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BUIL 1074 FDA3/PDA4

The technical study is split into two separate terms and will be integrated into the design portfolio. However, the design and technical aspect of the portfolio will be assessed separately. However, your design drawings and models will inform the technical assessment.

term 1

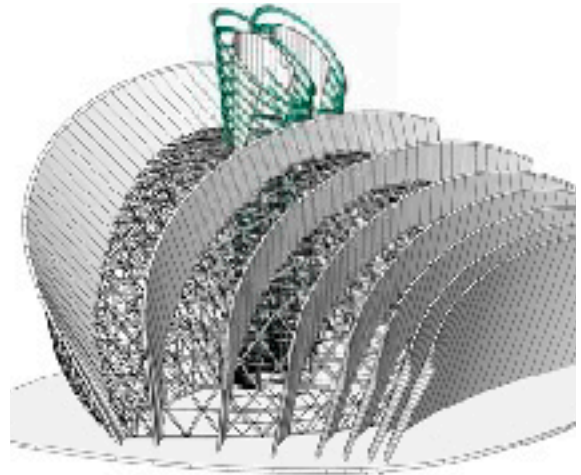
The atelier's technical tutor and the design tutor will set a brief and an assessment criteria based on the atelier's own field of study.

The assessment will have to investigate materials, structural, environment and constructional aspects of architecture which must be recorded or represented through photographs, collages, diagrams, drawings and models.

All research and experiments must be recorded. Sketches must be presented within the frame work of the over-all presentation.

The presented work must be accompanied by a written explanation.

note: Your work must show the topics of research, the research itself, the experiments undertaken and a set of technical drawings explaining your investigation(s). As a guide the whole assessment must be approximately four A2 drawings.



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term 2

The technical study for the second term will be assessed on the technical realisation of the main project. The technical study will be in-corporated into the design portfolio but the technical aspect will be marked independently. The design drawings will form part of the technical assessment.

Specific drawings, collages, models, should make up the technical submission with written explanation accompanying it where required.

The main project's technical requirements:

The following elements must be addressed.

1. Structure
2. Materials
3. Construction Details
4. Sustainable + Ecological Considerations
5. Technology experiments and ideas

1. structure

Sketches and structural models at 1:50 or appropriate scale.

A written explanation is to accompany this section.

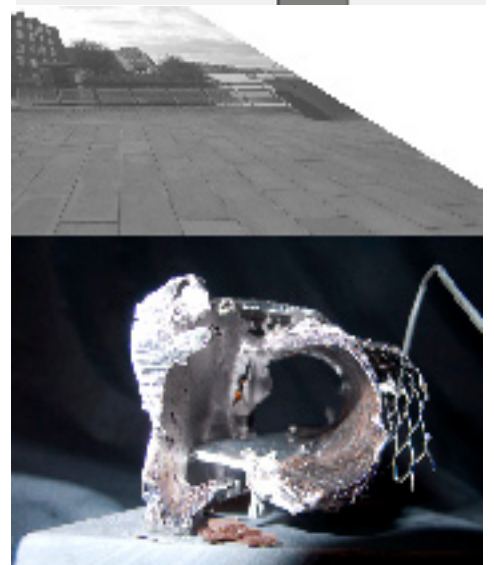
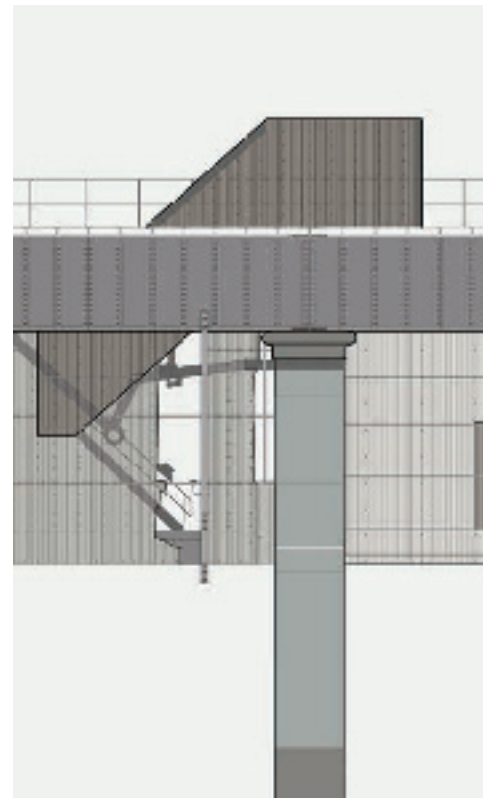
You must demonstrate your understanding of the structure that have employed i.e. Its appropriateness in aiding the realisation of the design concept.

2. materials

This is an investigation of the materials used in the realisation of the concept. Why did you use the materials that you have chosen? What are its technical qualities? Does it ware under climatic conditions, is it sustainable, does it glow and why does it glow etc.

