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| <b>Module Title:</b>   | Domestic Technology and Structural Appreciation 2  |
| <b>Language of Instruction:</b>  | English  |
| <b>Credits:</b>  | 5  |
| <b>NFQ Level:</b>  | 6  |
| <b>Module Delivered In</b>   | <a href="#">3 programme(s)</a>   |
| <b>Teaching &amp; Learning Strategies:</b>   | Lectures, Practical's, Private study   |
| <b>Module Aim:</b>   | The aims of the module are: (1) to provide students with a knowledge of the techniques, methods and practices used in the construction of buildings; (2) To introduce students to the concept of sustainable building; (3) To give students a basic introduction to some aspects of structural design and an appreciation of what is involved. |
| <b>Learning Outcomes</b>   |  |
| <i>On successful completion of this module the learner should be able to:</i>  |  |
| LO1  | to apply the methodologies used for setting out buildings on site and to illustrate how the foundations for buildings are constructed  |
| LO2  | to describe and illustrate how the walls, roofs and ground floors of buildings are constructed on site and off site and how the internal space in buildings is divided by partitions and floors  |
| LO3  | Demonstrate a knowledge and understanding of force and moment, their units and their application to loads, load types, stress, strain, load paths, including construction of simple shear force and bending moment diagrams  |
| LO4  | Demonstrate a knowledge of structural form and uses within structure - columns, beams, walls and foundations, a knowledge of Rules of Thumb regarding sizing of elements of construction projects  |
| LO5  | to select building materials new and existing that do not damage the environment, to understand health and safety issues on site and have an awareness of current legislation and building regulations in construction methods.  |
| LO6  | Demonstrate a knowledge and ability to undertake calculations of force and moment, their units and their application to loads, load types, stress, strain, load paths, including construction of simple shear force and bending moment diagrams  |
| <b>Pre-requisite learning</b>  |  |
| <b>Module Recommendations</b><br><i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>         |  |
| No recommendations listed  |  |
| <b>Incompatible Modules</b><br><i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i> |  |
| No incompatible modules listed   |  |
| <b>Co-requisite Modules</b>  |  |
| No Co-requisite modules listed   |  |
| <b>Requirements</b><br><i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>          |  |
| No requirements listed   |  |

## Module Content & Assessment

| Indicative Content  |
|---|
| <b>Superstructure</b><br>(a) External walls, (b) roofs, (c) upper floors, (d) internal/partition walls, (e) stairs, (f) movement joints (g) Sustainable building materials and technologies, (h) off site modular construction, (i) Construction Technologies (j) Insulation materials and fabric technologies (k) Fireplaces and flues, components, and finishes, (l) Material selection |
| <b>Stress and Strain</b><br>(a) Stress, strain, elasticity (b) Stress/ strain graphs, (c) Steel, concrete, reinforced concrete  |
| <b>Practical/lab Work</b><br>(a) Freehand Sketching Section through external wall and roof Fireplace details. Window and door schedule. Stair details Roof details. (b) Loading of unreinforced vs. reinforced concrete   |

| Assessment Breakdown             | %      |
|----------------------------------|--------|
| Continuous Assessment            | 15.00% |
| Project                          | 40.00% |
| End of Module Formal Examination | 45.00% |

| Continuous Assessment |                        |                   |            |                 |
|-----------------------|------------------------|-------------------|------------|-----------------|
| Assessment Type       | Assessment Description | Outcome addressed | % of total | Assessment Date |
| Case Studies          | n/a                    | 2,4,5             | 15.00      | n/a             |

| Project         |                        |                   |            |                 |
|-----------------|------------------------|-------------------|------------|-----------------|
| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
| Project         | n/a                    | 2,4,5,6           | 40.00      | n/a             |

|              |
|--------------|
| No Practical |
|--------------|

| End of Module Formal Examination |                        |                   |            |                 |
|----------------------------------|------------------------|-------------------|------------|-----------------|
| Assessment Type                  | Assessment Description | Outcome addressed | % of total | Assessment Date |
| Formal Exam                      | n/a                    | 1,2,3,4,5,6       | 45.00      | End-of-Semester |

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

**Module Workload**

| Workload: Full Time     |            |                                 |
|-------------------------|------------|---------------------------------|
| Workload Type           | Frequency  | Average Weekly Learner Workload |
| Lecture                 | Every Week | 5.00                            |
| Estimated Learner Hours | Every Week | 5.00                            |
| Total Hours             |            | 10.00                           |

**Module Delivered In**

| Programme Code | Programme  | Semester | Delivery  |
|----------------|--|----------|-----------|
| CW_CMOPPT_B    | <a href="#">Bachelor of Science (Honours) in Construction Management</a> | 2        | Mandatory |
| CW_CMQSU_B     | <a href="#">Bachelor of Science (Honours) in Quantity Surveying</a>      | 2        | Mandatory |
| CW_CMBSE_D     | <a href="#">Bachelor of Science in Construction Management</a>           | 2        | Mandatory |