CEM Coursework

Coursework Assignment Brief

Assessment - Undergraduate

***Academic Year 2020-21***

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| **Module Title:** | Civil Engineering Materials |
| **Module Code:** | BNV5132 |
| **Assessment Title:** | CEM Coursework |
| **Assessment Type:** | CWRK | Weighting: 100 % |
| **School:** | School of Engineering and the Built Environment |
| **Module Co-ordinator:** | EHSAN AHMADI |
| **Hand in deadline date:** | 12pm Mid-day on May 28th 2021 |
| **Return of Feedback date and format**  | 20 working days from date of submission (see Moodle for details). |
| **Re-assessment hand in deadline date:** | 12pm Mid-day on Monday 26th July 2021Note: the reassessment work may be different. |
| **Support available for students required to submit a re-assessment:** | Timetabled support sessions will be arranged for the period immediately preceding the hand-in date |
| **NOTE:** | At the first assessment attempt, the full range of marks is available. At the re-assessment attempt the mark is capped and the maximum mark that can be achieved is 40%. |
| **Assessment Summary** | This module is assessed via 100% coursework. The current assessment includes 2 parts:* the laboratory reports, corresponding to 60% of the marks.
* the specification of construction materials exercise corresponds to 40% of the marks
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**IMPORTANT STATEMENTS**

***Undergraduate Regulations***

Your studies will be governed by the BCU Academic Regulations on Assessment, Progression and Awards. Copies of regulations can be found at <https://www.bcu.ac.uk/student-info/student-contract>

For courses accredited by professional bodies such as the IET (Institution of Engineering and Technology) there are some derogations from the standard regulations and these are detailed in your Programme Handbook

***Cheating and Plagiarism***

Both cheating and plagiarism are totally unacceptable and the University maintains a strict policy against them. It is YOUR responsibility to be aware of this policy and to act accordingly. Please refer to the Academic Registry Guidance at <https://icity.bcu.ac.uk/Academic-Services/Information-for-Students/Assessment/Avoiding-Allegations-of-Cheating>

The basic principles are:

* Don’t pass off anyone else’s work as your own, including work from “essay banks”. This is plagiarism and is viewed extremely seriously by the University.
* Don’t submit a piece of work in whole or in part that has already been submitted for assessment elsewhere. This is called duplication and, like plagiarism, is viewed extremely seriously by the University.
* Always acknowledge all of the sources that you have used in your coursework assignment or project.
* If you are using the exact words of another person, always put them in quotation marks.
* Check that you know whether the coursework is to be produced individually or whether you can work with others.
* If you are doing group work, be sure about what you are supposed to do on your own.
* Never make up or falsify data to prove your point.
* Never allow others to copy your work.
* Never lend disks, memory sticks or copies of your coursework to any other student in the University; this may lead you being accused of collusion.

By submitting coursework, either physically or electronically, you are confirming that it is your own work (or, in the case of a group submission, that it is the result of joint work undertaken by members of the group that you represent) and that you have read and understand the University’s guidance on plagiarism and cheating*.*

You should be aware that coursework may be submitted to an electronic detection system in order to help ascertain if any plagiarised material is present. You may check your own work prior to submission using Turnitin at the [Formative Moodle Site](https://moodle.bcu.ac.uk/enrol/index.php?id=715). If you have queries about what constitutes plagiarism, please speak to your module tutor or the Centre for Academic Success.

***Electronic Submission of Work***

It is your responsibility to ensure that work submitted in electronic format can be opened on a faculty computer and to check that any electronic submissions have been successfully uploaded. If it cannot be opened it will not be marked. Any required file formats will be specified in the assignment brief and failure to comply with these submission requirements will result in work not being marked. You must retain a copy of all electronic work you have submitted and re-submit if requested.

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| **Learning Outcomes to be Assessed:**1 Examine the production and physical behaviour of structural and non-structural materials used in Civil Engineering. 2 Test Civil Engineering materials in a group environment utilising standard laboratory processes, and adhering to Health and Safety standards.3 Appraise the properties of Civil Engineering materials utilising calculations and computational processes. 4 Design a low rise structure. |

**Assessment Details:**

**PART A 60% of the marks**

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| **Title:** Materials Reports**Type:** Coursework **Style:** Laboratory Reports |
| **Description:**As part of this module, you undertook five laboratories:* **Preparation and Compressive Testing of Concrete (at 7 and 28 days)**
* **Bending Testing of Timber**
* **Tensile Testing of Steel**
* **Compressive Testing of Masonry**

