1. **Title of the module**

ARCH8280 (AR828) – Rediscovery – **Historic Buildings and their Environmental Technologies**

1. **School or partner institution which will be responsible for management of the module**

Kent School of Architecture and Planning

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 7

1. **The number of credits and the ECTS value which the module represents**

30 credits (15 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Autumn

1. **Prerequisite and co-requisite modules**

None

1. **The programmes of study to which the module contributes**

MSc Architecture and the Sustainable Environment

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to demonstrate:**
   1. A comprehensive understanding of the history of environmental design in architecture, including the role of the natural sciences and technology in its development.
   2. A critical understanding of the specific cultural and historical context of environmentally driven innovation today and in the past.
   3. An in-depth knowledge of the environmental design strategies and technologies used in historic building, including the post-war building stock.
   4. An ability to use of historical research methods in the study of historic buildings from an environmental perspective.
   5. An ability to analyse the environmental behaviour of historic structures and the efficiency of past environmental technologies, using modern scientific methods.
   6. An in-depth knowledge of building science and its application to the analysis of historic structures and environmental technologies.
   7. A comprehensive understanding of cross-disciplinary and collaborative approaches to the study of historic buildings.
2. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to demonstrate:**
   1. A comprehensive understanding of the methods used in historical research, such as the gathering and interpretation of historic material, the reconstruction of events or evolution of a design.
   2. The ability to analyse scientific and technical data.
   3. A comprehensive understanding of cross-disciplinary and collaborative ways of working.
   4. The ability to produce research papers at a publishable standard, reflecting an awareness of the implication of writing for specialist and non-specialist readers.
   5. The ability to communicate their research through oral and visual (e.g. posters, diagrams, animations) presentations to specialist and non-specialist audiences.
   6. The ability to conduct project work independently or within a team of research collaborators.
3. **A synopsis of the curriculum**

In this module students will explore the environmental dimension of historic buildings and evaluate past environmental technologies and strategies, through a combination of historical research and technical analysis.   
Students research into the historical and cultural context of environmentally driven innovation in architecture, and will explore the specific motivations and historical circumstances that have been driving the development of environmental technologies and scientific principles today and in the past.  
Students will conduct a detailed environmental design case study of a historic building or environmental technology, combining historical research and technical analysis. Students have the choice to select from a number of case studies chosen by the module convenor or to study a building of their own choice. Students will conduct a piece of historical research with the aim of gaining a detailed understanding of the original environmental design intentions behind a particular historic building and the environmental technologies and control regimes deployed to achieve these objectives. Although each student will be assessed on individual pieces of work, the students are encouraged to work in cross-disciplinary teams.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Banham, Reyner (1969). The Architecture of the Well-Tempered Environment. Chicago: University of Chicago Press.  
Brucemann, Robert. Prowler, Donald. (1977). ‘19th Century Mechanical System Designs’, JAE, Vol. 30, No. 3 (Feb., 1977), pp. 11-15.   
Bruegmann, Robert. (1978). ‘Central Heating and Forced Ventilation: Origins and Effects on Architectural Design’, Journal of the Society of Architectural Historians , Vol. 37, No. 3 (Oct., 1978), pp. 143-160.

Hawkes, Dean. (1996). The Environmental Tradition: studies in the architecture of environment. London: Taylor & Francis.

Popper, Carl (1959). *The Logic of Scientific Discovery*. London: Hutchinson.  
Porteous, Colin. (2002). The new eco-architecture: alternatives from the modern movement. London: Spon Press.

1. **Learning and teaching methods**

Total contact hours: 45 hours

Private study hours: 255 hours

Total study hours: 300 hours

1. **Assessment methods**
   1. Main assessment methods

Research Paper (5,000 words) (100%)

13.2 Reassessment methods

Like for like

1. ***Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 | 8.7 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 | 9.6 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Private Study** | **X** | **X** | **X** | **X** | **X** | **X** |  |  |  | **X** | **X** |  | **X** |
| Lectures | **X** | **X** | **X** | **X** | **X** | **X** | **X** |  |  | **X** | **X** |  |  |
| Seminars | **X** | **X** | **X** | **X** | **X** | **X** | **X** |  |  | **X** | **X** |  |  |
| One-to-one/ small-group tutorials |  |  |  | **X** |  |  | **X** |  |  |  |  |  |  |
| Project presentations |  |  |  | **X** |  |  |  | **X** | **X** |  |  | **X** | **X** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Research Paper | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |

1. **Inclusive module design**

The School recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

Lectures, seminar teaching and tutorials will continue to draw on international source materials for historical and contemporary examples and theories of sustainability and design.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 20/01/2020 | Minor | September 2020 | 1,13 |  |
|  |  |  |  |  |

Revised FSO Jan 2018