

UNIVERSITY OF WARWICK

Proposal Form for New or Revised Modules (MA1 - version 7 - April 2014)

Approval information	
Approval Type	<input type="checkbox"/> New module <input checked="" type="checkbox"/> Revised module <input type="checkbox"/> Discontinue module
Date of Introduction/Change	01/10/2018
If new, does this module replace another? If so, enter module code and title:	
If revised/discontinued, please outline the rationale for the changes:	Minor updates to syllabus and feedback methods to reflect development of module since last reviewed. Updated bibliography.
Confirmation that affected departments have been consulted:	Changes were made in consultations between the School of Engineering and WMG.

Module Summary	
1. Module Code (if known)	ES96Q
2. Module Title	Construction Management
3a. Lead department:	School of Engineering (100%)
3b. Teaching Split (if known):	100% Engineering
4. Name of module leader	Dr Alan Bloodworth
5. Level	UG: <input type="checkbox"/> Level 4 (Certificate) <input type="checkbox"/> Level 5 (Intermediate) <input type="checkbox"/> Level 6 (Honours) PG: <input checked="" type="checkbox"/> Level 7 (Masters) <input type="checkbox"/> Level 8 (Doctoral) See Guidance Notes for relationship to years of study
6. Credit value(s) (CATS)	15
7. Principal Module Aims	To prepare students for working in the tunnelling industry and related project management environments and to be able to understand and articulate their personal role and responsibility as a professional engineer

Module Summary	
8. Principal Learning Outcomes	By the end of the module students should be able to: <ul style="list-style-type: none"> • Systematically identify and evaluate forms of contract and documents associated with a typical tunnelling/construction project. • Evaluate and use appropriate techniques to schedule, control and manage a construction project and associated risks. • Critique the selection of procurement strategy as applied to current case study project examples.
9. Timetabled Teaching Activities (summary)	30 hrs lectures. Total of 30 hours.
10. Departmental Web-link	https://warwick.ac.uk/fac/sci/eng/eso/modules/year4/es96q/
11. Other essential notes	The module is taught in a five-day intensive block (excluding Wednesday afternoon). Pre reading is required before the module with an unseen written test during the module. Case studies are presented including by external lecturers to aid understanding of the module content.
12. Assessment methods (summary)	1-hour Written test 20% 3-hour Written examination 80%

For use by Strategic Planning and Analytics Office only - Do not fill in this section

Level	JACS3 Code	Teaching Split
		<i>If not provided in 3b above</i>

External Credit Level	Scheme

Module Context				
13. Please list all departments involved in the teaching of this module. If taught by more than one department, please indicate percentage split.				
School of Engineering, 100%				
14. Availability of module				
Degree Code	Title	Study Year	C/OC/A/B/C	Credits
H214	MSc Tunnelling and Underground Space FT	M1	C	15
H214	MSc Tunnelling and Underground Space PT	M1	OC	15
H214	MSc Tunnelling and Underground Space PT	M2	OC	15
15. Minimum number of registered students required for module to run				
1				
16. Pre- and Post-Requisite Modules				
None				

Module Content and Teaching	
17. Teaching and Learning Activities (<i>totals for module – please see guidance</i>)	
Module duration (weeks)	1
Lectures	30 hours
Seminars	
Tutorials	
Project Supervision	
Demonstration	
Practical Class/Workshops	
Supervised time in studio/workshop	
Fieldwork	
External visits	
Work based learning	
Placement	
Year abroad	
Other activity (<i>please describe</i>): e.g. distance-learning, intensive weekend teaching etc.	120 hours of guided independent learning

