

#### ACADEMIC PARTNERSHIPS

#### **Module Outline**

#### Part 1- as validated

1.	Title	Land and Site Surveying Processes
2.	Level *	4
3.	Credits	20
4.	Indicative Student Study Hours	36
5.	Core (must take and pass), Compulsory (must take) or Optional	Compulsory

### \* Foundation Level=3 Degree Year 1 = 4 Degree Year 2 = 5 Degree Year 3 = 6

### PG (Masters) = 7

### 5. Brief Description of Module (purpose, principal aims and objectives)

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. Students will therefore identify, analyse, apply, and evaluate surveying techniques within construction related scenarios.

6.	Learning Outcomes - On successful completion of this module a student will be able to:					
(Ad	dd more lines if required)					
	Subject Specific Learning Outcomes					
1.	Apply and demonstrate basic principles of and competence in land surveying.					
2.	Apply setting out methods and control using electronic and laser instruments.					
3.	Apply a variety of analytical and graphical methods or techniques to surveying problems.					
4.	Select and justify data presentation techniques to suit particular requirements.					
	Generic Learning Outcomes					
1.	Accurately carry out activities using appropriate equipment					
2.	Prepare information using a variety of presentation techniques.					

#### Pass on aggregate or Pass all components

(modules can only be pass all components if this is a PSRB requirement)

Pass on aggregate

### Summary of Assessment Plan

	Туре	% Weighting	Annonymous Yes / No	Word Count/ Exam Length	Learning Outcomes Coverage	Comments	
1.	Portfolio of land surveying	50%	Yes	1000	LO 1, 4		
2.	Portfolio of control surveying	50%	Yes	1000	LO 2, 3		

### Further Details of Assessment Proposals

Give brief explanation of each assessment activity listed

#### Portfolio of land surveying

Students will be expected to carry out a series of land surveying activities using site surveying equipment that reflect contemporary site practice. The portfolio will consist of field notes and calculations that will allow the student to convert the field data into presentable forms of information with a justification as to why the forms have been utilised.

Portfolio of control surveying

The second portfolio part will be written work demonstrating theoretical understanding of the practices and methods employed in surveying, with the practical demonstration and recording of control surveying using appropriate site surveying equipment.

### 8. Summary of Pre and / or Co Requisite Requirements

Not applicable

#### 9. For use on following programmes

BSc (Honours) Construction Management (Architectural Technology)

BSc (Honours) Construction Management (Quantity Surveying)

BSc (Honours) Construction Management (Site Management)

## **Module Specification**

1	Module Leader	Bill Martin

2.	Indicative Content				
	Analytical methods related to surveying: determination of coordinates, traversing, and setting out with control				
	Area computations using Heron's rule and Simpson's rule.				
Use and application of surveying instruments: linear measuring equipment, automatic a barcode levels, electronic total stations and laser instruments. Principles of surveying and setting out: linear measurement, levelling, contouring, angumeasurement, traversing and setting out, tachometric, geodetic					
					Data calculation: analysis of raw data, interpretation and translation for surveys and setting out procedures.

3. Delivery Method (please tick appropriate box)								
Classroom Based		Supported Open Learning	Distance Learning	E	E-Learning	Work Based Learning	Other (specify)	
	Yes							
lf th	If the Delivery Method is <b>Classroom Based</b> please complete the following table:							
	Activity (lecture, seminar, tutorial, workshop)		Duration	Activity Duration - Hrs		Comments		
1	Lectures		18				LO 3-4	
2	Practical surveying exercises		s 18				LO 1-2	
	Total Hours		36					
If delivery method is not classroom based state lecturer hours to support delivery								

If delivery method is not classroom based state lecturer hours to support delivery

## 4. Learning Resources

To include contextualised Reading List.

Highly Recommended

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

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

Irvine, W. and Maclennan, F. (2005) Surveying for Construction 5<sup>th</sup> Edition London: McGraw Hill

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https://eu.sokkia.com/