

# BIM Advancement Academy



© 2015 Bentley Systems, Incorporated. Bentley and the "B" Bentley logo are registered trademarks of Bentley Systems, Incorporated or one of its direct or indirect wholly owned subsidiaries. Other brands and product names are trademarks of their respective owners.



[www.bentley.com](http://www.bentley.com)



[www.bentley.com/facebook](http://www.bentley.com/facebook)  
[www.bentley.com/twitter](http://www.bentley.com/twitter)  
[www.bentley.com/linkedin](http://www.bentley.com/linkedin)  
[www.bentley.com/youtube](http://www.bentley.com/youtube)  
<http://communities.bentley.com>

Bentley's BIM Advancement Academy supports the increasing use of information mobility in the construction industry, creating a lasting legacy of best practice in innovation.



## At A Glance

- 1800+ attendees since its creation, with visitors from ANZ, USA, Canada, RSA, ME, China, and Europe
- Supporting BIM initiatives through COBie, IADD4UK and Uniclass



## The BIM Advancement Academy Program

Bentley's BIM Advancement Academy program provides an effective way for owners to on-board contractors and the supply chain and to align their efforts through common processes that advance and improve information creation and information flow within each project. The goals of the Academy program are to advance industry best practices, drive standards, evolve solution templates, capture and recycle lessons learned, and advance BIM processes via awareness sessions, forums, and targeted seminars and working groups.

Bentley Academy subscribers in United Kingdom include Crossrail and the Highways Agency of England, both leveraging Bentley's Academy configuration in central London. Other Academy formats such as Satellite Academies, Mobile Academies, and fully Virtual Academies are in development to ensure the Academy concept is fully scalable to match any project scenario.

Each Academy subscription gives owner-operators access to Bentley's Academy configurations, which can be personalized to suit their business requirements. Each subscription includes a dedicated Academy client manager—from the relevant industry sector—who coordinates the creation and delivery of session materials, in conjunction with the representatives of the owner or project and its business imperatives, performing such tasks as chairing forums and workshops and meeting with contractors. Each Academy client manager works with a nominated Bentley colleague from our LEARNservices division to coordinate access to standard training content via clearly defined learning paths. In circumstances where an owner requires integration with other systems, and the Academy environment is best placed to validate that workflow within an overall management of the project information, Bentley will support that requirement.

Each Academy offers a curriculum specific to the project or to the subscriber's asset portfolio, in order to realise maximum benefits in both capital expenditure and asset lifecycle, focusing on best practices, supporting technologies and the cultural impacts of information mobility. Doing this enhances knowledge throughout the supply chain and ensures its understanding of the value of the information that is required by the project.

- Providing a laboratory for establishing and reinforcing best practice among participants.

## Data process

The management of data throughout the lifecycle of the project is a crucial part of BIM delivery. These processes need to be mapped out and each project participant needs to clearly understand the sources of their data, what format data should be in, and the appropriate places for them to post data. They must understand the need to collaborate with other project participants, the importance and value of the data they are delivering, and the impact of not complying with project guidelines and best practices for collaboration and data management. The Academy provides sessions that take each team through the data processes they will need to follow in "real world" role-based scenarios.

## Standards

The adherence to standards throughout the supply chain allows the federation of 3D design data and coordination through multiple BIM use cases across disciplines. These standards are demonstrated and supported within the Academy environment.

## Competency

To achieve the levels of competency required by a project team and to demonstrate compliance, those attending and completing Academy sessions and completing Academy-based sessions will have their achievements recorded and monitored. Levels of competency will be reflected in the benchmarking and performance reports visible to the project's management.



## A Case in Point

### Crossrail Academy

The Crossrail program of works includes over 100 contracts, each needing to interface and coordinate with each other to deliver the largest construction project in Europe. To ensure that the railway can be operated and maintained efficiently throughout its lifecycle, a single source of truth was set up to control all documents, drawings, models, and asset information. It is estimated that over 1 million assets will be recorded, verified and handed over by 2018, enabling a savings of GBP 50 million per year on operation and maintenance expenditure.

The Academy program for Crossrail has evolved over the project lifecycle and continues to evolve today. Sessions within the Academy focused initially on awareness of common standards, data-drops, and processes for consultants, and evolved to focus on construction process and asset capture within that cycle to ensure a digital asset model at completion and handover, matching the reality of the built asset. In that way, the complete construction is designed and built with operations efficiency from the very beginning.



### Crossrail and Bentley

Together, Crossrail and Bentley created an Academy to coach the supply chain on the world of data and information in Crossrail. Contractors, industry partners, and third-party stakeholders attend the Academy to learn about specific processes and the latest software and technology deployed on the project, as well as to share industry best practice in a controlled and project-centric environment.

As with many methodologies, BIM is a combination of process, technology, and people. It was recognised at Crossrail that both technology (through their partnership with Bentley) and process (through years of experience) were strongly represented in their BIM strategy, but people were not.

In August of 2012, Andrew Wolstenholme, OBE, CEO of Crossrail, and Bentley CEO Greg Bentley considered this gap and resolved to create an Academy that would deliver this last piece of the BIM strategy. Today, the Academy delivers a full curriculum that explains Crossrail's BIM vision and how each attendee can play their part. It describes the processes that take information throughout the lifecycle of a project and puts them into a real world context, encouraging and innovating, establishing and reinforcing best practice among participants.

Bentley's innovative BIM Advancement Academy program is a powerful vehicle for owners that brings complex construction projects into alignment, helping to ensure that contractors and the supply chain understand the processes and deliverables expected for each project.

Each Academy is adaptable to the specific needs of each project, taking into account all key business imperatives. An Academy is scalable and flexible in terms of personnel required and can offer both a physical and a virtual presence as desired by the owner.

The BIM Advancement Academy offers owners an effective means of managing the information complexity that occurs with on-boarding contractors and the supply chain, creating the perfect environment for establishing and enforcing best practices and optimizing information creation and data flow within a project.