

AI POWERED CONSTRUCTION MANAGEMENT

Plan Smarter. Execute Better. Deliver On Time.



Project Management & BIM Institute
★★★★★

AI POWERED CONSTRUCTION PROJECT MANAGEMENT

Plan Smarter. Execute Better. Deliver On Time.

Harness the power of AI, real-time data, and advanced analytics to plan, monitor, and deliver construction projects with greater accuracy, clarity, and control.

AI-Powered Planning

Schedule Intelligence

Cost & Risk Control

Real-Time Dashboard

Predict. Prevent. Perform.

BUILD SMARTER. DELIVER STRONGER.



Tender & Contract →
 Planning & Scheduling →
 Resource & Procurement →
 Execution & Monitoring →
 Risk & Change Management →
 Quality & Safety Control →
 Handover & Possession

ONE PLATFORM. END-TO-END CONTROL. SUCCESS DELIVERED.

AI-POWERED PLANNING	SCHEDULE INTELLIGENCE	COST & RISK CONTROL
WBS, activities and resource planning	Schedule analysis and delay signals	Forecasts, EVMS and mitigation
REAL-TIME DASHBOARDS	DOCUMENT INTELLIGENCE	QUALITY & CLOSEOUT
Power BI tracking and KPIs	Contracts, RFIs and data extraction	Inspections, punch lists and handover

Primavera P6 • Microsoft Project • Power BI • EVMS • AI Tools



AI Features for Construction Project Management

An integrated learning framework for applying AI, structured project data and analytics across the construction project lifecycle.

AI⁺ Powered Construction Project Management



Smart Project Management | On-Time | On-Budget | Data-Driven Decisions





Project Management & BIM Institute



AI POWERED CONSTRUCTION PROJECT MANAGEMENT

SMARTER PLANNING. BETTER EXECUTION. ON-TIME DELIVERY.

Harness the power of AI, real-time data, and advanced analytics to plan, monitor, and deliver construction projects with greater accuracy, clarity, and control.



AI-Powered Planning

Generate WBS, activities, resources & schedules in seconds



Schedule Intelligence

AI analyzes schedule & predicts delays before they happen



Cost & Risk Control

Forecast cost, identify risks & avoid overruns



Real-Time Dashboard

Live project tracking with Power BI dashboards



Predict. Prevent. Perform.

AI-driven insights for proactive decision making

AI FEATURES FOR CONSTRUCTION PROJECT MANAGEMENT

AI-Powered Project Planning



- Automatically generate WBS, Activities & Milestones
- Smart resource allocation
- Optimize logic, durations & constraints

Schedule Intelligence



- AI analyzes Primavera P6 / MS Project schedules
- Predict delays & critical issues
- What-if scenario analysis

Cost Management



- AI-based cost forecasting
- Budget vs Actual analysis
- Earned Value Management (EVMS)

Risk Management



- AI identifies & ranks project risks
- Probability & impact analysis
- Mitigation recommendations

Productivity Tracking



- Track manpower, equipment & material productivity
- AI detects productivity variances
- Improve efficiency & output

Real-Time Dashboards



- Power BI interactive dashboards
- KPIs for time, cost, quality, safety & progress
- Mobile-friendly reports

Document Intelligence



- AI reads contracts, RFIs, submittals & drawings
- Extract key data
- Reduce manual effort & errors

Claims & Delay Analysis



- AI-assisted delay analysis
- EOT & claims support
- Forensic schedule analysis

Quality & Safety



- Track inspections & NCRs
- AI alerts for safety violations
- Ensure compliance

Handover & Closeout



- Track punch lists
- Documentation & asset handover
- Lessons learned capture

END-TO-END PROJECT MANAGEMENT WITH AI



Tender & Contract



Planning & Scheduling



Resource & Procurement



Execution & Monitoring



Risk & Change Management



Quality & Safety Control



Handover & Possession

MASTER AI-POWERED CONSTRUCTION PROJECT MANAGEMENT

- ✓ Primavera P6 | MS Project | Power BI | EVMS | AI Tools
- ✓ Practical Training | Live Projects | Industry Experts
- ✓ Be Future-Ready with AI Skills

BUILD SMARTER.
DELIVER STRONGER.
GROW FASTER.

JOIN NOW & UPSKILL

THE FUTURE OF CONSTRUCTION IS AI



Professional Credential Pathways

MDEA professional credentials presented in the supplied certification artwork.



MCP-EoTCP
MCP Certified
EoT Claim
Practitioner



UK Accredited Certification Forum



MDEA_CPMP
Certified Project
Management
Practitioner



UK Accredited Certification Forum

Integrated Course Architecture

The course combines the existing construction project management curriculum with AI-enabled workflows and analytics.

