JUPITER PRIME

Consulting • Training • Advisory

جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

BIM Fundamentals Course for Engineers and Project Managers

10 – 14 October 2027
Muscat

jupiterprime.uk

info@jupiterprime.uk

Registered in the United Kingdom and Saudi Arabia

BIM Fundamentals Course for Engineers and Project Managers

Ref: 567_20954 **Date:** 10 – 14 October 2027 **Location:** Muscat **Fees:** 6500 GBP

BIM Fundamentals is a 1-week training course for engineers, project managers and site managers new to model-based project work, and it ends with a BIM adoption roadmap for the participant's own project. More clients now ask for models, viewers and digital records, and managers who cannot read or question a model lose control of decisions made inside it. Jupiter Prime Training opens BIM Fundamentals to people who manage projects rather than author models.

Why BIM Fundamentals Matter Now

Three pressures push managers towards models today: clients who write model deliverables into contracts, design teams who share coordinated models instead of drawing sets, and site teams who expect to check quantities and sequences on a tablet. Managers who grasp the basics ask the right questions at design reviews and spot gaps before they become variations; those who do not sign off information they cannot test. The course introduces ISO 19650, the international series for organising information about buildings and civil engineering works, in plain terms, alongside the model uses most projects adopt first.

Who Gains Most from BIM Fundamentals

- Design engineers moving from drawing-based checking to reviewing shared models
- Project managers responsible for schedule, cost and change decisions
- Site and construction managers who plan sequences, logistics and inspections
- Commercial and planning staff who take quantities and progress from project data

A contractor or consultancy starting its first model-based project gains most when its project, site and commercial leads attend together.

BIM Fundamentals Capabilities

Participants gain enough fluency to question a model, read its data and decide where it helps their own project.

- Assess which model uses suit each project stage and sector — project sponsors
- Apply model viewers to navigate, measure, section and mark up federated models — design review meetings
- Calculate and check quantities extracted from models against manual take-offs — commercial teams
- Specify the roles and information duties each party holds on a model-based project — appointment discussions
- Weigh how models change progress reporting, change control and risk registers — project controls
- Build a staged adoption roadmap with quick wins, training needs and measures — senior management

Key BIM Fundamentals Terms

- Building Information Modelling BIM — producing and managing shared digital models that combine geometry with data about each building or infrastructure element.
- Model Use — a defined purpose for a model, such as design review, quantity take-off, sequencing or handover.
- Common Data Environment CDE — the agreed single source where project information is stored, shared, approved and archived.
- Federated Model — a combined view of separate discipline models used to review the whole design together.
- Level of Information Need — the agreed amount of geometry, data and documentation each element needs at each stage.
- Model Viewer — software that lets non-authors open, navigate, measure and comment on models without editing them.

BIM Fundamentals Day by Day

Day 1: Why Projects Move to Models

- From Drawings to Information Models — Seeing What Changes for Managers
- Model Uses Across the Life Cycle — Matching Purposes to Project Stages
- Client Requirements and Contract Clauses — Recognising What Is Being Asked
- Benefits and Pitfalls From Real Projects — Setting Realistic Expectations
- ISO 19650 in Plain Terms — Following the Information Management Cycle

Day 2: People, Roles and Information Flow

- Appointing and Appointed Party Roles — Clarifying Who Produces What
- BIM Execution Plan Basics — Reading the Rules Your Project Follows
- Common Data Environment Workflows — Finding the Latest Approved Information
- Information Containers, Naming and Status — Trusting What You Download
- Responsibility Matrices — Linking Tasks to Disciplines and Deadlines

Day 3: Reading and Checking Models

- Model Viewer Navigation — Walking Through Floors, Zones and Systems
- Sections, Measurements and Mark-Ups — Raising Clear Design Queries
- Federated Model Reviews — Spotting Gaps Between Disciplines
- Element Properties and Data — Checking What the Model Really Contains
- Clash Reports for Managers — Deciding Which Conflicts Need Escalation

Day 4: Models and Project Controls

- Quantity Extraction and Checking — Supporting Estimates and Valuations
- Linking Models to Schedules — Visualising Sequence and Logistics
- Model-Based Progress Reporting — Showing Completed Work by Zone
- Change Control With Model Revisions — Tracing Variations to Their Source
- Risk Registers Informed by Models — Identifying Design and Site Risks Earlier

Day 5: Practising the BIM Adoption Roadmap

- Project Readiness Check — Applying Model Use Selection to Your Project
- Roles and CDE Set-Up Sketch — Applying Information Flow to Your Team
- Quick-Win Model Uses — Applying Viewer and Quantity Checks
- Skills and Training Plan — Building Capability for Each Role
- BIM Adoption Roadmap — Completing the Staged Plan for Your Project

Applying BIM Fundamentals After the Course

- Lead one design review using a federated model in a viewer, recording queries as mark-ups rather than emails
- Compare model-extracted quantities with manual take-offs for one package and report the differences to the commercial lead

BIM Fundamentals Questions FAQ

What are BIM Fundamentals and why do they matter now?

BIM Fundamentals are the core ideas, roles and model uses behind model-based project work. They matter now because clients increasingly require models, and managers must be able to read, question and use them in decisions.

Which roles gain most from BIM Fundamentals training?

Design engineers, project managers, site managers and commercial staff gain most. They make cost, schedule and quality decisions on schools, roads, residential towers and industrial facilities where models now carry the information.

How do BIM Fundamentals differ from a BIM coordination or software course?

They focus on understanding and using models as a manager rather than authoring or coordinating them. Software and coordination courses build skills for specialists; this course builds informed clients and project leaders.

What do you bring back from BIM Fundamentals?

You bring back a staged adoption roadmap for your own project, listing chosen model uses, roles, quick wins and the skills each team member needs.

BIM Fundamentals: The Way Forward

The BIM adoption roadmap first informs which model uses the project adopts in its next stage and who needs training. Project managers own it, site and commercial leads apply its quick wins, and sponsors track its measures. After the first stage, revisit which model uses actually saved time and which only added effort.