

<b>Module code:</b>	AUR348
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<b>Module Title:</b>	Graphical Communication in the Built Environment
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<b>Level:</b>	3	<b>Credit Value:</b>	20
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<b>Cost Centre(s):</b>	GABE	<b>JACS3 code:</b>	K400
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<b>Faculty:</b>	Faculty of Arts, Science and Technology	<b>Module Leader:</b>	Gareth Carr
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Scheduled learning and teaching hours	40hrs
Guided independent study	160 hrs
Placement	0 hrs
<b>Module duration (total hours)</b>	200 hrs

<b>Programme(s) in which to be offered</b>	Core	Option
BSc (Hons) Architectural Design Technology (with Foundation Year) SUBJECT TO VALIDATION	✓	<input type="checkbox"/>
BSc (Hons) Construction Management (with Foundation Year) SUBJECT TO VALIDATION	✓	<input type="checkbox"/>

<b>Pre-requisites</b>
none

**Office use only**

Initial approval: 12/12/2018

Version no:1

With effect from: 01/09/2019

Date and details of revision:

Version no:

**Module Aims**

The principal aim of this module is to provide students with an introduction to the standards and conventions of graphical communication used in the design and construction of buildings and civil infrastructure. The construction industry recognises particular drawn and representational conventions, and it is important that students become familiar with those standards that have been adopted by the industry.

Two further aims of this module are to provide the student with experience in the interpretation of exemplar graphical information, and to provide opportunities for students to prepare their own drawings and models in line with those standards

**Intended Learning Outcomes**

Key skills for employability

- KS1 Written, oral and media communication skills
- KS2 Leadership, team working and networking skills
- KS3 Opportunity, creativity and problem solving skills
- KS4 Information technology skills and digital literacy
- KS5 Information management skills
- KS6 Research skills
- KS7 Intercultural and sustainability skills
- KS8 Career management skills
- KS9 Learning to learn (managing personal and professional development, self-management)
- KS10 Numeracy

At the end of this module, students will be able to

Key Skills

At the end of this module, students will be able to		Key Skills	
1	Prepare and present original graphical information, drawn and modelled using industry-recognised conventions and techniques.	KS1	KS3
		KS5	KS6
2	Prepare and present original graphical information to appropriate scales and within acceptable tolerances of dimensional accuracy.	KS1	KS5
		KS10	
3	Prepare and present original graphical information using a wide range of media, materials and technique.	KS1	KS3
		KS9	
4	Structure and present a complete portfolio of original graphical information in a logical and ordered way	KS1	KS3
		KS5	KS9

**Transferable skills and other attributes**

This module will provide students with an understanding of the interpretation and use of drawings and models in a wide range of construction-related contexts. This will cover both their academic study and preparation for employment within the Construction Industry.

The utilisation of drawings and models as vehicles of communication will also develop an individual's confidence to explain ideas and technical content to peers and associates involved in the design and construction of buildings and civil infrastructure.

**Derogations**

None

**Assessment:**

1. A portfolio of original sketches, drawings and models that communicate concepts and technologies through recognised conventions, scales and presentational techniques

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration (if exam)	Word count (or equivalent if appropriate)
1	1,2,3 & 4	Portfolio	100	n/a	2,500

**Learning and Teaching Strategies:**

This module will provide opportunities for students to study standards and exemplars in the construction industry, and learn through the physical preparation of drawings and models that communicate conceptual ideas and technical content.

It is appropriate that students share in the drawing studio experience so that ideas and techniques become accepted components of learning and encourage individual experimentation with media and materials. In this respect, delivery will incorporate 'in the round' group tutorial sessions as far as possible, to facilitate a broad-ranging dimension to the student learning experience.

Whilst the learning and teaching strategy is therefore open and diverse in its approach to encouraging the student to develop an appropriate portfolio for assessment, its content should nonetheless be the product of the student's own preferences and presentational competencies.

**Syllabus outline:**

**'Doodling and sketching'**

- 'doodling' – informal communication of ideas and concepts
- 'sketching' – sketching from observation;  
sketching towards explanation

**Scale and representation in design and construction drawings**

- 'design drawings' and 'working drawings'
- conventions of scale and graphical representation in 2-dimensional drawings:
  - topography and maps;
  - locations and sites;
  - general arrangements: dimensional co-ordination, grids, plans, sections and elevations
  - details: material and component assemblies
- titles, attributes, revision and issue of drawings

**3-dimensional drawings and models**

- Common viewpoint drawings including perspective
- simple architectural modelling

**Rendering and presentation**

- materials, media, layout and composition
- rendering, colour, text and annotation
- exhibition, display and presentation
- photography as a tool in the built environment

**Bibliography:**

**Essential reading**

BSI – *Construction Drawing Practice, BS1192 Part 5* (British Standards Institute, 1999) ISBN 0580295141

Ching F D K – *Architectural Graphics* (John Wiley & Sons Inc, 2002) ISBN 0471209066

Fukai D – *Graphic Communications in Construction* (Prentice Hall, 2002) ISBN 0130605522

**Other indicative reading**

Hill M – *Small Practices – A Guide to Drawn Information* (RIBA Publications, 1999) ISBN 1859460518

Reekie F and McCarthy A – *Reekie's Architectural Drawing* (Architectural Press, 1995) ISBN 0340573244