For the first part of the assessment, you need to hand in the completed lab reports, as per the lab sheet instructions. Each report must include the followings sections:* Background to the material, including production process and main structural properties, supported by at least three appropriate external references.
* Brief overview of the experiment
* Testing Methodology
* Health and Safety aspects, including Risk Assessment form
* Results
* Calculations and Discussion
* Conclusion

The allocation of marks for each report is as follows:* Preparation and Compressive Testing of Concrete (at 7 and 28 days) **20 marks**
* Bending Testing of Timber **15 marks**
* Tensile Testing of Steel **15 marks**
* Compressive Testing of Masonry **10 marks**

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| **Additional information:**  Specific lab sheets will be handed out the week before each laboratory, detailing the experiment that will be undertaken.**If you have not attended a laboratory, you can use the data collected by your colleagues, acknowledging (referencing) the source.**For advice on writing style, referencing and academic skills, please make use of the Centre for Academic Success: <https://icity.bcu.ac.uk/celt/centre-for-academic-success> |
| **Workload:** Each report should be up to 600 words excluding tables, calculations, and figures. The concrete report should be up to 900 words, excluding tables, calculations, and figures. |
| **Transferable skills:** * Report writing
* Calculations
* Presentation of data
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**PART B 40% of the marks**

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| **Title:**  Specifying Construction Materials **Type:** Coursework**Style:** Report with calculations and sketches. |
| **Description:** You are working on a school project in collaboration with an architect. The architect has provided you with sketches of her design. The design is a three-storey building, while it will also include an artistic “feature” element that is yet to be decided.For this project:a. Advice on suitable materials for each floor. Specifically, advice on materials for:  the foundations; the structural system of the first floor; the structural system of the second floor; the material for the “feature” element. Support your answers with suitable external references. **10 marks**b. Specify the dimensions of the structural elements. You need to size the elements using calculations at pre-analysis level. **20 marks**c. Provide drawings and sketches showing your suggestions. **10 marks** |
| **Additional information:**  N/AThe architect’s sketches will be made available on Moodle.For advice on writing style, referencing and academic skills, please make use of the Centre for Academic Success: <https://icity.bcu.ac.uk/celt/centre-for-academic-success> |
| **Workload:** The answer should be up to 1000 words **excluding** calculations and figures. |
| **Transferrable skills:** * Report writing
* Calculations
* Visual communication
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| **Marking Criteria:**1. Laboratory Reports2. Construction Materials Exercise**Table of Assessment Criteria and Associated Grading Criteria**

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|  | **Assessment****Criteria****** | **1.**  | **2.**  |
|  | **Weighting:** | **60%** | **40%** |
|  | **Grading** **Criteria****0 – 29%** | Inadequate and/or incomplete application of the methodology with little accuracy in the calculations, not arriving to results. Inadequate notation and discussion. | Inadequate and/or incomplete application of the methodology with little accuracy in the calculations, not arriving to results. Inadequate or incomplete drawings and sketches. |
|  | **30 – 39%** | Inadequate application of the methodology and accuracy in the calculations, interfering with the results. Inadequate notation and discussion. | Inadequate application of the methodology and accuracy in the calculations, interfering with the results. Inadequate drawings and sketches. |
|  | **40 – 49%** | Adequate application of the methodology, showing an understanding of the main engineering principles. Basic H&S coverage. Adequate accuracy in the calculations, though with errors, that might interfere with the results. Adequate notation and discussion. | Adequate application of the methodology, showing an understanding of the main engineering principles. Adequate accuracy in the calculations, though with errors, that might interfere with the results. Adequate drawings and sketches. |
|  | **50 – 59%** | Satisfactory application of the methodology, showing an understanding of the main engineering principles. Satisfactory H&S coverage with some Risk Assessment. Satisfactory accuracy in the calculations, with some errors, that do not interfere with the results. Satisfactory notation. Satisfactory discussion. | Satisfactory application of the methodology, showing an understanding of the main engineering principles. Satisfactory accuracy in the calculations, with some errors, that do not interfere with the results. Satisfactory drawings and sketches. |
|  | **60 – 69%** | Effective application of the methodology, showing a clear understanding of the engineering principles. Highly satisfactory coverage of H&S aspects with complete Risk Assessment. Generally excellent accuracy in the calculations, with few errors, arriving to the correct results. Generally correct notation. Highly satisfactory discussion illustrating a command of the topics covered. | Effective application of the methodology showing comprehension of the engineering principles. Generally excellent accuracy in the calculations, with few errors, arriving to the correct results. Generally correct notation. Supported with original and referenced drawings and sketches. |
|  | **70 – 79%** | Excellent application of the methodology showing full comprehension of the engineering principles. Extensive and/or innovative coverage of H&S, with in-depth Risk Assessment. Outstanding or excellent accuracy in the calculations, with no, or few and trivial, errors, arriving to the correct results. Excellent notation and referencing to the design code. Outstanding or excellent discussion, illustrating full comprehension of the required material, and expanding on the topics covered, with valid external references. Well-supported with original and referenced diagrams and graphics. | Excellent application of the methodology showing full comprehension of the engineering principles. Outstanding or excellent accuracy in the calculations, with no, or few and trivial, errors, arriving to the correct results. Excellent notation. Well-supported with original and referenced drawings and sketches. |
|  | **80 - 90%** |
|  | **90 – 100%** |

