

Construction Technology 1

Module Information

2022.01, Approved

Summary Information

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| Module Code | 4500BEQR |
| Formal Module Title | Construction Technology 1 |
| Owning School | Civil Engineering and Built Environment |
| Career | Undergraduate |
| Credits | 20 |
| Academic level | FHEQ Level 4 |
| Grading Schema | 40 |

Teaching Responsibility

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| LJMU Schools involved in Delivery |
| LJMU Partner Taught |

Partner Teaching Institution

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| Institution Name |
| Oryx Universal College WLL |

Learning Methods

| Learning Method Type | Hours |
|----------------------|-------|
| Lecture | 40 |
| Workshop | 20 |

Module Offering(s)

| Display Name | Location | Start Month | Duration Number Duration Unit |
|--------------|----------|-------------|-------------------------------|
| SEP-PAR | PAR | September | 12 Weeks |

Aims and Outcomes

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| Aims | To introduce the student to construction techniques associated with domestic dwellings including building regulations and building services. To develop an understanding of the performance of buildings and the influence of materials and workmanship specification on performance. |
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After completing the module the student should be able to:

Learning Outcomes

| Code | Number | Description |
|------|--------|--|
| MLO1 | 1 | Describe and compare a range of processes and techniques involved in the construction of the substructure work of domestic buildings. |
| MLO2 | 2 | Describe and compare, including illustrations, a range of processes and techniques involved in the construction of the primary elements of the superstructure of domestic buildings. |
| MLO3 | 3 | Describe and compare a range of processes and techniques involved in the construction of the secondary elements and finishes of domestic buildings. |
| MLO4 | 4 | Describe and compare a range of building services systems used in domestic buildings. |

Module Content

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| Outline Syllabus | <ul style="list-style-type: none"> • Substructure – domestic foundations of the forms of strip, raft and pile foundations for domestic buildings. Mechanical plant used in substructure work. Excavations. Health and Safety in excavation work. Site investigations for housing sites. (Dealing with trees on site, high water tables, contaminated land etc.) • Superstructure – Ground floor construction – suspended and solid floors. External Cavity Wall Construction. Timber Frame Construction. Timber upper floors. Pitched roofs – trussed rafters and purlin roofs. Flat Roofs – warm deck and cold deck in timber. • Secondary Elements and Finishes – stair construction. Door and Window construction and fixing. Internal partitions. Dry lining of walls. Plaster boarding of ceilings. Sand and cement and asphalt screeds. Timber floor finishes. Floor and wall tiling. Painting timberwork. External cladding and rendering. • Building Services – above and below ground drainage systems. Hot and Cold water supply and distribution. Internal environment control (heating/cooling). Electrical supply and distribution. |
| Module Overview | |
| Additional Information | This module introduces the student to construction techniques associated with domestic dwellings including building regulations and building services and develops an understanding of the performance of buildings and the influence of materials and workmanship specification on performance. |

Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Module Learning Outcome Mapping |
|---------------------|---------------------------|--------|--------------------------|---------------------------------|
| Report | SENARIO BASED | 50 | 0 | MLO1, MLO2 |
| Exam | EXAMINATION - CLOSED BOOK | 50 | 2 | MLO3, MLO4 |

Module Contacts

Module Leader

| Contact Name | Applies to all offerings | Offerings |
|--------------|--------------------------|-----------|
| Tasnim Ahmed | Yes | N/A |

Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
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