University of East Anglia

ACADEMIC PARTNERSHIPS

Module Outline **Part 1- as validated**

1.	**Title**	**Individual Research Project (Work Based) Part B**
2.	**Level**	**6**
3.	**Credits**	**40**
4.	**Indicative Student Study Hours**	**36 lectures (group)** **4 h supervision (per student)** **360 hours self-directed learning**
5.	**Core (must take and pass), Compulsory (must take) or Optional**	**Compulsory**

5. Brief Description of Module (purpose, principal aims and objectives)

The aim of the module is to enable students to demonstrate the connecting between academic study, investigative processes and work-based scenarios in commercial settings.

The individual research project requires students to plan, execute, review and report upon a major piece of technical work directly related to the degree discipline. It provides students with the opportunity to develop a high degree of subject specific expertise.

The delivery structure of the module (lectures, online individual and group tutorials, research skills support sessions) reflects the overarching educational and professional purpose of the individual research project: to prepare the student for more autonomous study after the completion of the programme, to introduce postgraduate research skills at the end of a L6 qualification and to enable students to gain communication and presentation skills as part of a rounded professional profile.

6. Learning Outcomes - On successful completion of this module a student will be able to:

(*Add more lines if required)*

	Subject Specific Learning Outcomes
1.	Research, design and develop an engineering project in the workplace through the application of advanced technical skills and the appropriate research methodologies
2.	Demonstrate effectively the ability manage data collection and evaluation
3.	Communicate a practice-based and research underpinned position through an appropriate combination of presented, written, graphic and visual means.

	Generic Learning Outcomes
4.	Take responsibility for own learning and development using reflection and evaluation
5.	Work with ideas and concepts by evaluating information from a range of perspectives

7. Assessment

Pass on aggregate or Pass all components *(modules can only be pass all components if this is a PSRB requirement)*	Pass on aggregate

Summary of Assessment Plan

	Type	% Weighting	Anonymous Yes / No	Word Count/ Exam Length	Learning Outcomes Coverage	Comments
1.	Presentation, followed by group discussion led by the student	25% (presentation) 0% discussion	No	20 minutes	LO 3, 4, 5	
2.	Individual project Report	75%	Yes	5000	LO 1, 2, 3, 5	

Further Details of Assessment Proposals

Give brief explanation of each assessment activity listed

Presentation

The presentation is delivered mid-module and enables the student to share draft (or anticipated/provisional) findings. It is also an opportunity for staff and peer feedback to inform the concluding process of any data collection or research reading.

Individual Project Report

The individual project report in a dissertation-style document which reflects the research investigation, its processes, limitations and conclusion. The critical summary of the findings also needs to identify any potential for future research.

8. Summary of Pre and / or Co Requisite Requirements

Not applicable

9. For use on following programmes
BEng Engineering (Electrical) BEng Engineering (Mechanical)

Module Specification **Part 2- to be reviewed annually**

1.	**Module Leader**	**Dr Dominic Onimowo**

2.	**Indicative Content**
	This module content is inclusive but not limited to the research process, ethics and appropriate research methods particular to engineering, the technicalities of report writing and report evaluation. The student will also demonstrate the ability to carry out research, analysis, synthesis and evaluation of literature and findings which are appropriate to the field through this module. Overall, the student will develop skills relating to project development, literature review, methodology development, skill development, critical thinking, project documentation, reflective writing, and scientific writing.

3. Delivery Method (*please tick appropriate box)*

Classroom Based	Supported Open Learning	Distance Learning	E-Learning	Work Based Learning	Other (specify)
Yes		Yes		Yes	

*If the Delivery Method is **Classroom Based** please complete the following table:*

	Activity (lecture, seminar, tutorial, workshop)	**Activity Duration - Hrs**	**Comments**	**Learning Outcomes**
1	Lectures	24h		LO 1, 2, 5
2	Online lectures and tutorials	12h		LO 3, 4, 5
3	Individual project report tutorials	4h		LO 1-5
	Total Hours	**36 hours lectures, 4 h per student individual supervision**		

If delivery method is *not* classroom based state lecturer hours to support delivery	n/a

4. Learning Resources

To include contextualised Reading List.

Highly Recommended

Cottrell, S. (2014) *Dissertations and Project Reports: A Step by Step Guide. Basingstoke:* Palgrave Macmillan

Dym, C. (2014) *Engineering Design: A Project-Based Introduction.* Hoboken: John Wiley & Sons

Leong, C, Heah, C., Ong, K. (2015) *Guide to Research Projects for Engineering Students: Planning, Writing and Presenting*. Boca Raton: CRC Press

Recommended

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

Journals

Journal of Engineering Design: https://www.tandfonline.com/loi/cjen20

[accessed 07/11/2018]

Journal of Engineering, Design and Technology: https://www.emeraldinsight.com/journal/jedt

[accessed 07/11/2018]