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**Submission Details:**

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| **Format:** Moodle upload . The submission needs to be in pdf format. PLEASE ENSURE YOU UPLOAD IN PDF FORM. Other formats will be rejected by the system. |
| **Regulations:** * The minimum pass mark for a module is 40%
* Re-sit marks are capped at 40%

*Full academic regulations are available for download using the link provided above in the IMPORTANT STATEMENTS section* **Late Penalties**If you submit an assessment late at the first attempt then you will be subject to one of the following penalties: * if the submission is made **between 1 and** **24 hours** after the published deadline the original mark awarded will be reduced by **5%**. For example, a mark of 60% will be reduced by 3% so that the mark that the student will receive is 57%. ;
* if the submission is made between **24** **hours** and **one week (5 working days)** after the published deadline the original mark awarded will be reduced by 10%. For example, a mark of 60% will be reduced by 6% so that the mark the student will receive is 54%.
* **if the submission is made after 5 days following the deadline, your work will be deemed as a fail and returned to you unmarked.**

The reduction in the mark will not be applied in the following two cases:* + the mark is below the pass mark for the assessment. In this case the mark achieved by the student will stand
	+ where a deduction will reduce the mark from a pass to a fail. In this case the mark awarded will be the threshold (i.e.40%)

Please note: * **If you submit a re-assessment late then it will be deemed as a fail and returned to you unmarked.**
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**Feedback:**

Marks and Feedback on your work will normally be provided within 20 working days of its submission deadline via Moodle.

**Where to get help:**

Students can get additional support from the library for searching for information and finding academic sources. See their iCity page for more information: <http://libanswers.bcu.ac.uk/>

The Centre for Academic Success offers 1:1 advice and feedback on academic writing, referencing, study skills and maths/statistics/computing. See their iCity page for more information: <https://icity.bcu.ac.uk/celt/centre-for-academic-success>

Additional assignment advice can be found here: <https://libguides.bcu.ac.uk/MA>

**Fit to Submit:**

Are you ready to submit your assignment – review this assignment brief and consider whether you have met the criteria. Use any checklists provided to ensure that you have done everything needed.

 ***Assignment Checklist***

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|  | **Assignment Tip Sheet** |

**Run through this simple tick list before submitting your work!**

**Report**

Well prepared materials make your work look more professional and easy to understand.

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| Item | Action | Done? |
| 1 | I have used the spellchecker and proofread the report correcting errors several times. |  |
| 2 | I have checked that all material is directly related to the assignment tasks. |  |
| 3 | I have checked that all the required information has been included in the report. |  |
| 4 | The report is professionally presented using consistent headings, fonts and layout. |  |
| 5 | All tables and images are numbered and captioned. |  |
| 6 | I have used the report structure specified in the assignment. |  |
| 7 |  |  |
| 8 |  |  |

**Referencing and Originality**

Your work will be subjected to checks to ensure it is not derivative of other works. Works found to be derivative may leave you subject to penalties, including in extreme cases, expulsion from the University.

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| Item | Action | Done? |
| 1 | All images and tables are fully referenced |  |
| 2 | I have not copied any material from anywhere else. All sentences have been paraphrased into my own words. |  |
| 3 | All references appear in the references section at the end of the presentation. |  |
| 4 | All references are cited in the text in the form of (author, year). See <https://www.bcu.ac.uk/library/services-and-support/referencing> for more details. |  |
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| 5 | If I have used quotes, these are fully referenced, appear in quotation marks and form only a small part of my report. |  |

**Content**

Is your work complete? Have you included all the required elements?

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| Item | Action | Done? |
| 1 | I have given an analysis of problem.. |  |
| 2 | I have explained why I chose the strategic tools that I have used and used references to support my decisions. |  |
| 3 |  |  |
| 4 |  |  |