Keep asking questions about the material you have chosen and show any experiments that you have undertaken.

Drawings + Research + a written explanation is to accompany this section.



3. construction

1:20 Rod Section.

This is a section taken through one part of the building. It must show foundation slabs, wall make up, internal and external walls finishes, floors and roof detail.

This is an important section as it will show how much you understand about a myriad of construction issues - such as waterproofing, sound and thermal insulation, detailing of wall to floor junctions; wall to roof junctions etc.

4. Sustainable + Ecological Considerations.

Site location, site orientation, material choice, construction method, energy consumption, well-being and waste. It must also include lighting, air conditioning, heating etc.

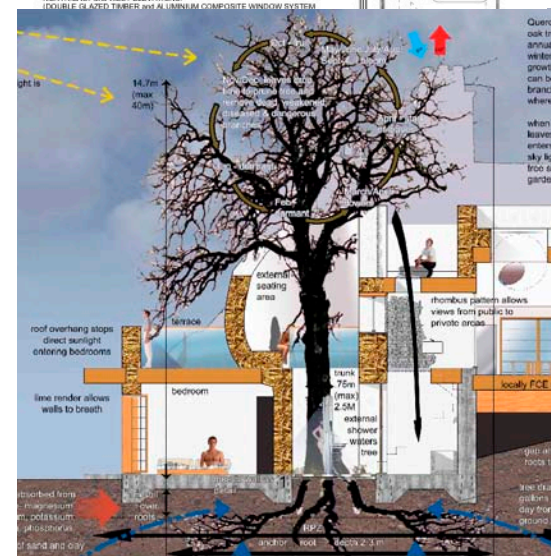
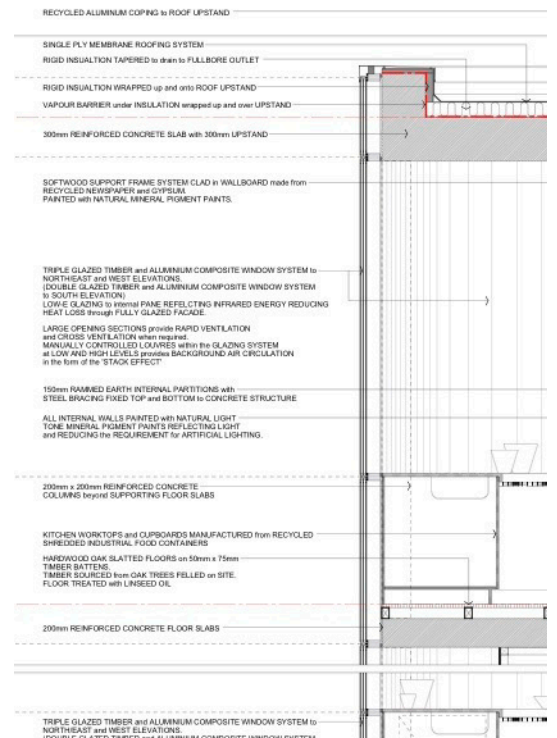
This chapter is to ensure that you have a clear understanding of current environmental issues. The drawings/diagrams will have to show how your project uses site location, site orientation, material choice, construction method, energy consumption and waste management to achieve good environmental standards for your design. Each title will have to be completed with written explanation accompanied by, sketches, details drawings, diagrams and photos etc.

It would be preferable that each point meets the highest environmental standards. However, if you do not achieve this or decide to use un-favourable solutions then you will have to state why you used your particular solution.

5. . technological experiments and ideas.

Documentation of experiments and ideas from tangential projects or thought processes.

Note: All experiments and sketches must be recorded and presented in portfolio format. Sketchbooks are important but the relevant sketches must be represented in the portfolio format. Sketchbooks will not be marked..



references list:

Steel Construction Manual	Shulitz/Sobek
Timber Construction Manual	Herzog/Natterer
Glass Construction Manual	Schittich/Staib
Materials Form Architecture	Richard Weston
Details of Modern Architecture	Ford
Structural System	Engel
How Buildings Learn	Brand
Constructing Architecture: Materials,Processes,Structures	Deplazes
Creativity and Innovation:	Addis
The Structural Engineer's Contribution to Design	
Skins for Buildings	Zijlstra/Vollaard
Building Simply	Schittich
Architectural Surfaces	Juracek
Material Misuse	Kennedy/Grunenberg
Materials for Inspirational Design- Ceramics	Lefteri
Materials for Inspirational Design- Glass	Lefteri
Materials for Inspirational	Lefteri
Materials for Inspirational Design- Plastics 2	Lefteri
Materials for Inspirational Design- Wood	Lefteri
Architects Working Details	Jenkins/Dawson etc.
Architects Working Details	Boyle/Wright