

Building Information Management and Modelling Teaching in Geospatial Engineering, Civil Engineering and Architecture

Craig Matthew Hancock, Llewellyn Tang, Ruoyu Jin, Huib de Ligt and Luke Allan (China, PR)

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SUMMARY

Building information modelling is currently an emerging technology within the building industry in the UK and in China as well as throughout the world. The departments of Civil Engineering and Architecture and Built Environment at the University of Nottingham Ningbo China have been gradually introducing Building Information Modelling content into their courses over the last few years and have plans to further increase this area by introducing Building Information Modelling teaching at Master's level in its Geospatial Engineering courses. The introduction of the teaching of Building Information Modelling has been seen as a priority by the Faculty of Science and Engineering and has been introduced to 1st year students as part of existing modules that traditionally teach Computer Aided Design and also by the introduction of two new optional modules in the final year of undergraduate study. The teaching of Building Information Modelling focuses on three main areas, management for architecture and civil engineering, Modelling using BIM modelling software from design plans, and data collection and processing for As-Built BIM model creation from laser scanning. Teaching takes the form of standard lectures and tutorial classes but focuses more on using hands on teaching methods and group work using both equipment for data collection and software for modelling testing.

To aid this teaching the University of Nottingham will establish a BIM teaching and research lab at their campus in Ningbo. This lab will be equipped with extensive BIM software and other modelling tools and facilities that will complement the already extensive surveying and mapping equipment and software available at the Ningbo campus. This paper will outline the teaching content used and give examples of student work on the newly developed modules as well as describing planned future developments in BIM teaching at the University of Nottingham. It also provides an example and initial analysis of these new teaching methods and how they contribute to current industry requirements.

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