

FACULTY OF SKILLS

School of Construction

#### ACTIVITY ASSESSMENT SHEET AND ASSESSMENT CRITERIA

#### BTEC Extended Diploma in Construction

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| --- | --- | --- | --- |
| Unit: | 2 Sustainable Construction | Assessment Ref. | 2 |
| Assessment title: | Sustainable Construction Techniques | Date issued: | 08/02/21 |
| Issued by: | Meirion Lewis | Date due: | 17/05/21 |
| Student name: |  | Date received: |  |
| Programme: | BTEC Diploma | Year: | 2020-21 |

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| **Assessment method/s used** | Class Exercise |  | Drawing Exercise |  | End of Module Exam |  | Laboratory Activity |  |
| Observation |  | Portfolio Building |  | Practical Activity |  | Questioning |  |
| Report | **** | Research Based |  | Test |  |  |  |

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| Grading Criteria to be assessed in this exercise: |  P5, , M3,D2 |
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| *Brief has been Internally Verified*  |  | *When?* |  | *By Who?* |  |
| Interim Assessment (no grade award until all module assessments are completed) |  | Overall Grade Achieved |  | Points Awarded |  |

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| **STAFF COMMENTS** | ACTION PLAN |
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| Student signature: |  | Date: |  |
| Tutor signature: |  | Date: |  |
| Internally Verified by: |  | Date: |  |

## Unit Introduction

In recent times we have built far bigger and far more complex buildings than before. For many years the UK has been among the market leaders in this field and UK construction workers are taking their knowledge and expertise all over the world. Modern developments in construction technology and materials have enabled us to create more efficient and complex structures. The ability to design, plan and communicate ideas effectively is essential if a project is to be translated from an idea into reality. Poor communication will lead to poor construction. This unit will encourage You to develop their understanding of the design process and to recognise the contribution of other members of the design team. Planning and organising design activities is related to the decision-making process and the likely outcomes of decisions taken by the team within a legal framework should be considered in the wider social context, rather than as simple subjective preferences. This unit will enable You to cope with the requirements of construction-related projects as they pass through various stages from design to construction, including the implications of changes and variations in the design. You will develop their ability to produce clear drawings of construction components, using

both manual and CAD techniques, together with succinct and accurate explanations that specify for builders the exact characteristics of relevant construction details. Use of scale, proportion and appropriate description is expected of all successful You will be able to use appropriate design and planning procedures to specify for and communicate to other team members involved in a construction project requirements for the technical components of buildings.

**Assessment Brief: You are employed as an Environmental Engineer, tasked with delivering the environmental design and specification for the new super school at Baglan Bay. The client expects a BREEAM rating of excellent.**

1. Prepare a report for the client, highlighting at least four different construction techniques to build the superstructure of the new super school, assess the environmental impact of the designs and cost implications.
2. Compare the four chosen designs and select your preferred choice of design and justify your reasons for your choice.

## Assessment Tasks

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| --- | --- | --- | --- | --- | --- |
| **Task Description** | **Criteria Claimed** | **Page** | **Tutor Comment** | **Achieved**  | **IV** |
| Consider four different, fit-for-purpose sustainable construction techniques. The techniques should cover one from each of the following areas: energy, materials and waste. | P5 |  |  |  |  |
| Compare each of the techniques described for P5 in terms of how well each achieves what it is intended to do (performance) and the relative cost outlay. Diagrams will enhance your submission | M3 |  |  |  |  |
| You must justify the use of appropriate sustainable construction techniques for a specified (real or virtual) construction project, for example that used for M3, in terms of the associated environmental and sustainability issues. Non-specific responses that refer to construction projects in general are not acceptable. | D2 |  |  |  |  |

## Achievement Progress

The following target dates identify what grades should be achieved by key dates throughout the academic year.

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| --- | --- |
| *Key date* | *Performance Criteria that should be achieved by…..* |
| Christmas |  |
| February half term |  |
| Easter |  |
| Whitsun |  |

## Additional Guidance

A close adherence to the grading criteria and the unit specification will enable you to maximise your potential to achieve the highest possible grade.

** **

**Learner Assessment Submission and Declaration**

When submitting evidence for assessment, each learner must sign a declaration confirming that the work is their own.

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| --- | --- |
| Learner name: | Assessor name: |
| Issue date: | Submission date: | Submitted on: |
| Programme: |
| Unit:  |
| Assignment reference and title: |

Please list the evidence submitted for each task. Indicate the page numbers where the evidence can be found or describe the nature of the evidence (e.g. video, illustration).

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| --- | --- | --- |
| **Task ref.** | **Evidence submitted** | **Page numbers or****description** |
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| Additional comments to the Assessor: |

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| **Learner declaration**I certify that the evidence submitted for this assignment is my own. I have clearly referenced any sources used in the work. I understand that false declaration is a form of malpractice.Learner signature: Date: |