

**Course Code:**

PMAR205

**Session:**

2017/2018

**1. Course Title:**

Individual Research Project 2: Feasibility Study

**2. Date of Production/Revision:**

20 April 2017

**3. Level:**

SCQF 11

**4. Credits:**

15

**5. Lead School/Board of Studies:**

Mackintosh School of Architecture

**6. Course Contact:**

As per Pathway

**7. Course Aims:**

- To apply research methodologies and practices to an allied architectural field.
- To identify a research question within an allied field of study and develop appropriate research in response.
- To develop an academic writing practice in answering a self-directed research question

In addition the specific aims of the elective area are:

**Urban Design**

- To develop a critical understanding of the key cultural, social and economic issues that shape the urban environment.
- To analyse the nature of a particular place (town or city) in order to devise strategies and visions for its future.
- To devise and test solutions against local conditions and to reflect upon their applicability in global situations.

### **Urban Building**

- To develop a critical understanding of the key cultural, social, economic and technological issues that influence the role and form of architecture within the city.
- To analyse the nature of a particular urban site and to devise a particular programme of use in order to prepare designs for an urban building.
- To demonstrate the organisation of an urban building and its architectural qualities in response to local conditions and to reflect upon the applicability of the chosen approach in global situations.

### **Digital Creativity**

- To develop a critical understanding of the key philosophical notions of information, reality, materiality and cyberspace.
- To develop a theoretical understanding of the intellectual trends in computer based design cognition.
- To explore and demonstrate appropriate skills in the use of various machine based media and techniques in the design process.

### **Energy and Environment**

- To develop a critical understanding of the key principles relevant to the creation of sustainable architecture.
- To gain an understanding of the physical parameters that determine the performance of buildings in terms of environmental efficiency, comfort and well being, relative to function and climatic context.
- To develop an ability to use appropriate analytical tools to make an innovative contribution to the design of sustainable, solar, bio-climatic or green architecture.

### **History and Theory of the City**

- To equip students with a range of methods and ideas for examining urban architecture through a historical and theoretical framework.
- To provide a broad coverage of significant themes and case studies in history and theory relating to western urban architecture.
- To enable and stimulate the development of students' independent research interests and learning within the discipline and subject area.

### **Creative Urban Practices**

- To develop a critical understanding of the key theories and practices of space and place, in the context of historical and contemporary urbanism.
- To analyse the nature of a particular place in order to devise creative propositions that address issues of space and place in that location.
- To reflect upon the links between theories and practices of space and place and the realities of contemporary urban design practice.

### **Zero-Energy Mass Custom Housing**

- To develop a critical understanding of design, production and communication principles relevant to the delivery of zero energy sustainable housing.

- To gain an understanding of key parameters that determine the housing affordability and performance in view of socio-demographic contexts.
- To develop an ability to use appropriate analytical tools to make an innovative contribution to mass-customising socially, economically and environmentally responsible housing units and the community development.

### **8. Intended Learning Outcomes of Course:**

At the end of the Course each student should have the ability to demonstrate and/or work with: SCQF Level 11.

#### Category A : Knowledge and Understanding

- Knowledge that covers and integrates most, if not all, of the main features, boundaries, terminology and conventions of the chosen elective pathway.

#### Category B: Practice – Applied Knowledge and Understanding

- Use a significant range of the principal skills, techniques and practices associated with the Area of Specialisation
- Plan and execute a significant project of research, investigation and/or design.
- Demonstrate creativity in the application of theoretical, conceptual and practical knowledge

#### Category C: Generic Cognitive Skills

- Apply critical analysis, evaluation and synthesis to issues which are at the forefront, or are informed by developments at the forefront, of the areas of study.
- Identify problems and issues within the area of study and develop original and creative responses to them.

#### Category D: Communication, ICT and Numeracy Skills

- Communicate on an expert level in a variety of roles and contexts.
- Communicate, using appropriate methods, to a range of audiences with different levels of knowledge/expertise.

#### Category E: Autonomy, Accountability and Working with others

- Exercise substantial autonomy and initiative in carrying out the work related to the Course of study.
- Demonstrate the ability to manage time and physical resources in relationship to undertaking self-directed study as an individual and a group member.
- Collaborate with peers and others in researching, sharing knowledge and discussion of work in progress.

### **9. Indicative Content:**

The submission for the course will be in the form of a written report providing a detailed, objective and methodical study of the strengths and weaknesses of the proposed research project as identified in IRP1, the materials, resources, methodologies and expertise required to realise such a project in order to evaluate the prospects of success.

In the case of a design based project this will including such factors; programme, site appraisal and potential strategies, technical challenge; environmental, structural and constructional, precedents,

historical background and theoretical context and options appraisal.  
 In the case of a research based project this will include appraisal of research methods employed, data analysis and synthesis.

The Feasibility Study builds of the information generated in stage 1 with the IRP1: report and anticipates the realisation of the project within stage 3.

The work is undertaken on an individual basis. The work related directly to the student's specialist pathway.

- Urban Design
- Urban Building
- Digital Creativity
- Energy and Environment
- History and Theory of the City
- Creative Urban Practices
- Zero-Energy Mass Custom Housing

**10. Description of Summative Assessment:**

No.	Assessment Method	Description of Assessment Method	Weight %	Submission week (assignments) or length (exam)
1	Written Work	Feasibility Study of 6,000 – 7,000 words	100	Semester 2 Week 12

**10.1 Please describe the Summative Assessment arrangements:**

The Individual Research Project 2: Feasibility Study is assessed against the stated learning outcomes of the course.

The submission will be assessed by the Internal Examination Board, comprising the elective tutor and Programme team. Written feedback will be given.