Module	Core coverage / practical output
1. Project setup & planning	OBS, EPS, PBS, WBS; scope, activities, durations, logic, leads/lags and project calendars.
2. Scheduling & monitoring	Manual/auto scheduling, forward/backward scheduling, critical path, schedule updates, look-ahead programmes and progress measurement.
3. Procurement & resources	Procurement schedule control, material tracking, delay monitoring, resource allocation and utilization.
4. EVMS & financial control	S-curves, CPI, SPI, EAC, schedule/cost variance, budget vs actual and cash-flow visibility.
5. Claims & schedule assurance	EOT claim preparation, delay causes, delay cost analysis, BVA checks, SPM early warnings and corrective actions.
6. AI & project analytics	AI-assisted planning concepts, schedule intelligence, risk indicators, document intelligence, productivity analytics and workflow automation opportunities.
7. Power BI dashboards	Portfolio, schedule, milestone, resource, procurement, financial, risk/claims and productivity dashboards.
8. Integrated capstone	Build a project-controls review pack linking baseline, progress, procurement, cost, risk and management actions.

End-to-End Project Lifecycle

Tender & Contract → Planning & Scheduling → Resource & Procurement → Execution & Monitoring → Risk & Change Management → Quality & Safety Control → Handover & Possession



AI Applications & Project-Control Deliverables

AI-powered planning

Draft WBS/activity structures, support resource planning, and review logic/duration assumptions with professional validation.

Schedule intelligence

Analyze Primavera P6 / Microsoft Project schedules, highlight potential delay patterns, and support what-if scenario reviews.

Cost management

Support budget-versus-actual analysis, EVMS interpretation, cost forecasting and financial reporting.

Risk management

Structure risk registers, summarize probability/impact inputs and support mitigation planning.

Productivity tracking

Track labor, equipment and material productivity; identify variance patterns for review.

Real-time dashboards

Use Power BI reports for time, cost, quality, safety and progress KPIs.

Document intelligence

Assist with extracting and organizing information from contracts, RFIs, submittals and drawings; verify extracted data against source documents.

Claims & delay analysis

Organize delay-event records, schedule evidence and EOT documentation; maintain professional and contractual review.

Quality & safety

Track inspections, NCRs and safety observations; support alerts and compliance reporting.

Handover & closeout

Track punch lists, handover documents, asset information and lessons learned.

AI outputs should be reviewed by qualified project professionals. Contractual determinations, schedule acceptance, safety decisions and claims remain subject to project requirements and authorized review.



AI Construction Command Center — Visual Concept

Illustrative dashboard concepts for project health, schedule performance, cost performance, risk signals, progress overview and AI-generated management insights.



Construction Project Management Training: Maximizing Project Time-Cost Control & Cash Flow as a Manager

Why This Training is Critical for Managers / Entrepreneurs in Construction



CONSTRUCTION PROJECT MANAGEMENT

[ACPM + EVMS + EOT+ BVA+ SPM + POWER BI]

- (EARNED VALUE MANAGEMENT SYSTEM)
- EXTENSION OF TIME CLAIM (EoT) CLAIM
- DELAY ANALYSIS METHOD – DAM
- MDEA CERTIFIED PROFESSIONAL ONLINE EXAM - MDEA
- GLOBAL CERTIFICATION PM & EOT PRACTITIONER
- BVA – BASELINE VALIDATION AUDIT SPECIAL TOOL
- SPM – SLIPPAGE PREVENTION METHOD
- PBI – CONTROL DASHBOARD FOR INFORMED DECISION

**Smart Project Management,
On-Time, On-Budget Delivery**
Duration: 3+ MONTHS



CEO – 

VP – 

GM – 

DGM – 

PM – 

CM – 

LiveClass
MDEA
Project Management & BIM Institute

Smart Project Management, On-Time, On-Budget Delivery











Managing a construction site effectively is not just about completing work on time; it's about controlling costs, ensuring smooth cash flow, and handling claims efficiently. This training integrates **ACPM+EVMS+EOT+BVA+SPM+POWER BI** to give you a **holistic approach to site management, progress tracking, and financial control.**

CONSTRUCTION PROJECT MANAGEMENT



Smart Project Management, On-Time, On-Budget Delivery

With this system, you can:

- ✓ Track scheduled vs. executed work
- ✓ Measure progress accurately
- ✓ Ensure timely billing & payment collection
- ✓ Manage claims and delay
- ✓ Maintain strong project financial health

How This Training Helps You as a Manager

1 Advanced Construction Project Management (ACPM)

How it Benefits You:

- Enables you to **plan, monitor, and control** site activities efficiently.
- Ensures that your project progresses according to the schedule.
- Helps you **avoid overruns in cost, time, and resources.**

2 Earned Value Management System (EVMS)

How it Benefits You:

- Tracks **actual vs. planned work** to measure performance.
- Ensures that the **budget aligns with the progress** on site.
- Identifies **early warnings for delays or cost overruns.**

👉 **Example:** If 50% of the project timeline has passed but only 30% of the work is done, EVMS highlights the issue immediately so you can take corrective action.

