Liverpool John Moores University

Title: CIVIL ENGINEERING AND BIM
Status: Definitive
Code: **7324BEPG**   (120993)
Version Start Date: 01-01-2016

Owning School/Faculty: Built Environment
Teaching School/Faculty: Built Environment

Team	Leader
Jayne Dooley	Y

Academic Level:	FHEQ7	**Credit Value:**	20.00	**Total Delivered Hours:**	33.00
Total Learning Hours:	200	**Private Study:**	167		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	11.000
Workshop	22.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Technical IT case study	100.0	

Aims

To enable students to evaluate the role of BIM in improving project delivery at all stages of a construction project. To allow students to apply the theory of BIM specifically in a civil engineering context.

Learning Outcomes

After completing the module the student should be able to:

1   Critically evaluate the role of BIM across all stages of construction projects.
2   Apply BIM tools and processes to investigate and improve design in a civil engineering context.
3   Apply BIM tools and processes to investigate and improve construction phase of project delivery.
4   Appraise the role of BIM in improving the management of civil engineering infrastructure

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

REPORT   1   2   3   4

Outline Syllabus

The BIM processes and tools used throughout all stages of a project from inception through to operation and decommissioning.
Visualisation tools to improve stakeholder management.
More efficient design through technology and collaboration
Designing out health & safety risks through 3D modelling & logistics planning.
Management & co-ordination of works throughout the construction & handover phase, eg updates to design info, handling of RFIs etc
Use of intelligent models to facilitate more efficient operation of infrastructure assets.

Learning Activities

Use of case studies. Workshops to facilitate collaborative working and use of IT.

Notes

Discussion of real life case studies and application of computer modelling software will be used to facilitate collaborative working and learning.