MODULE SPECIFICATION

Module Code:	AUR618

Module Title:	Construction Management 3: Industrial Practice

Level:	6	**Credit Value:**	20

Cost Centre(s):	GABE	JACS3 **code**: HECoS **code**:	K220 (CM) 100149 (CM)

Faculty	FAST	**Module Leader:**	Dr Gareth Carr

Scheduled learning and teaching hours	24 hrs
Guided independent study	176 hrs
Placement	0 hrs
Module duration (total hours)	200 hrs

Programme(s) in which to be offered (not including exit awards)	Core	Option
BSc (Hons) Construction Management	✓	☐

Pre-requisites

Office use only
Initial approval: 29/08/2019 Version no: 1
With effect from: 01/09/2019
Date and details of revision: Version no:

Module Aims
The aim of the module is to provide students with opportunities to develop a thorough understanding of construction management through live construction projects that are contemporaneous with the duration of the module. Information that is available in the public domain will be supplemented by engagement with industry such that students are facilitated with informed and real-time analysis of the progress of contemporaneous projects at their various stages of development. Whilst the module is required to be delivered and assessed in accordance with the requirements of this specification, it is important that its implementation strives to be non-generic as far as possible, and takes every opportunity to derive its specific content from those projects that are contemporaneous with its delivery. In this way, students will become familiar with the contemporary development landscape, and will have derived an informed understanding of construction management through direct analysis of commercial and industrial activity within the region and beyond; this helps students identify immediate employment contexts upon completion of the academic programme.

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	
1	Describe the role of the built environment sector in resourcing the needs of UK society, and in its contribution to the nation's economy through an appreciation of contemporaneous building projects.	KS1	KS6
		KS3	KS5
2	Explain the relationships that exist between companies involved in the construction industry and review threats and opportunities that exist within the sector, with particular reference to contemporaneous building developments within the region.	KS1	KS5
		KS6	
3	Evaluate the importance and challenges of working in a collaborative environment and the integration of design, construction and commissioning, with particular reference to contemporaneous building projects.	KS1	KS4
		KS6	
4	Analyse the impact that legal obligations towards health, safety, welfare and environmental protection have on the	KS1	KS6

	construction management process, with particular reference to contemporaneous building projects.	KS3	KS5
5	Explain organisational structures and managerial strategies towards delivering building projects on time, within budget and to the required standards of quality, with particular reference to contemporaneous projects.	KS1	KS6
		KS3	

Transferable skills and other attributes

- Students will put into practice the management skills developed in earlier modules;
- Students will appreciate their role at the higher levels of management;
- Students will understand the importance of clear lines of communication and responsibility within projects.

Derogations

None

Assessment:

Indicative Assessment Tasks:

The module will be assessed through a portfolio of written analyses and associated illustrated material in the contexts of contemporaneous building projects that satisfies the requirements of the Intended Learning Outcomes.

Where group tasks are detailed, students will be provided with an individual marking criterion.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration or Word count (or equivalent if appropriate)
1	1,2,3,4 & 5	Portfolio	100%	4,000

Learning and Teaching Strategies:

The *Construction Management 3 – Industrial Practise* module should be delivered to ensure that syllabus coverage is informed as far as possible by contemporary building developments that are on-going whilst the module is being undertaken. The formative stages of delivery should identify projects that are being conceptualised, planned, are in the process of construction, are nearing completion, and have been recently 'handed-over', so that these may become the vehicles for class discussion and analysis. It is important that students drive this process and collectively bring to the classroom an overview of current activity that might be exploited towards contextualising the syllabus content.

Having identified such projects, students will be encouraged to obtain as much detail as is available in the public domain in the first instance, in order that Intended Learning Outcomes 1 and 2 might be appropriately addressed through the derivation of portfolio material.

Delivery will proceed by considering strategic management aspects of the syllabus within the contexts of the individual case-study projects identified, so that all phases of the construction management process might be considered in terms of client and company relationships, collaboration and organisational structures and procedures.

It is important that companies able to support the delivery through site visits, guest lectures and the provision of other such opportunities are identified as early as possible within the programme, so that further detail and project-related material becomes available to students in the preparation of their portfolio work. Opportunities to attend relevant CPD activities should similarly be identified in support portfolio content.

Throughout the delivery, students will be facilitated with a 'Constructionarium' base-room that will accumulate and display portfolio work as it develops, structured to comprise analyses of those case-study projects that are 'live' during the period of delivery. This facility should be utilised as a 'window' on current construction activity within the region and controlled access should be made available to all construction management students within the built environment subject area. In the preparation of assessed portfolio work, the 'constructionarium' should be utilised to simulate construction management activities as far as possible, through the introduction of time-controlled scenario-based 'problems' that require solutions to be derived by small groups of students. Reflective analyses of such simulations on the part of individual students will contribute to portfolio content.

Through didactic delivery of syllabus content, tutorial support and reflective practise on the part of students, portfolio's should address both strategic and specific aspects of the management of those projects being considered, and communicate a thorough understanding of procedural and legislative control in response to the requirements of the Intended Learning Outcomes. Graphics should be strictly limited to those that help explain the management of the development/construction process, and should not simply represent the nature of the architecture alone.

Syllabus outline:

In the specific contexts of those 'live' projects identified, delivery should consider:

- the role of the built environment sector in resourcing society and contributing to national, regional and local economies;
- the threats and opportunities that exist within the contemporary construction sector;
- strategic organisational and contractual relationships in the procurement of buildings, including tendering, framework agreements, community engagement and similarly innovative initiatives within the contemporary construction sector;
- the challenges of working in a collaborative industrial environment;
- the impact of legal obligations towards health, safety, welfare and environmental protection throughout the construction management process;
- the delivery of building projects on time, within budget and to specified standards of quality.

Indicative Bibliography:

Essential reading

Griffith, A. and Watson, P. (2003), *Construction management: Principles and practice*. Hampshire: Palgrave Macmillan.

Harris, F. and McCaffer, R. (2013), *Modern construction management.* Chichester: Wiley Blackwell.

Other indicative reading

CIOB (2010), *Guide to Good Practice in the Management of Time in Complex Projects.* London: Chartered Institute of Building.

Dainty, A. and Loosemore, M. (ed.), (2012) *Human Resource Management in Construction: Critical Perspectives.* Abingdon: Routledge.

Kymmell, W. (2007), *Building Information Modelling: Planning and managing construction projects*. New York: McGraw Hill Professional.

Lester, A. (2017), *Project Management, Planning and Control: Managing Engineering, Construction and Manufacturing Projects to PMI, APM and BSI Standards.* Oxford: Butterworth-Heinemann

Ottosson, H. (2012), *Practical project management for building and construction.* Boca Raton: CRC Press.

The Royal Institute of Chartered Surveyors www.rics.org

Chartered Institute of Architectural Technologists www.ciat.org.uk

Chartered Institute of Building www.ciob.org.uk

Institute for Civil Engineering www.ice.org.uk

Royal Institute of British Architects www.architecture.com

Designing Buildings Wiki www.designingbuildings.co.uk

Other sources:

IHS Database www.ihsti.com