A candidate will be permitted reassessment in the course, if he or she has obtained a grade D1 or worse. A candidate will be entitled to one reassessment only, which must take place prior to the submission of the course work for the next stage

All reassessment results will be capped at grade C3.

**11. Formative Assessment:**

Formative feedback is available through regular tutorial sessions and group discussions

**11.1 Please describe the Formative Assessment arrangements:**

**12. Collaborative:**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<b>12.1 Teaching Institutions:</b>	
<b>13. Requirements of Entry:</b>	
First Class or Upper Second Class Honours Degree, or the equivalent in a field relevant to the chosen Pathway.	

<b>14. Co-requisites:</b>
Stage 2 Research Paper 2 PGT GSA elective

<b>15. Associated Programmes:</b>
Master of Architectural Studies

<b>16. When Taught:</b>
Stage 2

<b>17. Timetable:</b>	
Stage 2 begins	Late January
Tutorials occur weekly throughout the stage	
Submission date	Early May
End of stage 2	Late May

<b>18. Available to Visiting Students:</b>	
Yes <input type="checkbox"/>	No <input type="checkbox"/>

<b>19. Distance Learning:</b>	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

<b>20. Placement:</b>	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

<b>21. Learning and Teaching Methods:</b>		
Method	Formal Contact Hours	Notional Learning Hours (Including formal contact hours)
Lecture	5	5
Seminar/Presentation	10	35
Tutorial	10	35
Workshop		
Project work		
Essay		
Private Study	Not Applicable	75

Other (please specify below)		
<b>TOTAL</b>	<b>25</b>	<b>150</b>

**22. Description of "Other" Teaching and Learning Methods:**

N/A

**23. Additional Relevant Information:**

**24. Indicative Bibliography:**

Dependent upon the Pathway in which the elective is based.

**Creative Urban Practices**

De Certeau, Michel (1988) *The Practice of Everyday Life*, trans Steven Rendall, London, Berkley and Los Angeles: University of California Press.

Lefebvre, Henri (1991), *The Production of Space*, trans Donald Nicholson-Smith, London: Blackwell.

Massey, Doreen (2005), *For Space*, London: SAGE.

Plant, Sadie (1992) *The Most Radical Gesture: The Situationist International in a Postmodern Age*, London and New York: Routledge.

Thrift, Nigel and Pile, Steve (2000) *City A-Z*, London and New York: Routledge.

**Digital Creativity**

Digital Eisenman, 2002, *IT Revolution*.

Gibson, W., 1984 *Neuromancer*.

Mitchell, W., 2000, *City of Bits*.

**Energy & environment**

Porteous C. (2002), *THE NEW eco-ARCHITECTURE, Alternatives from the modern movement*, Spon Press, London

Banham R. (1969), *The Architecture of the Well-tempered Environment*, Architectural Press, London

Melet E. (1999), *Sustainable Architecture towards a diverse built environment*, NAI Publishers, Rotterdam

Hawkes D. and Foster W. (2002), *Architecture, Engineering & Environment*, Laurence King, London

**History and theory of the City**

Bennett, Michael, and David Teague (ed.), (1999) *The Nature of Cities: Ecocriticism and Urban Environment*

Blunt, Alison, and Robyn Dowling, (London, 2006), *Home*

De Certeau, Michel, (Berkeley, 1984) *The Practice of Everyday Life*

Foucault, Michel, (London, 1972), *The Archaeology of Knowledge*

Williams, Rosalind, (Los Angeles, 1982), *Dream Worlds: Mass Consumption in Late Nineteenth Century France*

Young, James E., (New Haven, 2000), *At Memory's Edge: After-images of the Holocaust in Contemporary Art and Architecture*

**Urban Building**

Willy Boesiger, 1996, *Le Corbusier: complete works in eight volumes*, Birkhauser.

Karl Fleig, 1990, *Alvar Aalto: complete works, volumes 1 and 2*, Birkhauser.

Heinz Roner, Sharad Jhaveri, 1987, *Louis I Khan: compete works 1935-1974*, Birkhauser.  
Raphael Moneo, 2005, *Theoretical Anxiety and Design: strategies in the work of eight contemporary architects*.

### **Urban Design**

Lynch, Kevin (1960), *The Image of the City*, Cambridge, Mass and London: MIT Press.  
John Reader: *Cities*, William Heinemann, 2004  
Le Corbusier: *The Radiant City*, Faber, 1967  
Robert Venturi, Denise Scott Brown, Steve Izenour, *Learning from Las Vegas*, 1972  
Peter Reed, *Glasgow: The Forming of The City*.  
Rudolph Kenna, *Glasgow then and now*  
A. H.Gomme and D. Walker, *Architecture of Glasgow*

### **Zero Energy Mass Customised Housing**

Noguchi, Masa, ed. 'The Quest for Zero-carbon Housing Solutions' *Open House International*, Vol. 3, No. 3, 2008.  
European Commission, *Photovoltaic Geographical Information System (PVGIS)*  
<<http://re.jrc.ec.europa.eu/pvgis>>.  
IEA PVPS Task 7, PV Database <[http://www.pvdatabase.com/search\\_form.cfm](http://www.pvdatabase.com/search_form.cfm)>.  
Jones, Leslie, *Tap the Sun: Passive Solar Techniques and Home Designs*, Ottawa: Canada Mortgage and Housing Corporation, c1997.  
Porteous, Colin, *The NEW eco-ARCHITECTURE, Alternative from the Modern Movement*, London: Spon, 2002.  
Porteous, Colin, and Kerr MacGregor, Kerr, *Solar Architecture in Cool Climates*, London: Earthscan, 2005.