



SS-06

Building Information Modelling in education and construction activity

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Abstract

Building Information Modelling (BIM) is a methodology supported in a virtual 3D model- based process, allowing modelling management of all activities inherent to AECO sector. The construction area in all its fields is experiencing a rapidly technology changing, mainly supported in BIM, as it provides architects and engineers the visualization and the tools to plan, design, build and manage more efficiently engineering works. To stay competitive in business, companies demand for professional training on BIM methodology and the development of additional tools supported on this methodology. BIM education represents the process of acquiring the necessary knowledge and the required skills to develop and generate BIM deliverables satisfying the respective requirements. In a national context, the development of Projects supported on BIM platforms will be soon mandatory and the professionals should be updated with it. Several BIM subjects can be addressed in an educational or industrial/professional context: -Introduction of BIM in higher education; -Interoperability enhances and limitations in structural design; -Construction planning and management; - Generation of parametric objects based in standard requirements; -Virtual and augmented reality improving BIM capacities; -BIM implementation strategies; -Quantity take-off and cost estimation; -Multitasks and collaborative teams; -Heritage BIM; -Case study.

Justification

The Building Information Modelling (BIM) concept has been introduced in the Construction industry achieving all domains. The implementation of BIM is being widely disseminated in the international community and across several sectors within the Construction field. Currently professionals demands to understand the concept and applicability and how to manage BIM tools in order to obtain benefits. This is urgent in a national Construction context as BIM is mandatory in all European countries and in several other countries in the world. Conferences related with Engineering and in particular with Construction benefits with the insertion of this subject as a topic contribute to the dissemination and knowledge spread.