

# Module specification

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Refer to the module guidance notes for completion of each section of the specification.

Module code	AUR626
Module title	Individual Project
Level	6
Credit value	20
Faculty	FAST
Module Leader	Louise Duff
HECoS Code	100148
Cost Code	GABE

# Programmes in which module to be offered

Programme title	Is the module core or option for this	
	programme	
BSc Civil Engineering Studies	Core	

## **Pre-requisites**

N/A

### Breakdown of module hours

Learning and teaching hours	24 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	0 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	<b>24</b> hrs
Placement / work based learning	0 hrs
Guided independent study	176 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	13/04/21
With effect from date	01/09/21
Date and details of	
revision	
Version number	1



### Module aims

The aim of the module is to facilitate the development of an original and authoritative piece of individual research as the product of a contextually viable research methodology.

The module aims to give the learner a simulation of the professional and technical work environment where they are capable of bringing all the appropriate research, analytical and critical resources applied to a civil engineering problem.

Learners will be provided with an opportunity to write a professional technical report, in which appropriate solutions are developed and presented.

This module will provide students with skills required for further study and also help them enhance the skills they need for creating technical reports and preparing and submitting membership review documentation to Professional Bodies.

### **Module Learning Outcomes -** at the end of this module, students will be able to:

1	Identify a particular interest or define a problem within the field of civil engineering that is likely to facilitate an informed research project.
2	Design and implement the project within agreed procedures, guidance and specification, synthesising data and concepts to produce innovative solutions to civil engineering problems
3	Structure and submit an individual Research Project in an academically competent and authoritative manner.
4	Justify and present research project outcomes and be able to communicate designs to technical and non- technical audiences.

#### Assessment

Indicative Assessment Tasks:

Assessment 1 An Individual Research Project in a Civil Engineering context (3,400 words equivalent)

Assessment 2 An Oral Presentation of the above project (10 mins, 600 words equivalent)

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1,2,3	Dissertation/Project	85%
2	4	Oral Assessment	15%

# **Derogations**

N/A



### **Learning and Teaching Strategies**

The module will be driven by a project agreed with the module tutor who will deliver a series of key lectures on the common elements of projects. Proposals will be considered in the context of structural, water, highways, geotechnical, waste or energy engineering.

On line delivery will define the nature of an Individual Research Project and will explain the importance of research methods when establishing context, originality, structure, methodology, data collection and analysis. It is important that whilst such fundamental components are considered in detail, the delivery should avoid being prescriptive to the extent that the student's own initiative in deciding how best to proceed is compromised. It is important that delivery moves to structured tutorial-based support following coverage of those considerations identified above, so that direction and scope can be derived individually by students within their chosen context. It is essential that students continue to question their own processes throughout, so that reflective practise informs originality and academic quality in the final product.

The oral assessment is an opportunity for students to authenticate their submitted work and to clarify or explain further, aspects of the submission that have drawn the attention of the assessor/module tutor.

## **Indicative Syllabus Outline**

Reviewing and researching areas of interest.

Research ethics

Structure and organisation

Research methodologies

Collecting and managing data

Data analysis

Drawing conclusions

Presentation techniques, use of appropriate media.

# **Indicative Bibliography:**

Please note the essential reads and other indicative reading are subject to annual review and update.

#### **Essential Reads**

Bell, J. & Waters, S. (2018), *Doing Your Research Project: A Guide for First-time Researchers*, 7<sup>th</sup> Ed. Maidenhead: OU Press.

Wang, G.T., Park, K., (2016) *Student Research and Report Writing*, Chichester, Wiley Blackwell.

Yin, R. K., (2018), Case Study Research and Applications: Design and Methods, 6<sup>th</sup> Ed. Los Angeles: Sage Publications.



#### Other indicative reading

Van Emden, J. and Becker, L. (2016), *Presentation Skills for Students*. Basingstoke: Palgrave Macmillan.

Leedy, P.D. and Ormrod, J. (2020), Practical Research: Planning and Design. 12th ed. Upper Saddle River: Pearson.

Creswell, J. W. and Creswell J.D. (2018), Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. London: Sage Publication

#### Websites:

Cite them right

Institution of Civil Engineers

Institution of Structural Engineers

Institute of Highway Engineers

**CIHT** 

IHSTI

Other indicative reading will be made available via the VLE.

## Employability skills - the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

#### **Core Attributes**

Engaged Creative Ethical

#### **Key Attitudes**

Commitment Curiosity Confidence

#### **Practical Skillsets**

Digital Fluency
Organisation
Critical Thinking
Emotional Intelligence
Communication