# **Higher Nationals**

# **Assignment Brief – BTEC (RQF)**

**Higher National Diploma in Computing**

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| **Student Name /ID Number** |  |
| **Unit Number and Title** | **Unit 8 - Computer Systems Architecture** |
| **Academic Year** | **2018-2019** |
| **Unit Assessor** | **Carlos Sciequan** |
| **Assignment Title** | **Assignment 1 – Computer Subsystems and Operating Systems** |
| **Issue Date** | **w/c 29.10.2018** |
| **Submission Date** | **25.01.2019** |
| **IV Name** | **Hiten Patel** |
| **Draft submission date** | **11.01.2019** |
| **Final submission date** | **25.01.2019** |
| **Re-submission date (if required)** |  |

**Plagiarism**

Plagiarism is a particular form of cheating. Plagiarism must be avoided at all costs and students who break the rules, however innocently, may be penalised. It is your responsibility to ensure that you understand correct referencing practices. As a university level student, you are expected to use appropriate references throughout and keep carefully detailed notes of all your sources of materials for material you have used in your work, including any material downloaded from the Internet. Please consult the relevant unit lecturer or your course tutor if you need any further advice.

**Learning Outcomes and Assessment Criteria**

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|  | Grading Criteria | Met | Grading Criteria | Met | Grading Criteria | Met |  |
| **LO1** | P1 |  | M1 |  | D1 |  |  |
| **LO1** | P2 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **LO2** | P3 |  | M2 |  |  |  |  |
| **LO2** | P4 |  |  |  |  |  |  |

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| **Assessor Feedback:** | | |
| **Grade:** | **Assessor Signature:** | **Date:** |
| **Resubmission Feedback:** | | |
| **Grade:** | **Assessor Signature:** | **Date:** |

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| Submission Format: |
| The submission is in the form of a set of presentations and an individual written evaluation report.  The presentations should use both text and images relevant to the topic covered. It should be detailed enough to allow for a 10-minute presentation for both training packages and must be written in a suitable format. The handout that supports the presentation needs to be comprehensive and include the research obtained for the presentation.  The report should be written in a concise, formal business style using single spacing and font size 12. You are required to make use of headings, paragraphs and subsections as appropriate, and all work must be supported with research and referenced using the Harvard referencing system. Please also provide a bibliography using the Harvard referencing system. The recommended word limit is 1,000–1,500 words, although you will not be penalised for exceeding the total word limit. |
| Unit Learning Outcomes: |
| LO1 - Explain the relationships between hardware components and the subsystems used in a computer system  LO2 - Categorise the key features and services provided by different computer operating systems and hardware |
| Assignment Brief and Guidance: |
| You work as a training consultant for Infinity Training. Your line manager has asked you to create two new training packages (Training Package A and B).  **Training Package A**  You are required to create a training package suitable for non-technical personnel on computer system hardware and the subsystems used in a computer system. Your training package should be well-structured, easy to follow and contain clear, technically accurate and appropriate detail. Specifically, it should include:   1. A Google Slides presentation that:     1. introduces what a computer system is    2. identifies the main subsystems of a computer and explains how they are organised and connected    3. explains the purpose and operation of the CPU    4. assesses CPU dependency and performance with regards to associated systems and subsystems. 2. A presentation handout that provides additional information on the points discussed.   **Training Package B**  You are required to create a training package suitable for technical personnel on the key features and services provided by different computer operating systems and hardware. Your training package should be well-structured, easy to follow and contain clear, technically accurate and appropriate detail. Specifically, it should include:   1. A Google Slides presentation that:     1. describes a range of different operating systems including the purpose, use and hardware requirements of each    2. discusses the key features associated with the architecture of an operating system    3. analyses the services provided by an operating system with regards to user interaction, memory management, file management and hardware support. 2. A technical evaluation report that evaluates the structure and functions of an operating system, including memory, processor, devices, file, security, performance and error management with regards to functionality, operation and dependency. |
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| **Pass** | **Merit** | **Distinction** |
| **LO1** - Explain the relationships between hardware components and the subsystems used in a computer system | | **LO1 & 2**  **D1** Evaluate the structure and functions of an operating system including memory, processor, device, file, security, performance and error management with regards to functionality, operation and dependency. |
| **P1** Identify the main subsystems of a computer and explain how they are organised and connected.  **P2** Explain the purpose of the Central Processing Unit (CPU) and include details on its operation. | **M1** Review the operation of the CPU and assess its dependency and performance with regards to associated systems and subsystems. |
| **LO2** - Categorise the key features and services provided by different computer operating systems and hardware. | |
| **P3** Describe a range of different operating systems including the purpose, use and hardware requirements of each.  **P4** Discuss the key features associated with the architecture of an operating system. | **M2** Analyse the services provided by an operating system with regards to user interaction, memory management, file management and hardware support. |

