Capability Statement

Contents

About us	4
Services	6
Clients	18

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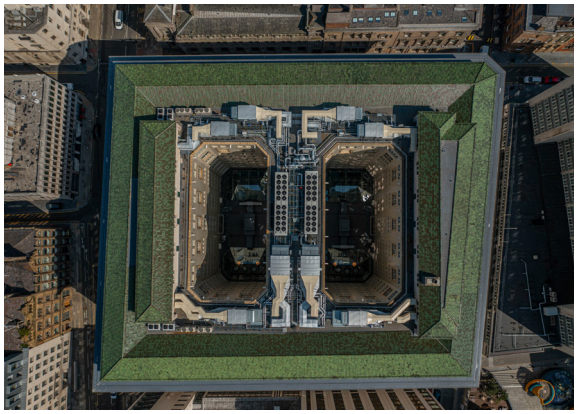


India Buildings, Liverpool

About us.

About Us
Digital innovators in the built environment

At BIM Academy we are a team of visionaries, on a mission to digitally transform the built environment.

We act with integrity and we always do what we say we are going to do. We believe in trust and transparency, we're authentic and agile, we work throughout every continent to bring the very best in future-thinking to client projects.

We are digital construction specialists, skilled in unlocking your digital potential to drive project success and organisational growth.

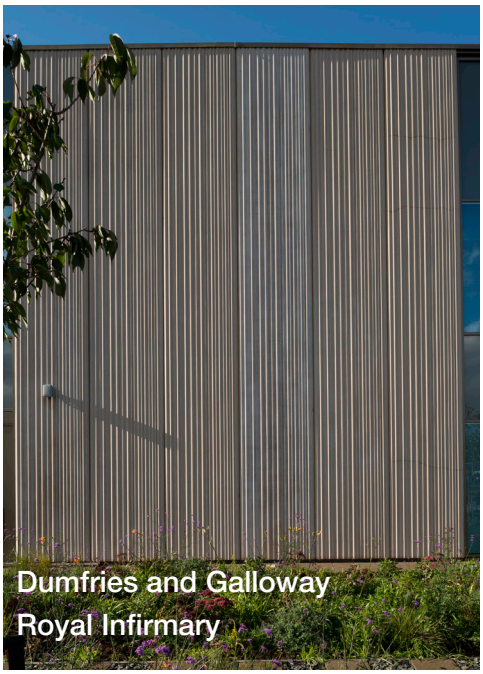
BIM Academy was in born in 2010 out of a joint venture between Ryder Architecture and Northumbria University, with the intention of establishing a centre of excellence for digital construction and transformation.

Today we have achieved such status and have taken further steps to transition into one of the world's leading research and strategic consultants in the global digital built environment.

We provide valuable support for construction, real estate and infrastructure through our strategic vision and project management and software development expertise.

At BIM Academy, we help transform businesses through our intelligent application of BIM, smart processes and digital technologies, by guiding our clients along a clear pathway towards achieving their goal, whilst always mindful of adding value and reducing risk.

We believe in the power of connectivity, the spirit of exploration and the ability to drive innovation through collaboration.



Dumfries and Galloway Royal Infirmary

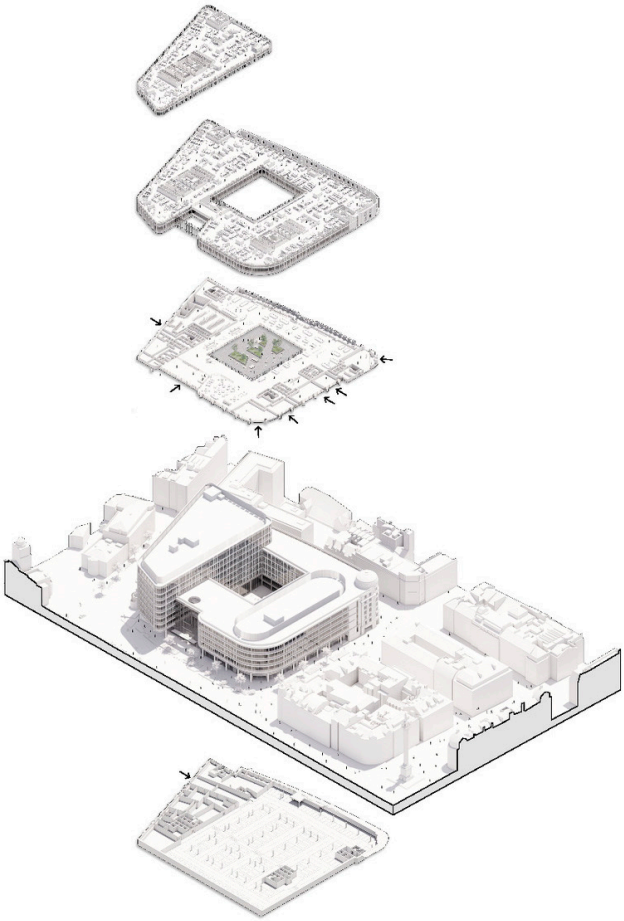
Services.

