

CONSTRUCTION PLANNING MANAGEMENT SYLLABUS COPY

Engineered for skill enhancement.



PROGRAM HIGHLIGHTS

Accredited Certificates:

- ✓ Program approved ISO Certification

Internships:

- ✓ Industry-relevant opportunities provided

Placement Assistance:

- ✓ Career guidance from industry experts

Basic to Advanced Level Training:

- ✓ Learn from experienced construction management professionals

Live & Recorded Lectures:

- ✓ Flexible learning at your convenience

Real-Time Projects:

- ✓ Hands-on minor & major projects



ABOUT US

- **OUR MISSION :**

NxtSync is a pioneering EdTech company committed to bridging the gap between theoretical learning and practical application. Our mission is to empower students with cutting-edge construction planning and management skills that enhance employability and prepare them for a dynamic and data-driven industry.

- **OUR VISION--UPSKILL:** Empowering professionals for the future.
- **INNOVATE:** Fostering creativity and breakthrough solutions in construction.
- **EXCEL:** Preparing industry-ready construction managers.



WHY CONSTRUCTION PLANNING MANAGEMENT?

- ➤ High Demand for Skilled Construction Managers
 - Cost-effective Project Planning & Execution
 - Streamlined Project Delivery with High ROI
 - Career Opportunities in Project Management, Scheduling, Cost Control, Risk Management
 - Scalability in Residential, Commercial, and Infrastructure Projects
 - Integration with Construction Technologies & Smart Building Solutions



LEARNING PATH

- Introduction to Construction Management
- Project Planning & Scheduling Techniques
- Cost Estimation & Budgeting
- Construction Project Risk Management
- Site Management & Safety Protocols
- Construction Contracts & Legal Aspects
- Quality Control & Assurance in Construction Projects
- Sustainable Construction & Green Building Practices
- Construction Technologies & BIM (Building Information Modeling)
- Capstone Projects & Industry Research



DETAILED MODULE BREAKDOWN

Module 1: Introduction to Construction Management

- Fundamentals of Construction Management
- Overview of Construction Project Lifecycle
- Roles & Responsibilities of a Construction Manager
- Project Stakeholder Management

Module 2: Project Planning & Scheduling Techniques

- Project Scheduling Concepts & Tools (MS Project, Primavera)
- Work Breakdown Structure (WBS)
- Critical Path Method (CPM) & Gantt Chart
- Resource Allocation & Optimization



Module 3: Cost Estimation & Budgeting

- Methods of Cost Estimation
- Preparing Cost Estimates & Budgets
- Project Cost Control & Tracking
- Earned Value Management (EVM)

Module 4: Construction Project Risk Management

- Identifying Risks in Construction Projects
- Risk Assessment Techniques
- Risk Mitigation & Contingency Planning
- Health, Safety, and Environmental Risk Management

Module 5: Site Management & Safety Protocols

- Site Organization & Logistics
- Construction Site Management Best Practices
- Occupational Health & Safety Regulations
- Safety Training & Accident Prevention



Module 6: Construction Contracts & Legal Aspects

- Types of Construction Contracts
- Understanding Legal Frameworks in Construction
- Managing Claims & Disputes
- Contract Administration & Negotiation

Module 7: Quality Control & Assurance in Construction Projects

- Quality Management Systems in Construction
- Standards & Regulations (ISO, ASTM)
- Inspection & Testing Procedures
- Continuous Improvement & Best Practices

Module 8: Sustainable Construction & Green Building Practices

- Principles of Sustainable Construction
- Green Building Certifications (LEED, BREEAM)
- Energy-Efficient Design & Materials
- Waste Management & Environmental Impact Reduction



Module 9: Construction Technologies & BIM (Building Information Modeling)

- Introduction to BIM & Digital Construction Tools
- Collaborative Project Delivery with BIM
- Virtual Design & Construction (VDC)
- Integration of IoT & Smart Technologies in Construction

Module 10: Capstone Projects & Industry Research

- Real-Time Construction Planning Projects
- Industry Collaboration & Research-Based Projects
- Construction Management Portfolio Building
- Project Development & Performance Evaluation



ASSIGNMENT'S & ASSESSMENTS

- Weekly hands-on assignments
- Mid-term Construction mini-projects
- Final capstone Construction management project
- Live presentations & discussions



TOOLS & FRAMEWORKS USED

- Project Management & Scheduling Tools:
MS Project, Primavera, GanttPRO
- Cost Estimation & Budgeting Tools:
Procore, Buildertrend, PlanSwift
- BIM & Construction Design Tools:
Revit, AutoCAD, Navisworks, SketchUp
- Risk Management & Safety Tools:
Aconex, Procore Safety, PlanGrid
- Quality Management Tools:
Procore Quality & Safety, Buildertrend, Smartsheet



RECOMMENDED READING

Construction Management:

"Construction Project Management" - Peter Fewings

"Project Management for Construction" - Chris Hendrickson

"The Lean Construction Handbook" - Gerald L. Adams

"Principles of Construction Management" - Roy Pilcher



WHY CHOOSE NXTSYNC?

- ✓ Industry-Aligned Construction Management Curriculum
- ✓ Hands-on Real-World Projects
- ✓ Expert Mentorship & Career Guidance
- ✓ Flexible Learning Schedule
- ✓ ISO-Certified Construction Planning & Management Training Program

Start Your Construction Management Journey with NxtSync Today!



THANK YOU

