

Technology and Practice 2

Module Information

2022.01, Approved

Summary Information

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|---------------------|----------------------------------|
| Module Code | 5131AR |
| Formal Module Title | Technology and Practice 2 |
| Owning School | Liverpool School of Art & Design |
| Career | Undergraduate |
| Credits | 20 |
| Academic level | FHEQ Level 5 |
| Grading Schema | 40 |

Teaching Responsibility

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|-----------------------------------|
| LJMU Schools involved in Delivery |
| Liverpool School of Art & Design |

Learning Methods

| Learning Method Type | Hours |
|----------------------|-------|
| Lecture | 25 |
| Workshop | 12 |

Module Offering(s)

| Display Name | Location | Start Month | Duration Number Duration Unit |
|--------------|----------|-------------|-------------------------------|
| JAN-MTP | MTP | January | 12 Weeks |

Aims and Outcomes

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| Aims | The aim of this module is to methodically inform students in the topics of environmental design, structural design, materials choice and properties, Computer Aided Design, and the construction of buildings on site. The module builds on the broad introduction given at Level 4, by focussing on the technical realisation of buildings through analysis, design, detailing, and site construction and supervision. |
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After completing the module the student should be able to:

Learning Outcomes

| Code | Number | Description |
|------|--------|--|
| MLO1 | 1 | Outline the proposed project in the context of comparable fields of investigation. |
| MLO2 | 2 | Contextualise their project with reference to relevant precepts of sustainability. |
| MLO3 | 3 | Communicate succinctly through writing, drawings and diagrams an evaluation of their technological inquiry/ies. |
| MLO4 | 4 | Demonstrate understanding of the role of the architect, other professionals and legislation in the procurement of buildings. |
| MLO5 | 5 | Describe the key issues in the management of architectural practice and building projects. |

Module Content

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| Outline Syllabus | Lectures series are presented on the technology of environmental design including energy supply, mechanical systems and building services, and on artificial lighting, and on acoustics. Basic structural mechanics theory is introduced covering systems capable of spanning long distances and structural rules of thumb. Additional lectures on the detailed design of structural elements in timber, brick, concrete and steel are included. A series of construction lectures is given continuing from the lectures in Level 4 and dealing with the 'making' of architecture. The course is structured according to the 'Common Arrangement', to allow a smooth progression into practice in the fourth 'year out'. The lectures are intended to aid the technical realisation of work being produced in the design studio. The module also has a number of Professional Studies lectures continuing a series delivered over Years 2 & 3. The aim is to introduce students to the framework of professional procedures and legal responsibilities within which architects work in England and Wales. CAD Workshops give students the key skills necessary to represent their architectural ambitions. The syllabus covers techniques in presentation, architectural drafting, 3d modelling using both CAD and graphics methods, as well as the interface with CAD/CAM and rapid prototyping technology. A range of software is used in the key categories of CAD, BIM, environmental analysis and graphics. |
| Module Overview | The aim of this module is to methodically inform you of the topics of environmental design, structural design, materials choice and properties, Computer Aided Design, and the construction of buildings on site. The module builds on the broad introduction given at Level 4, by focussing on the technical realisation of buildings through analysis, design, detailing, and site construction and supervision. |
| Additional Information | This module supports the concurrent design module (5124AR) though lectures and workshops, challenging students in the technical aspects of their design development. The main assessment for the module follows a series of workshops on Building Information Modelling (BIM) and environmental analysis. A second assessment also follows a series of Professional Practice lectures. |

Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Module Learning Outcome Mapping |
|---------------------|-----------------|--------|--------------------------|---------------------------------|
| Presentation | Report | 70 | 0 | MLO1, MLO2, MLO3 |
| Essay | Essay | 30 | 0 | MLO4, MLO5 |

Module Contacts

Module Leader

| Contact Name | Applies to all offerings | Offerings |
|--------------|--------------------------|-----------|
| Simon Tucker | Yes | N/A |

Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
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