Services

Digital solutions for planning, design, construction and operation

Whipps Cross Hospital, London

We bring a new perspective to the world of digital, enabling our clients to achieve better results. At BIM Academy we are motivated by the desire to improve the way people and technology work together in the built environment.



Pilgrim's Quarter, Newcastle

Strategic Advisory

Information Management

Technical Delivery

Training and Development

Digital Cost Management

Strategic Advisory
Transforming business processes together

At BIM Academy we help our clients solve increasingly complex business challenges. Utlising a bespoke set of tools, we offer digital expertise and solutions to help clients adopt digital processes and technologies to overcome these challenges, reach their goals and make their business more competitive.

When businesses adopt digital workflows, they need to think differently about their processes, how they are managed and how the results can be measured.

In order to fully realise the advantages of this digital transformation, businesses need to go beyond just learning to use digital tools. They often need to fundamentally change how they operate and sometimes this includes cultural change.

Our strategic approach helps our clients achieve digital, business and cultural transformations. We bring new thinking to business and project processes, allowing businesses to become more agile, innovative, digitally responsive and ultimately more successful.

Sydney Opera House, Australia

Sydney Opera House, Australia

BIM Academy beat international competition to win a major project to provide specialist facilities management (FM) technical capability for Sydney Opera House.

Sydney Opera House is one of the world's most famous structures: a defining icon of the Sydney skyline. Construction of this stunning structure was completed in 1973 at a cost of $102 million AUS – with an original estimated build budget of $7 million AUS.

BIM Academy worked with the client's Building Information Management team, to define and develop a detailed facilities management specification to meet the building stakeholder needs for the existing building and its future development.

We subsequently developed and implemented a unique BIM4FM solution to achieve operational and cost efficiencies to support an enhanced visitor experience, playing a pivotal role in the conservation and preservation of the Opera House's cultural programme.

As part of our commission, we undertook detailed consultations with stakeholders on current and future needs; conducted a review of its current systems, processes and decision matrix; and created and a detailed technical specification that defines the long-term requirements.

We also developed a detailed model management plug in for the Revit model of the building. This has enabled the Opera House to start the implementation of a web based BIM4FM interface that will link a constantly maintained geo spatially accurate model of the building to its engineering, maintenance and building control systems.

BIM Academy teamed with leading software developer EcoDomus and local AECOM project managers to tender, and subsequently win, the delivery of the BIM-enabled FM platform.

Rolled out over two years, the project was executed in two stages: the first stage involved successfully retrieving and linking information from existing and new databases via the digital 3D model, while the second introduced a broader range of functional modules that can be added to the BIM interface over time.

Information Management

Optimising performance to maximise value

We run client projects from their inception to completion for the digital management of information, data and processes.

After working with clients to develop their digital information strategies, we then transition to the implementation of the strategy for the construction phase and beyond, throughout the lifecycle of the asset.

In our unique approach, we can take ownership of the full digital project, mobilise the team, define the project information requirements and manage delivery. We ensure a smooth and effective implementation by bringing people and information together, using clearly defined processes and technology.

Embedding digital workflows right from inception helps to protect and prioritise an organisations development objectives. We apply digital systems (including BIM) to help the project team to better understanding project workflows, manage project data and models and reduce risk, particularly due to unreliable uncoordinated or missing data which ultimately lead to rework and reduced performance.

