

## Liverpool John Moores University

Title: DIGITAL TECHNOLOGY FOR CONSTRUCTION  
Status: Definitive  
Code: **4536NCCG** (129473)  
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment  
Teaching School/Faculty: Accrington Campus

Team	Leader
Fiona Borthwick	Y

**Academic Level:** FHEQ4  
**Credit Value:** 20  
**Total Delivered Hours:** 48  
**Total Learning Hours:** 200  
**Private Study:** 152

### Delivery Options

Course typically offered: S1, S2 and NS2 (S2 for Jan)

Component	Contact Hours
Lecture	48

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Assignment	Assignment	100	

Competency	NCC Group Pass/Fail

### Aims

*This module introduces students to digital technology for construction. It explores how digital technology can plan for a safer and professionally run project.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Explain how digital technology can help plan a project
- 2 Identify a range of programs that could be used
- 3 Use a CAD program to demonstrate the benefits of digital technology
- 4 Identify how health and safety can be improved using digital technology

## Learning Outcomes of Assessments

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

Assignment	1	2	4
NCC Group Pass/Fail			3

## Outline Syllabus

*Using drawings in construction*

*Types of digital programs available to the construction industry*

*Use CAD to create an example project*

*Health and safety issues*

*Changes in design*

*Communication to construction team*

*Presentation of projects using digital technology*

*Use of project planning tools (e.g. MS Project) in construction*

*Building Information Management: types of information kept, purposes of information, BIM management tools.*

## Learning Activities

### Lectures

These will not normally be traditional didactic lectures in which the student plays little active part, but will be delivered in small groups of up to 20 students in which their interaction with their tutor is a key ingredient of their learning experience.

The material of this module requires the development of significant practical skill. This will be taught within the lecture time, making these sessions a blend of lecture and workshop time. The sessions will be timetabled in spaces with physical resources appropriate to the delivered content.

Students will receive approximately 30 hours of taught material, supported by in-class exercises and discussions designed to help student assimilate learning and to provide early informal feedback on their progress.

### Practical Work

This module contains directed practical work that students will undertake under the supervision of teaching staff and/or technicians. Some elements of this practical

work will form part of the assessment for this module.

### Independent Study

Students are expected to undertake personal reading and research into topic areas that have been stimulated from the lectures and seminars. This reading will enhance their academic work and enable valid contribution to lectures and seminars.

### VLE support

This will provide links to academic web-sites and on-line journals, facilitate group discussion outside of the classroom, access to outline lecture notes, and provide students with assessment details.

### Notes

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