOPMENTS**

Technology-Enabled Principles

BUILDING INFORMATION MODELLING (BIM)

PRINCIPLES & FUNCTIONS → **REAL-WORLD APPLICATIONS** → **AEC INDUSTRIES** → **HANDS-ON SESSION**

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Module 12: Marketing and Sustainability Aspects of Infrastructure Projects

▶ **Infrastructure-Linked Property Development**

- Identifying Property Development Opportunities
- Need for property development in infrastructure projects
- Benefits and Risks

▶ **Marketing Infrastructure Projects**

- Introduction to Marketing in Infrastructure Projects
- Market Research and Stakeholder Analysis
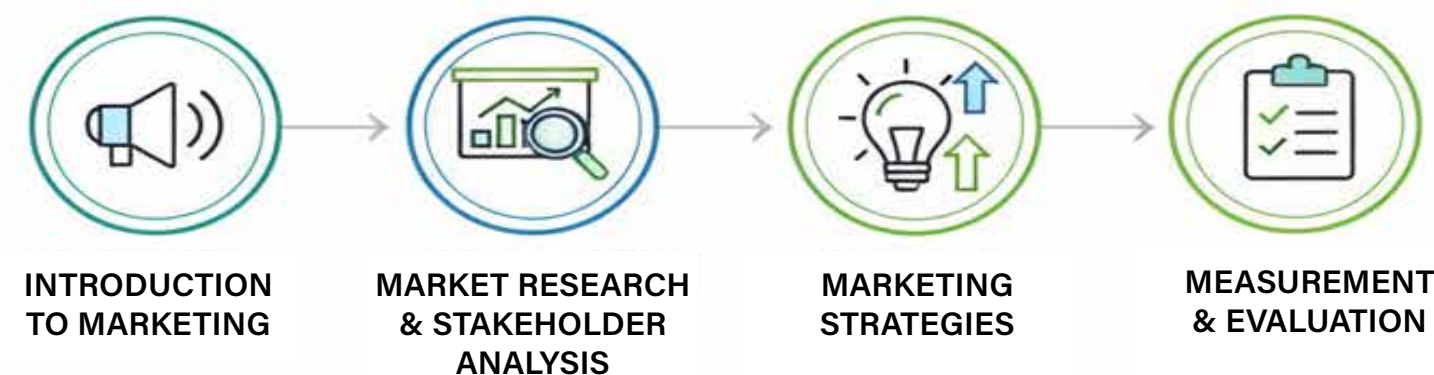- Marketing Strategies for Infrastructure Projects, Measurement and Evaluation of Marketing Efforts

▶ **Sustainability**

- Sustainability in infrastructure projects
- Sustainability reporting and certifications (for example, LEED, GRIHA)
- Circular economy concepts

INFRASTRUCTURE-LINKED PROPERTY DEVELOPMENT

IDENTIFYING OPPORTUNITIES	NEED & BENEFITS	RISKS	PROPERTY DEVELOPMENT

MARKETING INFRASTRUCTURE PROJECTS

INTRODUCTION TO MARKETING	MARKET RESEARCH & STAKEHOLDER ANALYSIS	MARKETING STRATEGIES	MEASUREMENT & EVALUATION

SUSTAINABILITY

SUSTAINABILITY REPORTING	CERTIFICATIONS	CIRCULAR ECONOMY CONCEPTS

The charts, graphs, and visuals in this brochure are for illustrative purposes only

Tools to be Covered

MS Project is a powerful tool that helps organizations plan, schedule, and track infrastructure projects with greater accuracy and efficiency. It enables clear visualization of timelines, resource allocation, dependencies, and progress, ensuring projects are delivered on time and within budget. By improving team coordination and providing real-time insights, it supports better decision-making and risk control. For professionals, gaining expertise in MS Project strengthens project planning and execution capabilities, increases confidence in managing complex tasks, and opens doors to career roles such as Project Coordinator, Planning Engineer, and Project Manager, making it a valuable asset for long-term career growth in the industry.

Primavera

Primavera is a powerful project management tool widely used for planning, scheduling, and controlling large-scale infrastructure and engineering projects. It helps professionals manage multiple projects efficiently by tracking timelines, costs, and resources in real time. With its advanced analytics and reporting features, Primavera enables organizations to minimize risks, avoid delays, and ensure on-time project delivery. For professionals, mastering Primavera demonstrates expertise in project planning and execution — key skills that enhance credibility and leadership potential. It not only improves coordination and decision-making but also positions individuals for higher managerial roles and long-term career growth in project management and operations.

Programme Directors

Srikrishna Madhumohan Govindaluri
Programme Director

Ph.D. (Clemson University)

Srikrishna Madhumohan Govindaluri holds a Ph.D. in the field of Industrial Engineering, Operations Research from Clemson University, United States and M.Tech. from NIT Nagpur. He has more than 18 years of teaching experience. Before joining IIM Tiruchirappalli, he was a faculty member at Sultan Qaboos University (Oman), IIM Indore (India), Ramapo College of New Jersey (USA) and Georgia Southern University (USA).

