**University of Lincoln Assessment Framework**

**Assessment Briefing Template 2020-2021**

**NOTE: All Assessment Briefings should be made available prior to the commencement of the module, clearly signposted on the module Blackboard site as well as included in any module handbook or briefing document.**

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| **Module Code & Title: CMP2803M Network Fundamentals** |
| **Contribution to Final Module Mark: 40%** |
| **Description of Assessment Task and Purpose:** *See guidance notes for further information*  This is a skills based test based on the workshops you have completed for this module.  Using Packet Tracer you need to design and construct a network simulation based on the following parameters:  Using an appropriate design model build a working simulation to meet the following scenario.  There are 4 separate locations which are connected to form a full mesh network. You may require more than one router for each network and will need to create an appropriate IP addressing scheme to accommodate all devices.  Identify the location of the main communications room. This room should house all the servers and main communication devices.  Identify the network devices that need to be accessed from the outside world. Hint: to achieve this, think about the devices ad services you can access when not on the university campus.  Identify any device(s) that can be included to provide network security.  Identify other mechanism(s) that can be used to provide network security using the existing network devices (routers and switches)  Create an IP addressing scheme using IPv4.  Identify and include appropriate devices and/or mechanisms to manage network security.  Select, configure and test a routing protocol to provide end to end communication.  Each location must be able to accommodate up to 55 network nodes. This includes routers, switches, printers, user devices – PCs, laptops, BYOD.  Specifically each location has the following requirements:  A – 47 including 28 sales staff, 7 finance staff, 4 technical support, 3 management, 5 administration staff  B – 50 including 9 finance staff, 6 technical support, 10 design and planning staff, 10 management, 15 administration staff  C – 38 including 26 sales staff, 4 technical support, 3 management, 5 administration staff  D - 42 including 15 sales staff, 7 finance staff, 4 technical support, 8 design and planning staff, 3 management, 5 administration staff |
| **Learning Outcomes Assessed:**  **LO2 Evaluate professional standards used in design and implementation of networks**  **LO3 Identify and classify threats within systems and networks and appraise protection mechanisms for those systems and networks** |
| **Knowledge & Skills Assessed:** *See guidance notes for further information*  Subject Specific Skills: *Planning and design, Subject-specific knowledge,*  Professional Graduate Skills: *effective time management, working under pressure to meet deadlines, problem solving, logical thinking,*  Emotional Intelligence: *self-management*  Career Focused Skills: *network operations, planning and design, device configuration* |
| **Assessment Submission Instructions:** *See guidance notes for further information*  Please submit the following:   * Packet Tracer file of the network simulation * Logical and physical diagrams in a pdf file. * The IP addressing scheme, subnetting or VLSM for this network |
| **Date for Return of Feedback:** |
| **Format for Assessment:** *See guidance notes for further information*  Please submit 2 files:   * Packet tracer file containing simulation file * Logical and Physical diagrams and IP addressing scheme. Please include any workings out for a subnetted IP addressing scheme. |
| **Feedback Format:** *See guidance notes for further information*  **Feedback will be provided on Blackboard.** |
| **Additional Information for Completion of Assessment:** *See guidance notes for further information*  **You are required to provide an IP addressing scheme and an overall design for this network.** |
| **Assessment Support Information:** *See guidance notes for further information*  **Please refer to the module workshop materials on how to configure devices and IP addressing.**  **Please refer to the following link for support on how to use Packet Tracer.**  <https://www.netacad.com/courses/packet-tracer/introduction-packet-tracer> |
| **Important Information on Dishonesty & Plagiarism:**  University of Lincoln Regulations define plagiarism as 'the passing off of another person's thoughts, ideas, writings or images as one's own...Examples of plagiarism include the unacknowledged use of another person's material whether in original or summary form. Plagiarism also includes the copying of another student's work'.  Plagiarism is a serious offence and is treated by the University as a form of academic dishonesty. Students are directed to the University Regulations for details of the procedures and penalties involved.  For further information, see [www.plagiarism.org](http://www.plagiarism.org) |