

The background is a stylized illustration of a construction site. It features the wooden framework of a building under construction. In the foreground, there are several construction workers wearing yellow hard hats and safety vests. One worker on the left is pointing upwards, and another in the center is holding a large sheet of paper, likely a blueprint. A third worker is visible in the bottom right corner. The overall scene is set against a muted, greyish-blue background.

Construction Project Management Track

Program Overview

Comprehensive Skills for Construction Project Success

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Construction Project Management Track

Program Overview

Comprehensive Skills for Construction Project Success

Phase 1: Foundational & Core Concepts

(Months 1 & 2 - Online)



Strong Theoretical Understanding

- Core PM Principles
- Strategic Planning Frameworks
- Effective Risk Identification
- Stakeholder Engagement Practices

Theory

Foundations

Frameworks



Construction Methodologies & Tools

- Critical Path Method (CPM)
- PERT for Schedule Estimations
- Earned Value Management (EVM)
- Advanced Resource Leveling

CPM

PERT

EVM

Scheduling



Hands-On Practical Application

- Real-World Problem-Solving
- Core Calculation Proficiency
- Industry Software Introduction
- Project Network Development

Practice

Calculations

Software



Deep Dive: Earned Value Management (EVM)

EVM is particularly useful in forecasting the cost and time of the project at completion, based on actual performance to date.

- ✓ Enhance project performance evaluation.
- ✓ Forecast accurate project duration.

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Month 1: Principles, Planning & Scheduling (Online)



Week 1

Intro to Construction PM



Week 2

Project Planning & Scope



Week 3

Scheduling: CPM & PERT



Week 4

Advanced Scheduling

Core Scheduling Methods

CPM Detailed duration estimates for critical tasks.

PERT High-level overview considering uncertainties.



Forecasting Performance

EVM Forecasts project cost and time at completion.

ES Transforms EVM into time-based metrics.

"EVM enhances evaluation of project schedule performance and aids in making evidence-based decisions."

— PMI: The earned schedule

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Month 2: Resource, Cost, Risk, Quality, Contracts & HSE

(Online)

Week 5



Resource Allocation

Optimizing team & material deployment.



Cost Estimating

Accurate initial project budgeting.

Week 6



Cost Control

Managing budget deviations.



Earned Value Management

Track project performance.

Week 7



Risk Management

Identify, assess, and mitigate threats.



Quality Assurance

Ensure project standards are met.

Week 8



Contracts & Procurement

Legal and acquisition processes.



HSE Management

Health, Safety, Environment protocols.



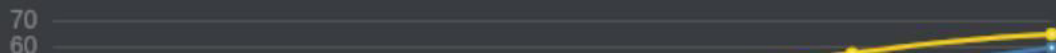
Mini Project Scoping

Applying learned skills for your Capstone project. Initiate planning.



Unpacking Project Performance

EVM: Value vs. Time





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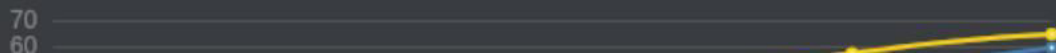
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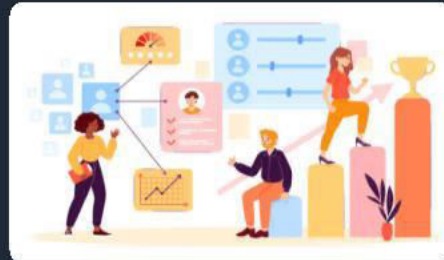
Phase 2: Industry Immersion & Integrated Project

(Month 3 - Offline)



Intensive Concept Application

Deep dive into real-world scenarios, applying theoretical knowledge to gain practical proficiency.



Hands-On Learning

Skill Development



Guided Real-World Simulation

Directly engage with project challenges under expert

Strategic Project Blueprinting

- ✓ Develop detailed project schedules.
- ✓ Formulate robust risk management plans.
- ✓ Integrate advanced planning techniques.



Gantt Chart for Scheduling



Risk Assessment Framework

CPM & PERT

Risk Register

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Month 3: Capstone Mini Project - Schedule & Risk Plan Development



Week 9

Project Initiation & Detailed Scheduling

Define scope & objectives. Craft detailed project schedules.

CPM Analysis

Gantt Charts



Week 10

Resource & Cost Planning

Allocate resources & estimate budgets. Systematically identify potential risks.

EVM Integration

Risk Registers



Week 11

Risk Analysis & Reporting

Assess risk impact. Develop mitigation plans & generate reports.

