

# BSI Training Academy

## **Building Information Modelling (BIM) training courses**

- ISO 19650
- BIM and Smart Cities
- BS 1192
- PAS 1192 series

Embedding digital  
innovation and  
accelerating global  
adoption of BIM





## BIM – transforming the way we work

Building Information Modelling (BIM) is a collaborative way of working underpinned by digital technologies, which allow for more efficient methods of designing, delivering and maintaining physical built assets throughout their entire lifecycle.

Greater efficiencies can be realized due to significant pre-planning during the design and construction phases, providing comprehensive information at handover stage.

### What are the benefits of BIM?

- Faster and efficient processes
- Increased productivity and speeds up delivery
- Reduced uncertainty
- Controlled whole-life costs and environmental data
- Avoidance of rework costs
- Improved safety
- Opportunity to secure both private and public sector contracts
- Reduced on-site waste
- Increased efficiency and visibility at operational stage

### ISO standards are good news for the construction sector

- They help remove barriers to collaborative working and competitive tendering across borders
- They lay the foundations for a level playing field for international markets and they foster trade
- They drive consistency across projects

Two international standards have been published to enable BIM to flourish across projects and borders, benefitting the industry as a whole. ISO 19650 parts 1 and 2 define the collaborative processes for the effective management of information throughout the delivery and operational phase of assets when BIM is being used.

These are in addition to existing BS and PAS standards around the various aspects of building information modelling.

“The course was presented very well. It was more advanced than I expected but I kept up and am very pleased with the amount I learned. The tutor answered my questions and I’m now implementing at work what I learned.”

**BIM course participant**





# BIM training courses

Whether you're an owner, design consultant, main contractor, sub-contractor, or project manager, training will help you to understand the opportunities that collaboration brings within a virtual digital environment.

You may want to know how to implement BIM within your organization or supply chain, or expand BIM knowledge internally so that all teams have a good understanding. Or you may have a specific requirement for more detail – whether that's health and safety or asset management.

BSI is instrumental in shaping international standards, and you'll benefit from the knowledge of our tutors who are experts in their field.

As contractors, governments and agencies around the world are increasingly looking at the adoption of standards for best practice, keep your knowledge up-to-date by planning your BIM training programme.

BIM training courses	Days
BIM Fundamentals	2
BIM Strategic Understanding	0.5
BIM Strategic Implementation	1
BIM Digital Built Britain, IoT and Smart Cities	1

BIM masterclasses	Days
BIM ISO 19650 Part 2: Project Delivery Phase	1
BIM PAS 1192 Part 3: Asset Management	1
BIM BS 1192 Part 4: Handover Information Exchange	1
BIM PAS 1192 Part 5: Security and BIM	1
BIM PAS 1192 Part 6: Health and Safety	1



# Your training journey with BSI

Our range of courses is designed to meet the needs of your entire business, from operational teams to senior leaders. Our training programmes support the learning journey of people at every stage – from understanding the requirements of a standard to leading a team of auditors, as well as tools and techniques to improve the performance of your business.

To enable your teams to find the right level of training, we've built a pathway which starts at level 1 for introductory courses and includes courses up to level 4. For a more detailed explanation of the different levels please read through the table below:

	Stage:	Ideal if you are:	What will I learn?
	<b>Understand</b> Introductory and requirements courses	New starters or those in need of an overview or a refresh	The requirements, terms and concepts of a standard
	<b>Implement</b> Implementation and lead implementer courses	Those responsible for implementing a management system or processes to conform to a standard	The skills required to plan, implement and manage a management system or standard compliance
	<b>Prove it's working</b> Internal and lead auditor courses	Anyone wishing to become an internal auditor or lead a team of auditors	The skills needed to conduct internal, supplier or third-party audits
	<b>Building resilience</b> Tools and techniques that enable performance improvement in specific business areas	Those looking at ways to embed a continual improvement culture	Recognizing and mitigating emerging risks, and looking for opportunities to improve your business

## BIM training courses

### Building Information Modelling (BIM) Fundamentals

This course is designed to raise your awareness and introduce you to the basic principles of BIM.

It will explain how BIM principles help to reduce waste in construction and asset management. We'll provide you with an overview of the standards that define BIM implementation and the fundamental processes of a Common Data Environment (CDE).

This course is ideal if you're adopting BIM practices into your organization or helping your clients or supply chains to adopt it.

