



## Applied Building Information Modelling (CEGE0053)

### Description

The module covers the integration of reality capture and survey data and GIS data with the Building Information Modelling (BIM) process. The module provides a background into the wider organisational and legislative context of BIM particularly for the UK. It gives the bigger picture of integrating geometry and information in the construction and maintenance world. It introduces concepts of reality capture data processing, feature extraction and 3D modelling. The practicals give students the opportunity to validate and critically assess 3D point cloud data for 3D modelling. Students learn how to create geometric models from point clouds and how to manage and share BIM data. The module is assessed by quizzes, individual reports and group presentations. The module is suitable for students in MSc Geospatial Science and also MSc Civil Engineering (particularly when specialising with Surveying).

### Learning Outcomes

Students will be able to assess and choose tools to capture 3D data for BIM applications. They are able to use state-of-the art software to generate a 3D geometric model for BIM. They will also understand available options for managing, storing and sharing the 3D geometry and associated semantic information. They will be familiar with the UK's legislative framework for BIM along with current research challenges in 3D geometric modelling and storage.

### Key information

<b>Year</b>	2019/20
<b>Credit value</b>	15 (150 study hours)
<b>Delivery</b>	PGT L7, Campus-based
<b>Reading List</b>	<a href="#">View on UCL website</a>
<b>Tutor</b>	<a href="#">Dr Jan Boehm</a>
<b>Term</b>	Term 2
<b>Timetable</b>	<a href="#">View on UCL website</a>

### Assessment



- Written examination (departmentally managed): 10%
- Report: 50%
- Group coursework: 40%

### Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit [ucl.ac.uk](http://ucl.ac.uk)