Risk Matrix

Progress Reports



Week 12

Showcase & Career Launch

Present capstone findings. Prepare for professional career paths.

Presentation

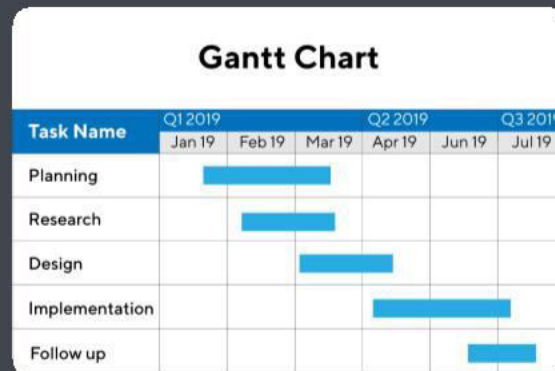
Networking



Core Scheduling Methodologies

PERT: High-level overview of project milestones.

CPM: Detailed duration estimates for critical activities.



Earned Value Management (EVM)

EVM: Manages resources, schedules, costs, and requirements.

Earned Schedule (ES): Transforms EVM metrics for precise time forecasting.

"EVM is particularly useful in forecasting the cost and time of the project at completion."

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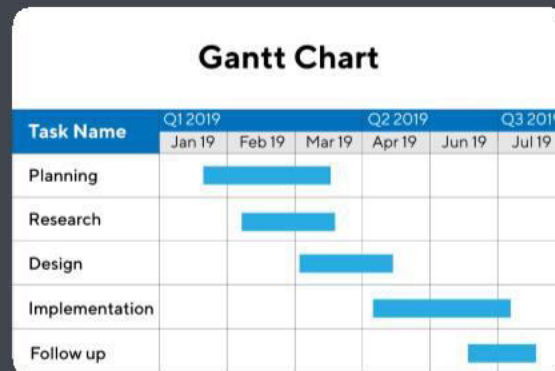
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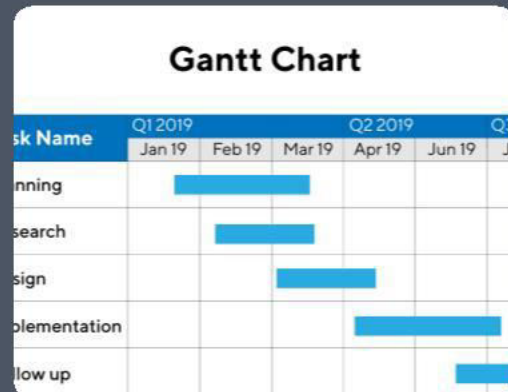
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Capstone Mini Project Highlights



Advanced Planning & CPM Scheduling

- Detailed WBS Developed
- Activity Sequencing Mastered
- Preliminary CPM Schedule Created



WBS

CPM

Scheduling



Strategic Resource & Budget Development

- Optimized Resource Allocation
- Preliminary Budget Developed
- Cost Controls Implemented



Budgeting

Resources

Finance



Proactive Risk Identification & Mitigation

- Thorough Risk Identification



Hands-on Learning & Mentor Feedback

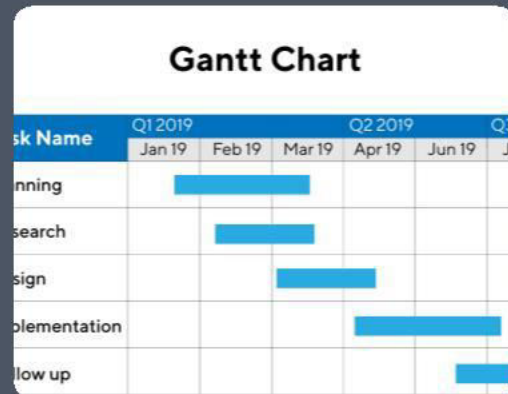
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Hands-on Learning & Mentor Feedback

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Career Launchpad & Graduation



Final Project Showcase

Justify design & project outcomes.

Capstone Achievement



Resume & Portfolio Mastery

Craft compelling professional materials.

Industry-Ready Tools



LinkedIn & Networking Edge

Build powerful industry connections.

Strategic Engagement



Interview Readiness Training

Practice technical & behavioral skills.

Confidence Building



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Direct interaction with industry experts.

Career Connections



Graduation & Certification

Celebrate program completion & recognition.

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