Definitive Unit Specification

1.	Programme Title	MArch
2.	Unit Title	STUDIO & THEORY: Research and Communications
3.	HE Level	PG - FHEQ Level 7
4.	Unit Code	MAR17701
5.	Credit Value of Unit	15
6.	Unit Type	Mandatory
7.	Unit Tutor	TBC

8. Indicative Notional Learning Hours			
Staff – Student Contact		**Independent Study Hours**	
Classes (e.g. lectures, seminars and supervised group activity)	20	**Independent Study** (e.g. project development, reading, research and work on online forums)	105
Supervised Access to Resources	0	**Preparation for Assessment**	15
		Unsupervised Access to Resources	10
Total	20		130

9. Unit Introduction

This is one of the first units undertaken in this course, along with Contemporary Practice. In relation to the course ethos of encouraging the development of individual students' design aspirations, they can propose most of the specific subject areas in this course for research and study. They therefore develop a strategy in this unit during term 1 establishing what they will focus on, particularly in the Dissertation and Comprehensive Design Thesis.

In support of this, the unit provides opportunities for students to learn appropriate advanced research and communication skills necessary to studying at post-graduate level areas associated with architectural theory. It will show students how to establish a critical position within a project-based investigation. Students will develop techniques that will allow them to engage pro-actively with the area of study and to establish a particular field of research.

Additionally as part of the development of communication skills, new and progressing students will be oriented to their local context and each other by undertaking a small group design project. This is exploratory and experimental in nature, about 'making' with a view to understanding the relationship between design and realisation, and investigating contemporary prototyping methods, in line with the innovative theme of the course. It will make extensive use of the workshops to introduce a culture of physical model-making. It will set the character of the course in the light of its principal aim of educating its students to be designers of real artefacts.

10. Aims of the Unit

The unit provides students with the opportunity to develop and enhance a range of skills, including but not limited to the following:

- To become acquainted with a range of archival and on-line sources for the study of architecture.

- To become aware of various models of architectural research, and the complexity of reading responses to architecture texts.

- To plan study strategies for the rest of the course, particularly Dissertation and Comprehensive Design Thesis

- To experience and understand the collaborative imperatives in the production of and the relationship between design, design communication and manufacture.

- The ability to create architectural designs that satisfy both aesthetic and technical requirements by demonstrating critical insight and practical understanding of a particular complex architectural specialism through the development of an appropriate design and artefact

And thereby have satisfied the ARB/RIBA Criteria for Part 2 at FHEQ Level 7 as outlined in the Learning Outcomes

11. Indicative Content

The topics covered in the unit will include:

- Effective reading, information retrieval and library skills.

- Design and implementation of empirical research.

- Analysis and evaluation of a study's results using statistical or other techniques.

- Written, drawn and modelled presentation skills utilizing appropriate tools and techniques.

- Strategic plan for study options in dissertation and final project
- Design and manufacture of a complex artefact

12. Unit Learning Outcomes

In order to successfully satisfy the learning outcomes students are required to engage with the process of learning. The learning outcomes refer to developing the following **RIBA/ARB Graduate Attributes for Part 2** and **FHEQ Level 7 standards** and must be read in conjunction with these. With regard to meeting the eleven RIBA/ARB General Criteria at Parts 1 and 2, successful completion of this unit will contribute to the award of the Part 2 to students who have:

GA2.3 ability to evaluate materials, processes and techniques that apply to complex architectural designs and building construction, and to integrate these into practicable design proposals**;**

GA2.4 critical understanding of how knowledge is advanced through research to produce clear, logically argued and written work relating to architectural culture, theory and design;

GA2.7 ability to identify individual learning needs and understand the personal responsibility required to prepare for qualification as an architect.

FHEQ Level 7:

- a comprehensive understanding of techniques applicable to their own research or advanced scholarship

- conceptual understanding that enables the student to evaluate critically current research and advanced scholarship in   the discipline and to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

- the ability to demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level, and continue to advance their knowledge and understanding, and to develop new skills to a high level

- the independent learning ability required for continuing professional development.

- originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline

- deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences

Upon completion of this unit students will be able to demonstrate, in relation to the above:

Learning Outcome	Marking Criteria	
1. A comprehensive understanding of techniques applicable to advanced scholarship in architecture	☒ Research ☒ Analysis ☒ Subject Knowledge ☐ Experimentation	☒ Technical Competence ☒ Communication & Presentation ☒ Personal & Professional Development ☐ Collaborative and / or Independent Professional working
2. Conceptual understanding that enables students to evaluate critically current research and advanced scholarship in the disciplines, and to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.	☒ Research ☒ Analysis ☒ Subject Knowledge ☒ Experimentation	☒ Technical Competence ☒ Communication & Presentation ☐ Personal & Professional Development ☐ Collaborative and / or Independent Professional working
3. A professional approach to research and development projects.	☐ Research ☐ Analysis ☐ Subject Knowledge ☐ Experimentation	☒ Technical Competence ☒ Communication & Presentation ☒ Personal & Professional Development ☒ Collaborative and / or Independent Professional working
4. The ability to apply a range of research methods and formulate an appropriate feasibility study relative to their chosen design and dissertation projects.	☒ Research ☒ Analysis ☒ Subject Knowledge ☐ Experimentation	☒ Technical Competence ☒ Communication & Presentation ☒ Personal & Professional Development ☒ Collaborative and / or Independent Professional working
5. The ability to present research findings and conclusions in a lucid academic style.	☐ Research ☐ Analysis ☐ Subject Knowledge ☐ Experimentation	☒ Technical Competence ☒ Communication & Presentation ☒ Personal & Professional Development ☒ Collaborative and / or Independent Professional working
6. The ability to work in a group and evaluate materials, processes and techniques that apply to the design	☒ Research	☒ Technical Competence

