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COURSE BROCHURE

Advanced Building Information Modelling (BIM) Training Course

5 – 16 September 2027
Muscat

Advanced Building Information Modelling (BIM) Training Course

Ref: 125_3204 **Date:** 5 – 16 September 2027 **Location:** Muscat **Fees:** 11700 GBP

Advanced Building Information Modelling BIM is a 2-week training course for BIM managers, BIM coordinators, design managers and project engineers who lead model-based delivery, and it ends with a BIM execution plan and coordination protocol for a live project. Clients now expect structured information at every stage, and federated models expose design conflicts long before they reach site. Jupiter Prime Training presents Advanced Building Information Modelling BIM as a discipline of information, not only geometry.

Why Building Information Modelling BIM Matters Now

Three forces shape model-based delivery today: appointing parties that write precise information requirements into contracts, multidisciplinary supply chains that must exchange models in open formats, and asset owners who want usable data at handover. Handled well, they cut rework and resolve clashes before fabrication; handled badly, they leave duplicated models, lost revisions and disputes. The course rests on ISO 19650, the international series for organising and digitising information about buildings and civil engineering works.

Who Gains Most from Building Information Modelling BIM

- Information leads who write exchange information requirements and set the level of information need
- Coordinators who federate discipline models and run clash detection cycles
- Design leads who sequence model production across discipline authors
- Project engineers who rely on model data for site queries, quantities and approvals
- Digital construction specialists who configure the common data environment and its permissions

A delivery team from one appointed party gains most when its information lead, coordinator and design lead attend together and agree one set of model rules.

Building Information Modelling BIM Capabilities

Participants move from authoring models to governing how models, documents and metadata flow between appointed parties across the project life cycle.

- Specify exchange information requirements and level of information need — appointing party briefing
- Design a BIM execution plan with responsibility matrix and model breakdown — lead appointed party
- Configure common data environment states, naming and status codes — document controllers and auditors
- Build a federated model and clash rule set by discipline pair — coordination meetings
- Assess model quality with validation checks and open format exports — design sign-off
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Communicate coordination issues through issue registers and viewpoints — site and design teams

Key Building Information Modelling BIM Terms

- Exchange Information Requirements EIR — the appointing party's statement of what information is needed, when, in what format and for which purpose.
- BIM Execution Plan BEP — the delivery team's response explaining how information will be produced, coordinated, checked and shared.
- Common Data Environment CDE — the agreed source of information where containers move through work in progress, shared, published and archived states.
- Federated Model — a combined view of separate discipline models, each still owned and edited by its own author.
- Clash Detection — automated checking of a federated model for hard, clearance and workflow conflicts between elements.
- Level of Information Need — the agreed geometry, attributes and documentation each model element must carry at each stage.

Building Information Modelling BIM Day by Day

Day 1: Information Management Context

- ISO 19650 Concepts and Roles — Who Owns Which Information Duty
- Appointing and Appointed Parties — Mapping Contractual Information Relationships
- Information Delivery Cycle — Aligning Model Stages With Project Gateways
- Organisational Information Requirements — Linking Asset Strategy to Project Models
- Digital Maturity Assessment — Choosing Where to Start Improving Practice

Day 2: Writing Information Requirements

- Exchange Information Requirements Drafting — Defining Purpose, Format and Timing
- Asset Information Requirements — Shaping Handover Data for Operators
- Level of Information Need Tables — Balancing Geometry Against Attribute Depth
- Classification Systems — Selecting a Structure for Elements and Spaces
- Tender Response Evaluation — Scoring Supplier Information Capability

Day 3: Building the BIM Execution Plan

- Pre-Appointment BEP — Demonstrating Delivery Team Capability
- Responsibility Matrix — Allocating Model Elements to Task Teams
- Model Breakdown Structure — Splitting Volumes, Zones and Disciplines
- Master Information Delivery Plan — Scheduling Containers Against Milestones
- Mobilisation Testing — Proving Software, Exchange and Access Before Production

