PRIFYSGOL glyndŵr UNIVERSITY

MODULE SPECIFICATION FORM

Module Title: **Major Project**	Level **6**	Credit Value: **40**

Module code: **AUR603**	Cost Centre: **GABE**	JACS3 code: **K900**

Trimester(s) in which to be offered: **1&2**	With effect from**:** **September 2015**

Office use only: To be completed by AQSU:	Date approved: September 2015 Date revised: - Version no: 1

Existing/New: **New**	Title of module being replaced (if any):

Originating Academic School: **Applied Science, Computing & Engineering**	Module Leader: **Dave Cheesbrough**

Module duration (total hours)	**400**	Status: core/option: **Core**
Scheduled learning & teaching hours	**36**	
Independent study hours	**364**	
Placement	**0**	

Programme(s) in which to be offered: **BSc (Hons) Construction Technology**	Pre-requisites per programme (between levels): **None**

Module Aims:

Students will be provided with the practical skills and research guidance required to pursue an individual programme of study leading to the production of a Major Project report. This will include the selection of a feasible research hypothesis, the application of an appropriate methodology, structuring their findings and presenting their conclusions.

Intended Learning Outcomes:
Knowledge and understanding:

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

1. Produce a BIM model of a complex commercial or public building, to include a technical report using BIM technology (KS1,KS4,KS5,KS6,KS9)
2. Correctly use the Technical Process to create a digital model, showing the data management process (KS1,KS4,KS5,KS9)
3. Use the correct technology to produce a sample Bill of Quantities and a specification (KS4,KS6,KS9,KS10)

Key skills for employability

1. Written, oral and media communication skills
2. Leadership, team working and networking skills
3. Opportunity, creativity and problem solving skills
4. Information technology skills and digital literacy
5. Information management skills
6. Research skills
7. Intercultural and sustainability skills
8. Career management skills
9. Learning to learn (managing personal and professional development, self-management)
10. Numeracy

Indicative assessment:

One single, individual piece of work in the form of a technical report using BIM methodologies to show the range of data and techniques to manage that information.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting	Duration (if exam)	Word count (or equivalent if appropriate)
1	1,2 & 3	Project	100%		10,000

Learning and Teaching Strategies:

Students will undertake a series of lectures based on a step-by-step examination of the broad chronological stages involved in producing a draft proposal and undertaking a project

The lectures will cover good practice examples and will facilitate open discussion between students in order to increase the transfer of knowledge, the critical analysis of proposals and to allow for the development of the skills needed to describe and justify their choices and approaches.

Individual supervisors will be assigned to the student to advise and direct the student through to completion of the work but under the direction of the Module Leader

A Students Log will be completed by the student after each consultation with the Supervisor or Module Leader

Syllabus outline:

- The stages of producing a project.
- Selection of a suitable topic for a project will follow critical analysis of the exemplars provided. These exemplars will be chosen from a range of real world complex building projects already completed.
- A BIM model of the project will be required and the full range of data needed to populate such a model will be a major part of the taught part of the syllabus.
- Time management will be paramount to completion of this work and strategies will be examined in the lecture sessions.

Bibliography:
Essential reading:

Eastman C, et al. *BIM Handbook* 2nd Edition (2011), Hoboken: Wiley
Hardin C & McCool D, *BIM and Construction Management: Proven Tools, Methods, and Workflows* (2015) Oxford :Wiley

Robson C*, How to do a Research Project: A guide for undergraduate students* (2007) Oxford: Blackwell

Other sources:
www.ihsti.com
As directed by the Module Leader