3 Extension of Time (EOT) & Delay Analysis Method (DAM)

How it Benefits You:

- If delays occur due to external reasons (weather, approvals, material supply issues), you can **legally extend the project timeline.**
- Helps in preparing a **solid delay analysis report** to support claims.
- Protects you from **liquidated damages (LDs) and penalties.**

👉 **Example:** If your subcontractor delays the work, you can document it with DAM and file an EOT request to avoid penalties.

4 Baseline Validation Audit (BVA)

How it Benefits You:

- Ensures that your **initial project schedule is realistic and achievable**.
- Identifies errors or unrealistic assumptions before the project starts.
- Improves scheduling accuracy, reducing future disputes.

👉 **Example:** If your initial project plan has **unrealistic deadlines**, BVA helps adjust them before work begins to prevent future disputes.

5 Slippage Prevention Method (SPM)

How it Benefits You:

- Identifies tasks that are **at risk of delay** before they impact the overall project.
- Provides **real-time solutions** to keep the project on track.
- Ensures **smooth execution of work** without unnecessary downtime.

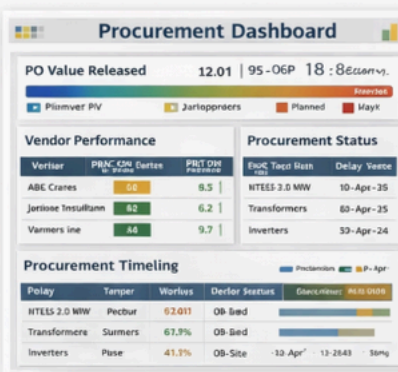
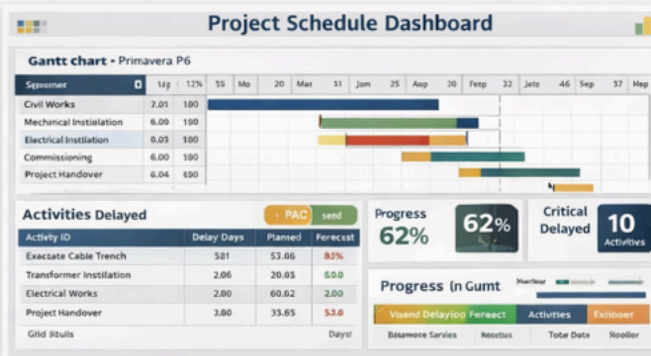
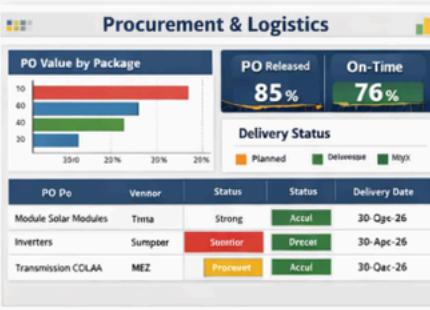
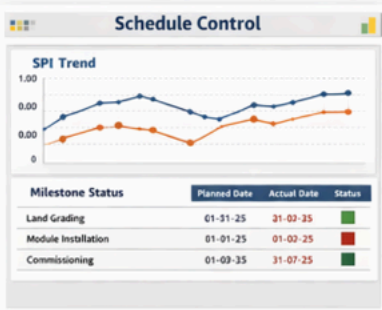
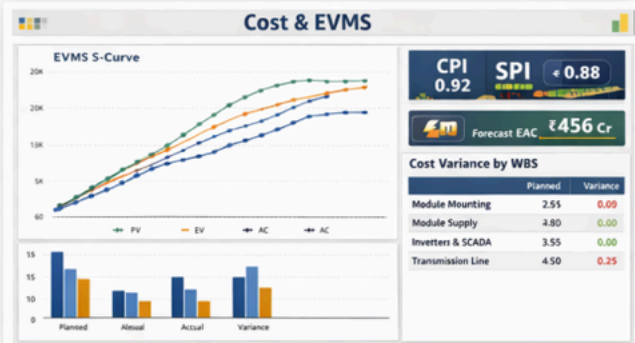
👉 **Example:** If material deliveries are frequently delayed, SPM alerts you to secure alternative suppliers early.