It will be particularly useful for construction and asset management professionals including project managers, asset managers, designers, constructors, manufacturers, maintenance contractors, and information managers.

Duration: two days



### BIM Strategic Understanding

This course is designed to give you a strategic understanding of how BIM can benefit your organization, your clients and supply chain. It will also cover the impact of digitization, lean and collaborative approaches on the delivery and use of built assets, highlighting the importance of placing BIM within project delivery and asset management processes.

This course is ideal if you're involved in communicating the benefits of BIM within your organization.

It's particularly useful for chief officers, directors and senior partners with project and portfolio responsibilities.

Duration: half a day



### BIM Strategic Implementation

This course will help you implement the benefits of digitization, lean and collaborative approaches in the delivery and use of built assets. It will also provide an introduction to ISO 19650, the two-part standard for building information modelling (BIM), and collaborative working.

You'll be able to understand the methods for setting clear purposes and priorities as part of a BIM implementation strategy, and gain an appreciation of UK PAS 1192-3 and BS 8536 for infrastructure and buildings.

This course is ideal if you're a senior manager tasked with introducing BIM to your organization, or if you're involved in BIM processes for project delivery and asset management.

Duration: one day



### BIM: Digital Built Britain, BIM Level 3, IoT and Smart Cities

Attention is now turning to the nature and implications of BIM and beyond; including social integration, Smart Cities (Communities), Geographical Information Systems (GIS), Internet of Things (IoT) and Smart Contracts.

This course will help you engage with the implications of the wider scope of built environment data and information management. You'll start to understand how you can exploit the opportunities that this might provide.

Please note that this course has been developed with a UK focus but it may still be of interest to you.

This course is ideal for clients, asset owners, designers, construction, commissioning and facility managers who may need to anticipate the latest developments in the creation and management of the built environment.

Duration: one day



"I really enjoyed the training and the tutor was superb, especially when applying the subject matter against real world examples. I came into the course with a little bit of knowledge and left feeling that not only did I have a good understanding of the requirements my company needs to adhere to, but also the whole wider picture and how it effects the end users of projects."

**BIM course participant**



# BIM Masterclasses

## BIM ISO 19650 Part 2: Project Delivery Phase

This course will help you understand the information management processes that are needed for a design and construction project to be delivered using BIM according to ISO 19650 Part 2: Project Delivery Phase.

It follows on from the BIM Fundamentals course, where information management concepts and principles are introduced.

This course is ideal for project clients, designers (architects, structural and civil engineers, services engineers, etc.), main contractors and sub-contractors, manufacturers of complex products and components.

Asset and facilities managers will also find it helpful to find out how operational information is specified and delivered during a construction project.

Duration: one day



## BIM PAS 1192 Part 3: Asset Management

This course aims to give you a detailed understanding of the PAS 1192-3 standard.

It explains how information requirements are developed for different life-cycle events, and the different roles involved in BIM Level 2 asset information management.

This course is ideal if you're involved in communicating the benefits of BIM within your organization.

It's particularly useful for:

- Asset or facilities managers working on behalf of asset owners or operators
- Asset contractors or in-house teams delivering maintenance, repairs, minor refurbishment works and condition surveys

Project information managers (client side or supply side) may also find it helpful to understand how operational information gets specified as part of project Exchange Information Requirements (EIR).

Duration: one day



## BIM BS 1192 Part 4: Handover Information Exchange

This course will help you obtain the benefits of COBie as the digital information exchange between design and supply chain, and the client or operator. It will give you an introduction to BS 1192 and collaborative working.

It also highlights the importance of clear Asset Information Requirements and a checkable digital Plan of Work.

This course is ideal if you're involved in communicating the benefits of BIM within your organization.

It is also particularly useful for design and construction managers charged with delivering COBie, typically within a BIM Level 2 project.

Duration: one day



## BIM PAS 1192 Part 5: Security and BIM

This course will help you address security implications for built assets from information modelling.

It will explain how the components of PAS 1192-5, security-mindedness, relate to each other.

This course is ideal for clients, designers, facilities, construction and commissioning managers who may need to implement security policies in relation to the built environment.

Duration: one day



## BIM PAS 1192 Part 6: Health and Safety

This course will help you understand the benefits of structured health and safety information and its digital information exchange amongst design and supply chain, and the client or operator. The importance of clear Asset Information Requirements (AIR) and a checkable digital Plan of Work will be emphasized.