of a complex practicable artefact and formulate a communication strategy for its manufacture by others	☒ Analysis ☐ Subject Knowledge ☒ Experimentation	☒ Communication & Presentation ☒ Personal & Professional Development ☒ Collaborative and / or Independent Professional working
7. The ability to communicate clearly to a professional standard the design intention for the artefact using appropriate methodologies so that it can be manufactured by others	☐ Research ☐ Analysis ☒ Subject Knowledge ☐ Experimentation	☒ Technical Competence ☒ Communication & Presentation ☒ Personal & Professional Development ☒ Collaborative and / or Independent Professional working
8. The ability to construct the artefact from the communication, including quality and viability of the finished product	☐ Research ☐ Analysis ☐ Subject Knowledge ☐ Experimentation	☒ Technical Competence ☒ Communication & Presentation ☒ Personal & Professional Development ☒ Collaborative and / or Independent Professional working

13. Learning and Teaching Methods

This unit will be delivered using a combination of:

- Briefings ☒
- Lectures ☒
- Project work ☒
- Seminars ☒
- Workshops ☒
- Group work ☒
- Online activity ☒
- Individual Presentations and critiques ☒
- Group presentations and critiques ☒
- Self-directed independent study ☒
- Other (describe below) ☒

This module is delivered as a series of lectures, seminars and related supervision sessions, which involve critical discussion, small group work and appropriate background reading. The module introduces an understanding of the methodologies and approaches to academic and design-led research in architecture, drawing on a wide range of cross-disciplinary sources developed in architecture, design and cognate disciplines.

14. Assessment Methods

The assessment for this unit is weighted. In element-based assessment, you must achieve at least D- in the overall unit. Failure (E, F, or F-), or non-submission in any element defaults to Fail for the unit.

- 20 minute interim presentation (20%)
    - Outline LO 3 & 4
- 2000 word Study Strategy (40%)
    - Study subject definition in relation to D & CDT
    - How LO 1 - 3 apply
    - How LO 4 - 5 apply
- Group design and make project (40%)
    - Application of LO 6 - 8

Assessment will be against the specified marking criteria.

All learning outcomes must be achieved at D- to pass this unit.

15. Reading and Resource List

Agkathidis, A. (2016) *Generative Design: form-finding techniques in architecture (Form + Technique)* Lawrence King

Aiello, C. (2014) Evolo, *Issue 06: Digital and Parametric Architecture* eVolo

Beesley, P. (2011) *Hylozoic Ground: Liminal Responsive Architecture*, 2011

Bell, Judith (1993) *Doing Your Research Project,* Open University Press

Blaxter, L., Hughes, C. & Tight, M. (2006) *How to Research,* 3rd Edition: OUP

Borden, Ian and Ruedi, Katarina. (2014) *The Dissertation: A Guide for Architecture Students,* Routledge

Brookfield, S. (1995) *Developing Critical Thinkers* Open University Press

Cook, Sir Peter (2013) *Drawing: The Motive Force of Architecture*

Creswell, J. (2003) *Research Design Qualitative, Quantitative, and Mixed Methods Approaches,* Sage

Dunn, Nick (2010) *Architectural Modelmaking*, Laurence King

Dunn, Nick (2012) *Digital Fabrication in Architecture*, Laurence King

Dye, Anne & Samuel, Flora, (2015) *Adding Value to Architectural Practice – Demystifying Architectural Research*, RIBA Publishing

Essential Reading

Farrelly, Lorraine and Crowson, Nicola (2014) R*epresentational Techniques for Architecture,* London: Bloomsbury Publishing

Fellows, R. and Liu, A. (2003) *Research Methods for Construction,* 2nd Edition: Blackwell

Fortmeyer, F. and Linn, C. (2014) *Kinetic Architecture: Designs for Active Envelopes,* Images Publishing

Lucas, R. (2016) *Research Methods for Architecture*, Laurence King

Ridley, Diana (2012) *The Literature Review: A Step-By-Step Guide For Students (Sage Study Skills Series),* Sage Publications Ltd

Sheil, Bob (ed) (2005) *Design Through Making* , Wiley

URLs

https://www.brookes.ac.uk/students/upgrade/study-skills/dissertations/

http://www.kinetica-museum.org

http://themadmuseum.co.uk

http://www.youtube.com/watch?v=8qJ4zC0DP18

http://www.youtube.com/watch?v=tqmyHX1orTA

http://www.youtube.com/watch?v=bFlJ7Qo8LO0&feature=related

http://www.urbanarchnow.com/2012/03/arab-institute-paris.html

http://www.youtube.com/watch?v=eWgeXczf_0M

Further Reading and Resources

Further reading and resources will be identified in your Project Brief.