6 Power BI - Project Control Dashboard

How it Benefits You:

- Creates a **visual, real-time dashboard** to monitor project progress, cost, and cash flow.
- Helps track **work completed, work in progress, and pending tasks** in one place.
- Allows **faster decision-making** based on actual data.

👉 **Example:** Instead of manually checking reports, you can **view real-time site updates** from anywhere using Power BI.



From Work Completion to Billing & Payment – How This Training Helps You Get Paid Faster

◆ **Work Completion → Work Certification → Bill Certification → Demand for Payment → Payment Collection**

1 Work Scheduled vs. Work Executed

- Track how much work was planned vs. how much is actually completed.
- If there's a gap, address issues before they impact billing.

2 Work Progress Measurement

- Accurately measure progress using EVMS and Power BI.
- Validate whether enough work is done to **raise the next invoice**.

3 Work Certification

- Once a milestone is achieved, prepare and submit a **work certification report**.
- Ensures that **clients accept completed work without disputes**.

4 Bill Certification

- After approval of work certification, raise an invoice.
- Ensure invoices align with the **agreed milestones and contract terms**.

5 Demand for Payment & Collection

- Follow up with clients using legally supported claims (EOT, DAM, EVMS).
- Avoid delays in payments by ensuring **all documentation is accurate and up to date**.

Why This Training is a Game-Changer for Construction Managers

- ✓ **Better Site Management** – Stay in control of labor, material, and schedule.
- ✓ **Faster Billing & Payments** – Work certification aligns with progress tracking.

- ✓ **Stronger Cash Flow** – Avoid payment delays with structured claims and tracking.
- ✓ **Reduced Delays & Disputes** – Use DAM & EOT to manage risks proactively.
- ✓ **Real-time Project Monitoring** – Power BI dashboard gives instant insights.

Final Takeaway

If you want to **increase profits, reduce disputes, and improve cash flow** in your construction projects, this training will give you **practical tools** to manage your site like a pro. You'll **minimize delays, get paid faster, and keep projects running smoothly.**



Course Technical Scope

Project Setup

- International project settings
- OBS – Organization Breakdown Structure
- EPS – Enterprise Project Structure
- PBS – Product Breakdown Structure
- WBS – Work Breakdown Structure

Planning

- Scope of work creation
- Activity definition & duration
- Construction logic relationships
- Lead & Lag management
- Project calendar (India & Gulf)

Scheduling

- Manual and auto scheduling
- Forward scheduling
- Backward scheduling
- Activity step concept
- Client & contractor monitoring

Project Monitoring

- Update schedule methods
- Work certification method (PPM)
- Look Ahead Program (LAP)

Procurement Monitoring

- Procurement schedule control
- Material tracking
- Procurement delays monitoring

Project Controls & Reporting

Earned Value Management

- Financial S-Curve
- Cost Performance Index (CPI)
- Schedule Performance Index (SPI)
- Estimate at Completion (EAC)

Critical Path Monitoring

- Detailed CPM reports
- Resource utilization reports
- Resource profile graphs
- Activity usage spreadsheets

Variance Analysis

- Delay analysis
- Schedule variance
- Cost variance

EOT Claim & Delay Analysis

Covered topics:

- EOT claim preparation
- Delay causes identification
- Contract clause-14 program
- Delay cost analysis
- Delay dispute management
- Case study of real EOT claim draft

Tools used

- Special delay analysis spreadsheets

Advanced Project Control Tools

Baseline Validation Audit

Verification of:

- Schedule logic
- Float
- Constraints
- Resource allocation

Slippage Prevention Method (SPM)

- Early delay detection
- Preventive planning
- Corrective actions

Certifications

Two professional certifications:

1 MCP-CPMP

MDEA Certified Project Management Practitioner

2 MCP-EoT Claim Practitioner

Extension of Time Claim Preparation & Award Competency

- Delay cost calculation templates

Power BI Project Dashboard

Integration of:

- Primavera P6
- Microsoft Project
- Power BI

Dashboards include:

Project Portfolio Dashboard

- Multiple project progress

Resource Dashboard

- Resource utilization
- Resource allocation

Milestone Dashboard

- Milestone tracking

Task Overview Dashboard

- Work progress tracking

Financial Dashboard

- S-Curve
- Budget vs actual cost

Gulf doesn't pay for experience — it pays for project control skills.

Industry Career Focus

Program designed for:

- Civil Engineers
- Construction Managers
- Project Engineers
- Planning Engineers
- PMC Professionals
- Contractors
- CXO's, Project Directors

Career Growth Path

Site Engineer → Planning Engineer → Project Manager → Vice President