Middela Mounisai Siddartha
Programme Director

Ph.D. (IIT Madras)

Dr. Middela Mounisai Siddartha is a faculty in the Operations Management and Decision Sciences area at the Indian Institute of Management Tiruchirappalli. Prior to joining IIM Tiruchirappalli, he worked as a faculty at Indian Institute of Management Ranchi and as a postdoctoral research fellow at Trinity College Dublin, Ireland. He was also a visiting scientist at the Joint Research Centre of the European Commission. He received his Ph.D. from the Indian Institute of Technology (IIT), Madras. His research focuses on the sustainability of transport systems, including urban freight systems, life cycle emissions, dockless bike-sharing systems, and electric mobility. His work has been published in reputed international journals such as Transportation Research Part-A: Policy and Practice, Transportation, Transport Policy, Transportation Research Part-D: Transport and Environment, Environmental Pollution, Transportation Research Record, and Transportation in Developing Economies.

Admission Process

FILL ONLINE APPLICATION → **PROFILE SHORTLISTING**

✔ **PASS** → **ENROLLMENT**

✖ **FAIL** → **FULL APPLICATION FEE REFUND**

Duration

12 Months (Total 171 Hours)

Course Start Date

18th January, 2026

Session Timings

10:00AM – 01:15PM

Programme Fee – **INR 2,73,000 + 18% GST**

Application fee – **INR 2,000 + 18% GST**

EMI Options Available

Who Should Attend

Project Managers involved in large-scale infrastructure projects who want to enhance their skills in managing complex undertakings.

Engineers and Technical Professionals seeking to gain project management expertise to complement their technical knowledge.

Construction Managers responsible for overseeing the execution of infrastructure projects.

Government Officials and public sector professionals involved in infrastructure planning and execution.

Consultants and Advisors who work on infrastructure development projects.

Business owners from the Architecture, Construction, and Real Estate industries.

Aspiring Project Managers looking to specialize in infrastructure sectors.

Eligibility

Participants must be graduates, preferably in B.E./B.Tech, with a minimum of 2 years of work experience.

Attendance

Minimum 70% attendance is mandatory for successful completion of the programme.

Evaluation

Performance of participants will be monitored through continuous evaluation on assessments, quizzes & project works.

Recorded Sessions Guidelines

Recorded sessions will be available on the Uptop portal for a period of two months from the course completion date, including the valedictory session of the programme.

Course Roadmap

The online sessions will be held every Sunday. However, participants may have live sessions on some Saturdays if the course roadmap requires it. The course roadmap will be prepared and shared by the Programme Professor.

Saturday → **Sunday**

- = Regular Online Session
- = Occasional Live Session (as per roadmap)

Campus Immersion

3-days mandatory campus immersion (No extra Charges for the Campus Immersion & Alumni Membership)

Welcome Kit during Mandatory Campus Immersion

Note: Family/Friends or any other member who is not a registered participant in the course, will not be allowed to visit the campus at the time of campus immersion.

Programme Certificate

Upon completion of the "**Post Graduate Certificate Programme in Advanced Infrastructure Project Management**" from IIM Tiruchirappalli, the successful candidates will be awarded the Post Graduate certificate from the institute. To qualify for the certificate, participants need to meet the minimum attendance requirements and have to submit their final project reports.

भारतीय प्रबन्धन संस्थान तिरुचिरापल्ली
Indian Institute of Management Tiruchirappalli

Certificate of Completion

This is to certify that

XXXXXXX

(Roll No. YYYYYY)

has successfully completed the

Post-graduate Certificate Programme in Advanced Infrastructure Project Management

through blended learning mode

Given on the ---

Programme Director	Programme Director	Dean (Corporate Relations & Faculty Affairs)	Director

Certificate images are for illustrative purposes only and may be subject to change at the discretion of IIM Tiruchirappalli without notice.

About **Up Top Careers**

The speedy pace of the universal revolution compels working professionals not only to gain mastery of current trends, digital transformations, and platforms but also to be able to connect that knowledge to their daily job. The ability to adapt and learn evolving trends can often unlock the next step in career advancement.

Up Top Careers is a dedicated platform for working professionals to help them to adapt, overcome, improvise and stay UP on the TOP in the career climbing race.

We believe that continuous learning is the key to maintaining a competitive edge and achieving rapid career growth. The concept is not just to offer rapid executive development programmes but to make professionals self-aware of different career stages and the need for continued development, also helping working professionals to self-realize the essentials of filling the gaps to have swift career growth.

The principle of executive education is not to follow traditional learnings but to welcome the right set of combinations in the development programmes well aligned with industry needs. We do believe that the executive programmes cannot be uniform or traditional but have to be aligned with emerging industry inclinations as executives require highly actionable insights, frameworks, and strategies to apply in their own roles and processes which will empower them to meaningfully contribute to the success of their organizations and to their career growth.

Up Top Careers is the authorized admission partner for this programme of IIM Tiruchirappalli.

Always **UP** on the **TOP**

ISO certified Company 29990 : 2010

INDIAN INSTITUTE OF MANAGEMENT TIRUCHIRAPPALLI

Executive Education and Consulting Office, IIM Trichy

Phone - 0431-2505025 /5125

Email : online@iimtrichy.ac.in

Website - www.iimtrichy.ac.in

IN COLLABORATION WITH

UP TOP CAREERS

Empowering Working Professionals to Lead

UNIVERSAL POTENTIAL TALENT OPTIMIZATION PLATFORM

✉ info@uptop.in   🌐 www.uptopcareers.com   📞 9910180728

Note-uptopcareers is the authorized admission partner for this program of IIM Tiruchirappalli.

All the sessions will be delivered in the English language only