Module Content and Teaching		
18. Assessment Method (Standard)		
Type of assessment	Length	% weighting
Written Test	1 hr	20%
Written Examinations	3 hrs	80%
Practical Examinations		
Assessed essays/coursework		
18a. Final chronological assessment (<i>please see guidance</i>)	Examination	
19. Methods for providing feedback on assessment.		
<p>In Class Written Test: Cohort level feedback Examination: publication of recent past examination papers and model solutions or mock paper and solutions where past papers do not exist. Cohort level feedback on examinations.</p>		
20. Outline Syllabus		
<ul style="list-style-type: none"> • Large project development and the RIBA Plan Of Work • Key elements of a contract • Standard forms of construction contract with main emphasis on NEC contracts • Civil Engineering and construction procurement, procurement risk • Design management and coordination • Construction planning • Programming and project controls • Delivering projects; cost management, quality management • Management of change • Processes to resolve disputes • Improvement techniques; Lean Construction, Value Engineering • Insurance and insured risks • Risk management (Project, Safety & Design) 		
21. Illustrative Bibliography		
<p>Cooke, Brian. (2013). Construction Planning, Programming and Control. Chichester: Wiley. E-book available via http://encore.lib.warwick.ac.uk/iii/encore/record/C_Rb2658630</p> <p>HARDIN, B., & MCCOOL, D. (2015). BIM and construction management: proven tools, methods and workflows. Indianapolis, John Wiley & Sons. E-book available via http://webcat.warwick.ac.uk/record=b3035010~S1</p> <p>Chris March (2009) Operations Management, Spon Press (ISBN 0415371120) E-book available via http://encore.lib.warwick.ac.uk/iii/encore/record/C_Rb2920401</p> <p>Powell, Geoff. (2016). Contracts preparation and management: from concept to completion. London: Macmillan Education: Palgrave. 2nd Edition. Print only, library record at http://encore.lib.warwick.ac.uk/iii/encore/record/C_Rb2905295</p>		

Module Content and Teaching

Walker, Anthony. (2015). Project management in construction. Sixth edition. West Sussex, England: Wiley Blackwell. E-book available via

http://encore.lib.warwick.ac.uk/iii/encore/record/C_Rb3091856

Winch, Graham M. (2013). Managing Construction Projects Chichester: Wiley. E-book available via

http://encore.lib.warwick.ac.uk/iii/encore/record/C_Rb2658479

22. Learning outcomes

Successful completion of the module leads to the learning outcomes. The learning outcomes identify the knowledge, skills and attributes developed by the module.

Learning Outcomes should be presented in the format "By the end of the module students should be able to..." using the table at the end of the module approval form:

Resources

23. List any additional requirements and indicate the outcome of any discussions about these.

N/A

Approval

24. Module leader's signature	Dr Alan Bloodworth
25. Date of approval	25 April 2018
26. Name of Approving Committee (include minute reference if applicable)	School of Engineering and WMG Course and Module Approval Committee (CMAC), Minute 266-17/18
27. Chair of Committee's signature	Professor Gillian Cooke
28. Head of Department(s) signature	Professor David Towers

Examination Information		
A1. Name of examiner (if different from module leader)		
A2. Indicate all available methods of assessment in the table below		
% Examined	% Assessed by other methods	Length of examination paper
80%	20% 1-hour Written Test	3h
A3. Will this module be examined together with any other module (sectioned paper)? If so, please give details below.		
No		
A4. How many papers will the module be examined by?	<input checked="" type="checkbox"/> 1 paper <input type="checkbox"/> 2 papers	
A5. When would you wish the exam take place (e.g. Jan, April, Summer)?	May	
A6. Is reading time required?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
A7. Please specify any special exam timetable arrangements.		
None		
A8. Stationery requirements		
No. of Answer books?	1	
Graph paper?	Yes	
Calculator?	Yes	
Any other special stationery requirements (e.g. Data books, tables etc)?	None	
A9. Type of examination paper		
Seen?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Open Book?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Restricted?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If restricted, please provide a list of permitted texts:		

LEARNING OUTCOMES		
(By the end of the module the student should be able to....)	Which teaching and learning methods enable students to achieve this learning outcome? (reference activities in section 17)	Which summative assessment method(s) will measure the achievement of this learning outcome? (reference activities in section 18)
Systematically identify and evaluate forms of contract and documents associated with a typical tunnelling/construction project.	Lectures, case studies	Written examination, Written Test
Evaluate and use appropriate techniques to schedule, control and manage a construction project and associated risks.	Lectures, case studies	Written examination
Critique the selection of procurement strategy as applied to current case study project examples	Lectures, case studies	Written examination, Written Test