

Module code: MOD008114	Version: 3 Date Amende	ed: 06/Jun/2022
1. Module Title		
Engineering Design		
2a. Module Leader		

Jennifer Joseph

2b. School

SE: ARU College

2c. Faculty

Faculty of Science and Engineering

3a. Level

3b. Module Type

Γ

Standard (fine graded)

4a. Credits	
15	

4b. Study Hours	
150	

5. Restrictions					
Туре	Module Code	Module Name	Condition		
Pre-requisites:	None				
Co-requisites:	None				
Exclusions:	None				
Courses to which this module is restricted:	N/A				

6a. Module Description

This module intends to provide you with the necessary foundation in Engineering Design to progress to Engineering, Computer Science or Architecture degree programmes. This module will help you put your studies into context in the wider world, in particular by considering how different professions must collaborate in the world of work. In this element, you will consider a number of different design processes, and how they might be implemented by multi-disciplinary teams, as well as how the design activity fits within the wider business context.

6b. Outline Content

- Solution-Neutral Problem Statements
- Functions and Embodiments
- Requirements and Evaluation Criteria
- Concept Selection
- Conveying Engineering Information
- Creative Problem Solving
- Ethics and Professionalism
- Sustainability
- Group dynamics

6c. Key Texts/Literature

The reading list to support this module is available at: http://readinglists.anglia.ac.uk/modules/mod008114

6d. Specialist Learning Resources

Access to computer lab

7. Learning Outcomes (threshold standards)				
No.	Туре	On successful completion of this module the student will be expected to be able to:		
1	Intellectual, practical, affective and transferrable skills	Work effectively in a team to complete a multi-week project		
2	Intellectual, practical, affective and transferrable skills	Develop, assess and produce several potential solutions to an engineering problem		
3	Intellectual, practical, affective and transferrable skills	Produce a concise report summarising and critically evaluating a group project		
4	Intellectual, practical, affective and transferrable skills	Produce and deliver a short presentation		

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2022/3	F01CAM	Trimester 1	ARU Cambridge Campus	Face to Face

8b. Learning Activities for the above Module Occurrence				
Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments	
Lectures	0	None	None	
Other teacher managed learning	48	1-4	4 lecture hours per week x 12 teaching weeks	
Student managed learning	102	1-4	Pre and Post session preparation, research, and writing tasks	
TOTAL:	150			

9. Assessment for the above Module Occurrence						
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)	
010	Coursework	1234	50 (%)	Fine Grade	30 (%)	
Report (up to 1500 words)						
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)	
011	Practical	1234	50 (%)	Fine Grade	30 (%)	
Group project and presentation (up to 20 mins)						

In order to pass this module, students are required to achieve an overall mark of 40%.

In addition, students are required to:

(a) achieve the qualifying mark for each element of fine graded assessment of as specified above

(b) pass any pass/fail elements