By fostering collaboration and innovation across the whole organisation or project team, we help clients drive efficiency and reduce risk, keeping projects on schedule and on budget.

Pilgrim's Quarter, Newcastle upon Tyne

Pilgrim's Quarter, Newcastle upon Tyne

As part of HMRC's ongoing process of creating city hubs for their new offices across the UK, BIM Academy sister company, Ryder Architecture was appointed to design their Newcastle workspace which will relocate the organisation from the current site at Benton Park View to Newcastle City Centre.

The arrival of 9,000 staff will boots the city economy and play a major part of the wider regenration across Pilgrim Street.

Having received planning permission in April 2022 the project is now on site with demolition and groundworks well underway.

The building revitalises the northern block of Pilgrim Street and incorporates the Grade II listed Carliol House façade, providing 43,000sqm Grade A office space and 142 car parking bays. Due for completion in 2025, the development has an estimated construction value of £155m.

BIM Academy is supporting HMRC and Ryder in the set up of the project in line with the UK Government's information requirements for BIM and digital construction. As a result, we are taking the lead on the project information and digital strategy, we are supporting the project team in setting up its Common Data Environment (CDE), which will be used to collate and manage all of the project's data and information.

Having recently worked with HMRC to deliver its new award winning Government Hub in Liverpool's India Buildings, Ryder and BIM Academy understood the unique requirements of the brief for the Newcastle location, working closely with HMRC to ensure the highest design quality on this prominent city centre site.

BIM Academy's role is to also ensure that the correct information is collected in the correct way, to help ensure a swift handover to the project's facilities management and ensure adequate ongoing upkeep of the building long after the construction phase is complete.

Technical Delivery
Innovative, collaborative and precise

BIM Academy's technical delivery services represents the pinnacle of Building Information Modelling excellence.

Our offerings encompass a comprehensive suite of services tailored to meet the dynamic needs of digital construction. Our proficiency in model management planning ensures that the 3D model's data integrity, structure, and flow align seamlessly with the project's digital strategy.

Our expertise in 3D Model Coordination and Clash Avoidance Strategies means that potential issues are anticipated and addressed long before they occur, ensuring smoother construction processes and reduced chances of costly rework.

Digital design modelling best practices are at the heart of our approach. By leveraging the latest tools and technologies, we empower projects to achieve designs that are not just aesthetically pleasing but also technically sound and feasible.

Our expertise in construction simulation modeling, or 4D, offers stakeholders a dynamic visual representation of the construction sequence. This helps identify challenges and streamline the project timeline.

From project initiation to completion, our goal is to enhance projects with digital capabilities, ensuring efficient execution within budget and surpassing expectations.

Whipps Cross Hospital, London

Forest City, Johor Bahru, Malaysia

Forest City is a newly-built smart and green city located in Johor Bahru, Malaysia, boasting hotels, golf resorts and luxury homes.

The Landmark Building is the focal point of the first phase of construction by Country Garden Pacific View for this impressive development. This intelligent and integrated city is estimated to house a population of 700,000 residents.

BIM Academy was commissioned by Country Garden Pacific View to develop a strategy for, and then create, a digital Asset Information Model (AIM) for the Landmark Building, comprising a coordinated multidisciplinary 3D geometry model of the building fabric, structure and services, combined with non-graphical data on the maintainable assets of the fabric and systems.

We worked closely with the project management, modelling and contractor teams to devise a strategy for the development of the geometric models and classification of asset data and means to combine this in a holistic digital information model for improved management of the building and infrastructure.

The project was developed as a 'proof of concept' for delivery with the greater Forest City smart city development, with the intention of replicating the approach across the entire project.

Training and Development

Achieving a true understanding of digital construction

All of our training is designed to meet the needs of professionals in the built environment who are seeking to develop their knowledge, skills and understanding in all areas of digital information management, software and workflows.

We draw upon our extensive knowledge and experience gained from practical application in industry since 2003 and our award winning consultancy since 2010,together with world leading academic research.

