Dedicated Building Information Modelling Academy

Crossrail and Bentley Systems, UK, have launched a dedicated Information Academy to provide hands-on technology and software training to the Crossrail supply chain for designing and building the new railway including 3D Mapping and Building Information Modelling (BIM). The Information Academy will capture, develop and share BIM best practices with the Crossrail supply chain. The increased use of BIM by the industry is a key element of the Government Construction Strategy.

Andrew Wolstenholme, Crossrail's chief executive, said that Crossrail is pioneering the use of Building Information Modelling in Europe on a scale that has not been undertaken before. This has directly resulted in the development of engineering design solutions, minimising waste and reducing future costs for maintaining the railway. The Academy will support the Government Construction Strategy by increasing the use of BIM in the construction industry and creating a lasting legacy of best practice in innovation. The training received at the Academy is expected to help contractors use the knowledge and skills gained on other major projects such as HS2.

Malcolm Taylor, Crossrail's head of Technical Information, said that the Academy will enable Crossrail contractors to get hands-on learning on the latest software, best practices and processes used at Crossrail. This offers the supply chain an advantage of working in a simulated Crossrail environment in order to obtain detailed technical knowledge about the project processes and systems in a virtual world.

Detailed design work for the Crossrail project began in 2008 and working in a collaborative 3D environment was a core contractual requirement across each of the 25 design contracts. The entire project exists in a digital 3D model which is handed to the construction contractors and will eventually move across to the operators and maintainers of the railway, thereby reducing the costs of running the railway.

Today, Crossrail integrates the information developed from over 25 main design contracts, 30 advanced works contracts and over 60 logistics and main works construction contracts, all of which have an extraordinary number of interlinked interfaces within the complex urban environment of London.

Crossrail owns all the project data. The BIM processes provide up-to-date information – either about the 3D model or from a document database – from a central source accessible to all contractors. This significantly reduces information loss between contracts and project stages and gives greater visibility into the design and construction processes.

Crossrail and Bentley have collaborated on all aspects of setting up the Academy with Crossrail providing project expertise and Bentley facilitating the physical learning environment.

The Academy, located in Bentley Systems' offices near Bank station in London, will offer a curriculum particular to Crossrail requirements focusing on the best use of BIM, latest software and best practice. The training on offer will benefit the entire construction industry by driving standards of design innovation within the construction industry. Crossrail will next month establish a BIM Industry Panel – engaging academic institutes, construction companies and specialist consultants as a platform to promote collaboration and best practices in BIM.

https://www.gim-international.com/content/news/dedicated-building-information-modelling-academy