

Module Title:	Surveying Processes
Module Code:	BSCS07C
Level:	4
Credits:	15
Pre-Requisites:	None

Module Description:

The module is designed to develop the students' ability to use surveying equipment in order to demonstrate a range of contemporary site surveying techniques and practice used in the construction industry. Semi manual and standard computer software should be used when performing surveying operations.

Indicative Content:

- Use and application of surveying instruments: linear measuring equipment, levels, theodolites, electronic and laser instruments.
- Principles of surveying and setting out: linear measurement, levelling, angular measurement, traversing and setting out, tachometric, geodetic
- Data calculation: analysis of raw data and translation for surveys and setting out procedures.
- Use of computer software: data capture, setting out, commercial software and programmed spreadsheets.

Learning and Teaching Methods:

The module will be delivered essentially using a practical approach, based around well-planned formative and summative assessments. Appropriate attention must be afforded to health, safety and welfare arrangements and CDM regulations throughout the delivery of this module.

Specific Learning Resources:

Students should have access to a wide range of instruments and become familiar with the more common equipment used on construction sites.

A range of linear measuring equipment

Automatic levels

Digital theodolites & total stations

Surveying software

Spreadsheet programmes

Bibliography

Highly Recommended

Module Specifications: Schools of Construction & Engineering

Schofield, W. and Breach, M. (2007) Engineering Surveying 6th Edition Oxford: Butterworth-Heinemann

Uren, J. & Price, W.F. (2010) Surveying for Engineers 5th Edition Basingstoke: Palgrave Macmillan

Recommended

Irvine, W. and Maclellan, F. (1995) Surveying for Construction 5th Edition London: McGraw Hill

Bannister, A. Raymond, S. and Baker, R. (1998) Surveying 7th Edition Harlow: Longman

Background Reading

Muskett, J. (1995) Site Surveying 2nd Edition Oxford: Blackwell Science

Bannister, A. & Baker, R. (1994) Solving Problems in Surveying 2nd Edition Harlow: Longman

Module Learning Outcomes

Subject Specific Learning Outcomes

On successful completion of this module you will be able to:

LO | Apply and demonstrate basic principles and competence of land surveying.

LO | Apply setting out methods and control using electronic and laser instruments.

LO | Apply and evaluate computer software used in surveying processes.

LO | Select and justify data presentation techniques to suit particular requirements.

Assessment Title or element	Weighting (%)
Surveying Practice (LO1; LO2; LO4)	60%
Surveying Technology (LO3; LO4)	40%

Information correct at point of publication.