Our training includes an introduction to BIM, digital construction and operation, through to an intensive tailored multi day Virtual Project workshop that allows delegates to collectively experience the full lifecycle of a BIM project in a hands-on risk free collaborative environment.

We carry out an initial training needs assessment and work with you to build your personal training programme to support digital adoption and implementation.

Durham NETPark

Aston University, Birgmingham

Aston first began as the Birmingham Municipal Technical School in 1895, evolving into the UK's first College of Advanced Technology in 1956, subsequently receiving its Royal Charter from Queen Elizabeth II in 1966.

Today Aston is host to 13,000 students from over 130 counties and is known for its world-class teaching and research in business and technology.

BIM Academy was appointed by Aston University School of Engineering and Applied Science to develop and deliver a training course on digital engineering for academic staff.

This unique and innovative opportunity for collaboration between academia and industry, supported knowledge sharing and new skills development in the area of digital engineering, that will be passed on to the future generation of engineering students.

This engaging and collaborative multidisciplinary course was developed to enable Aston University to prepare professionals working in the built environment for future experiences when working with BIM, by demonstrating the real value of BIM through the application of a virtual project scenario.

For the teaching staff within this School of the University, we designed and delivered a virtual project which we shared through a series of workshops. We carried out demonstrations for 'hands on' BIM processes and software tools for design, construction and operation phases of a built asset.

The course was specifically tailored to allow the team to experience BIM in a real-time collaborative environment, enabling them to explore the BIM process and software tools with few of the risks or costs which the uninitiated could encounter on a real project.

The virtual project also addressed BIM standards, processes and digital construction technologies. It was critical the team understand the basic concepts, links between data and technologies, and the benefits that can be seen during design, construction and operations from the application of BIM.

Digital Cost Management
Building tomorrow, managing costs today

With BIM Academy, cost management isn't just about numbers—it's about value, sustainability, and long-term vision.

Our digital cost management services stand at the forefront of contemporary construction commercial planning. Our approach is characterized by an intricate blend of innovation, precision, and an unwavering commitment to value-driven outcomes.

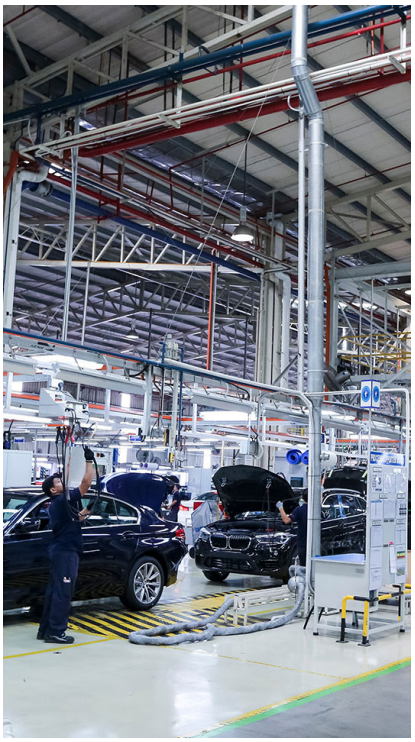
Central to our offerings is risk mitigation, where we deploy advanced analytics to identify, assess, and proactively address potential commercial pitfalls before issues arise. Using sophisticated quantity takeoff methods and comprehensive bill of quantity generation, we ensure that every material, component, and resource is accurately accounted for, facilitating transparent and predictable budgeting, which is crucial for effective financial management in construction.

Our primary strength lies in the field of cost and material quantification. Our team employs advanced 5D cost modeling to offer a comprehensive, real-time cost perspective that evolves alongside the project timeline.

This approach extends to our thorough whole-life cycle analysis, providing stakeholders with informed decision-making insights, not only for construction but throughout the asset's lifespan.

As part of our dedication to sustainable construction, our carbon calculation services provide essential information on a project's environmental impact, assisting in the selection of eco-friendly alternatives.

BMW Spartanburg, South Carolina, USA



BMW Spartanburg, South Carolina, USA

Since 1992, the BMW Group has invested nearly $12.4 billion in its USA operational facilities – in particular, at its Spartanburg BMW Manufacturing plant in South Carolina.