Day 4: Common Data Environment Workflows

- Container Naming Convention — Making Every File Traceable
- Status and Revision Codes — Controlling Suitability for Use
- Work in Progress to Shared Transitions — Setting Approval Gates
- Permissions and Audit Trails — Protecting Sensitive Model Content
- CDE Platform Configuration — Matching Folders and Metadata to the Plan

Day 5: Open Model Exchange

- Open Format Export Settings — Preserving Properties Across Platforms
- Model View Definitions — Filtering Exchanges for Each Recipient
- Property Sets and Parameters — Keeping Attribute Names Consistent
- Shared Coordinates and Survey Points — Aligning Models on One Origin
- Exchange Validation Rules — Catching Missing Data Before Issue

Day 6: Federation and Coordination Methods

- Federation Strategy — Choosing Linked, Merged or Cloud Aggregation
- Coordination Zones and Priority Rules — Ordering Discipline Resolution
- Clash Rule Sets by Discipline Pair — Reducing False Positives
- Clearance and Maintenance Zones — Protecting Access for Future Operation
- Coordination Meeting Protocol — Turning Clash Results Into Actions

Day 7: Issue Tracking and Model Quality

- Issue Viewpoint Workflows — Assigning Issues to Model Authors
- Model Checking Rules — Testing Naming, Levels and Element Data
- Quality Dashboards — Reporting Model Health to Design Leads
- Design Sign-Off Criteria — Deciding When a Model Is Fit to Share
- Lessons Learned Logs — Feeding Coordination Findings Into Templates

Day 8: Construction and Site Use of Models

- Fabrication Models — Handing Approved Geometry to Specialist Contractors
- Model-Based Site Queries — Answering Technical Questions From the Field
- Quantity Extraction Rules — Supporting Cost Checks From Model Data
- Field Verification Mark-Ups — Recording Deviations Against Design
- Change Control Links — Tracing Variations to Model Revisions

Day 9: Handover and Asset Information

- Equipment Data Drops — Structuring Records for Facility Teams
- Asset Information Model — Moving Project Data Into Operation
- Handover Acceptance Checks — Proving Completeness Before Practical Completion
- Information Security Planning — Deciding Which Model Content to Restrict
- Performance Review of Suppliers — Measuring Information Delivery Against the BEP

Day 10: Practising the BIM Execution Plan and Coordination Protocol

- Live Project Requirements Review — Applying EIR Drafting to a Real Brief
- Responsibility Matrix Build — Applying Task Team Allocation to the Live Project
- Clash Rule Configuration — Applying Discipline Pair Rules to Sample Models
- CDE Workflow Walkthrough — Applying Status Codes to Live Containers
- BIM Execution Plan and Coordination Protocol — Completing the Work Product for Issue

Applying Building Information Modelling BIM After the Course

- Run a mobilisation test of the common data environment with every task team, checking naming, status codes and model exchange before production starts
- Lead the first coordination cycle using the discipline pair clash rules and an issue register, then report open issues to design leads

Building Information Modelling BIM Questions FAQ

What is Advanced Building Information Modelling BIM and why does it matter now?

Advanced Building Information Modelling BIM is the management of model information across a project, not only its authoring. It matters now because clients write information requirements into contracts and expect coordinated models and reliable asset data at handover.

Which roles gain most from Advanced Building Information Modelling BIM training?

BIM managers, coordinators, design managers and project engineers gain most. They set information requirements, federate discipline models, run clash cycles and use model data for site decisions, so they shape how every task team produces and shares information.

How does Advanced Building Information Modelling BIM differ from a software authoring course?

It focuses on information management, coordination and the execution plan rather than authoring tools. A modelling course builds elements; this course governs how many models are specified, federated and handed over.

What do you bring back from Advanced Building Information Modelling BIM?

You bring back a BIM execution plan and coordination protocol for a live project. It includes a responsibility matrix, CDE workflow rules, clash rule sets and an issue tracking process ready for your next design stage.

Building Information Modelling BIM: The Way Forward

The BIM execution plan and coordination protocol first informs how the delivery team mobilises: who authors which model, how containers move through the CDE and which clashes are resolved first. Information leads, coordinators and task team leaders use it at every exchange. After the first coordination cycle, revisit clash priorities and the level of information need against site feedback.