This course is ideal for clients, designers, facilities, construction and commissioning managers charged with delivering health and safety within a collaborative or BIM project.

Duration: one day





# Management systems training

At BSI, we're as innovative today as we've always been – bringing together experts in a range of industry sectors to help make our world a safer place. Because we help shape international standards, there's no one better to help train you and your staff on how to implement management systems to make your business more secure, more successful and more resilient.

In addition to offering BIM training courses, we have many training solutions that companies working in construction and the built environment are already using to improve their business. We can train your staff at all levels and help you maintain your focus as you strive for continual improvement.



## Quality Management Systems – ISO 9001

Delivering quality products and services is more crucial than ever for survival and long-term success. Having an internationally recognized quality management system (QMS) allows you to enhance organizational performance, increase customer satisfaction and gain a competitive edge.

- Requirements
- Implementation
- Lead Implementer
- Internal Auditor
- Lead Auditor
- Senior Management Briefing



## Environmental Management Systems – ISO 14001

Environmental management is no longer a moral choice but a business necessity. Organizations that recognize the benefits of a sustainable model are best positioned to thrive in changing environmental conditions. An ISO 14001:2015 environmental management system helps you drive sustainable growth, stimulate innovation and gain access to new markets.

- Requirements
- Implementation
- Lead Implementer
- Internal Auditor
- Lead Auditor
- Senior Management Briefing



## Occupational Health and Safety – ISO 45001

The world's first global standard for occupational health and safety, ISO 45001, provides a framework to improve employee safety, reduce workplace risks and create better, safer working conditions all over the world.

- Requirements
- Implementation
- Lead Implementer
- Internal Auditor
- Lead Auditor
- Senior Management Briefing



## Business Continuity Management – ISO 22301

Learn how to establish a business continuity management system within your organization and clarify roles and responsibilities during disruption. You can minimize downtime, speed up recovery time and reassure customers with your ISO 22301 management system.

- Requirements
- Implementation
- Lead Implementer
- Internal Auditor
- Lead Auditor
- Senior Management Briefing



## Energy Management – ISO 50001

Whether you're interested in certifying to ISO 50001 to reduce costs, comply with legislation or increase your sustainability, implementing the standard provides a systematic approach to achieving all three. Our training courses are designed to help you understand and implement an energy management system based on ISO 50001 with confidence. With training, you could achieve greater savings while avoiding common mistakes.

- Requirements
- Implementation
- Lead Implementer
- Internal Auditor
- Lead Auditor
- Senior Management Briefing
- Transitioning to ISO 50001:2018



## Information Security Management – ISO/IEC 27001

Learn how to manage information security by training with our experts. ISO/IEC 27001:2013 is the current international standard that sets out the requirements to establish, implement and continually improve an information security management system (ISMS). Since their inception in the early 1990s, global information security standards have grown in rigor and recognition. So too have information security threats and the best ways to manage them. This standard reflects current best practice for information security management. It provides specific recommendations to help you establish an ISMS, monitor its performance and implement improvements when necessary. It also enables external assessment and certification of an organization's information security.

- Requirements
- Implementation
- Lead Implementer
- Internal Auditor
- Lead Auditor
- Senior Management Briefing



# Training delivered the way you want it



Training is rarely a one-off need and BSI can help you along every step of the journey. From every-day training needs to ongoing skills development and support, we provide business-wide training programmes. Depending on your requirements, we can deliver training in a number of ways:



## Choose a date and venue near you with one of our public training courses

We hold our training courses at venues all over the world.

If you have training requirements across various sites, we'll be happy to discuss a delivery programme to suit your business needs.



## Online training for complete flexibility

BSI Connected Learning Live is a real-time, online way of training that delivers our world-class learning programmes to you through an engaging and interactive experience, regardless of your location.

You can either opt to take a public version of a course, along with delegates from other businesses, or you could choose to book an in-house course for your organization within your own virtual classroom – ideal if you have multiple offices or locations.



## On-site training at your premises

If you have a group of people to train and a single location is practical, we can deliver training at your premises.

This is especially relevant if you're exploring sensitive topics like information security.