The Spartanburg plant is the largest BMW Group plant in the world, producing more than 1,500 vehicles each day and making up one of the most important parts of the BMW global production network.

In 2022, the Spartanburg plant began an expansion programme which will see the modification of the existing paint shop to accommodate the production of a new series of sport vehicles, a new press shop to facilitate on site metal stamping (expected to be completed in 2024), and a $1.7 billion investment into a facility for the building of electric vehicles and batteries.

Following on from their Hungary plant upgrade for which BIM Academy played a key role, BMW Group mandated the use of Building Information Modelling (BIM) for the entire project. Once again, BIM Academy was tasked with ensuring that the design team and contractors adhered to high standard BIM protocols.

The BIM Academy team became a part of the BMW project team, collaborating on innovative ways of working, ensuring BMW's standards of delivery, and analysing the design to optimise cost and schedule for construction. These digital models gave the project team the ability to assess and reduce risk, as well as focusing on granular optimisation of every aspect of the upgrades.

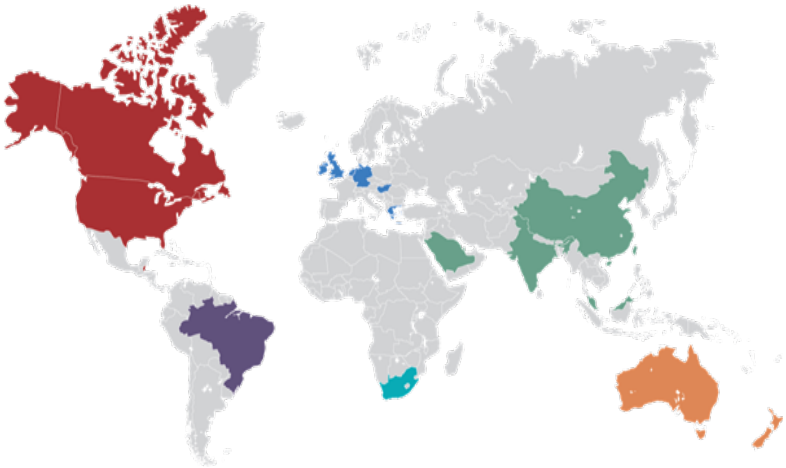
BIM Academy led on the implementation of a digital and BIM strategy, from the establishment of the contract to the handover workflow. As a result, once complete, the plant will be handed over to BMW Group's facilities management team with a wealth of well organised data that will enable consistent and optimised management and allow for any future changes and upgrades to be carried out with ease.

The complete facility upgrade will see the addition of a total of nearly 2 million sq. ft, creating tens of thousands of jobs in the area and increasing both the rate and quality of vehicle production. BIM Academy's work on this project will ensure the efficient running and management of each area of the facility – from its optimised design to its detailed data handover.

Clients.

Our Clients
Delivering value across the globe

At BIM Academy we bring a new perspective to the world of digital, enabling our clients to achieve better results.



24 countries | 18 research projects | 12 industries | 750 projects | 10,000 people trained | $10bn value | 11 awards | 9 PhDs

We are proud to highlight our extensive track record of successful project execution, spanning more than 750 projects across 24 countries. Our commitment to excellence has allowed us to serve a diverse range of clients, each with unique needs and representing a broad spectrum of industries. This breadth of experience positions us as a trusted partner capable of meeting the most demanding project requirements.

We have developed a deep understanding of international markets and cultures. This global perspective enables us to navigate the complexities of cross-border projects and tailor our services to meet the specific challenges and opportunities presented by each location. Our client base is as varied as the projects we undertake.

We have had the privilege of collaborating with organizations from industries including but not limited to healthcare, technology, manufacturing, finance, and hospitality. This rich tapestry of clientele has given us insight into the unique demands and intricacies of each sector.

Recognizing that no two clients are alike, we approach each project with a commitment to personalized solutions. We take the time to understand the distinct requirements of our clients, ensuring that our services are aligned with their strategic objectives and industry-specific needs.

Our extensive project portfolio, spanning a wide array of industries and geographies, underscores our versatility and adaptability. This diverse experience equips us with the knowledge and expertise necessary to tackle the most complex challenges and deliver innovative solutions.

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