## Training globally

Please note that not all BSI training courses are available in all countries in which we operate, or in all formats. However, with access to our virtual training platform, Connected Learning Live, we'll do our best to support you, regardless of your location. Talk to us about your training needs and we'll help you develop a plan to suit your individual business needs. Please speak to our expert training advisors.



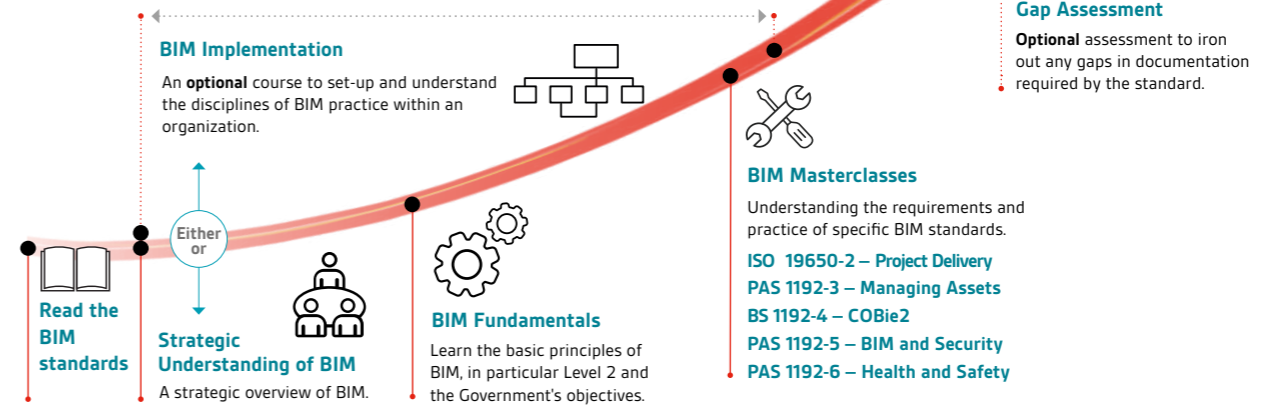
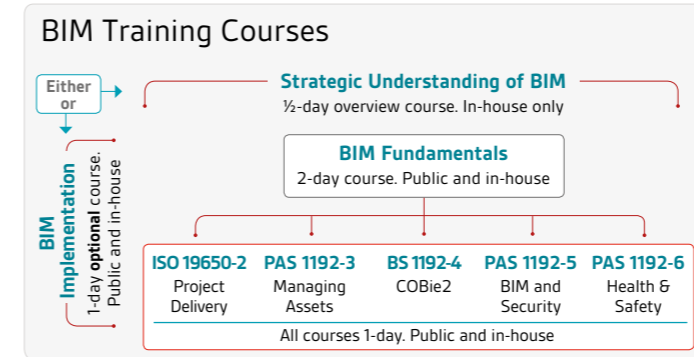
## Your copy of the standard

For standards-based training courses, you'll be given a loan copy of the standard for the duration of your course. We recommend that you're familiar with the content of the standard before the course, and it may be beneficial to bring your own copy so that you can add notes if you choose.



## Prerequisites

Some of our courses have specific prerequisites - usually having a working knowledge of the standard is a good starting point. To make sure that you and the other delegates on your course get the best value from your tutor, please ensure that you meet the entry criteria. Please contact us if you're unsure.



# Training for your business

For BIM Managers, Project Managers and implementation teams and anyone looking to improve their knowledge of BIM.



## Over 82%

of survey respondents said they'd benefit from training around BIM



Organizations have different levels of awareness of BIM. To help you prepare, **training is key**

### Points to consider

- Do your teams or suppliers have the correct level of knowledge?
- Does your organization have pockets of good BIM knowledge but not everywhere?
- Are you working towards BIM certification?

**Book today: [bsigroup.com/training](https://www.bsigroup.com/training)**



Find out more  
Call: **+65 6270 0777**  
Email: **training.sg@bsigroup.com**  
or visit: **bsigroup.sg**



## BSI – your partner of choice

Working in 193 countries, we pride ourselves on the expertise, integrity and professionalism of our people. We help clients 'make excellence a habit' and aspire to be the business partner of choice.

We deliver a diverse portfolio of standards, training, certification, advisory and supply chain solutions to improve business performance. BSI's solutions can help organizations improve performance, manage quality and risk, protect brands and create a foundation for Organizational Resilience.

We look forward to working in partnership with you.