

Portfolio Description 2020–2021

Computational Thinking (BSHCIFSC1 – HCCNCI1 – BSHCE1 – HCCOMPE1)

Administrative Data

This Portfolio is worth **50% of the final grade awarded**. As published in the School portal, the deadline for submission of the assignment is:

Submission Date Tuesday 12th January 2021 23:59hrs

Extension/Re-run

Should any student miss the assessment deadline with a valid reason, the student can apply for an extension/rerun using the Extension/Re-run Form online, via NCI360.

1 Module Introduction

It is expected that the knowledge and skills gained from the module will contribute (i) to the fundamental understanding of the internal workings of digital computers from a data-driven perspective, and (ii) to examine how some concepts of memory hierarchies, data-level parallelism, and cloud computing can address real-world enterprise-class problems. Specifically, the learning outcomes of this module are:

- LO1** Create high quality academic, technical and scientific documents using appropriate tools and technologies.
- LO2** Implement appropriate referencing techniques for both written text and programming code.
- LO3** Compose both technical and non-technical questions in a manner which elicits the required response and information.
- LO4** Apply critical thinking, teamwork, communication and problem-solving skills when working as part of a team.
- LO5** Analyse personal learning needs and identify ways in which to resolve those needs in an autonomous fashion, seeking the support of, and providing support to peers where appropriate.

2 Assignment

This assessment requires the writing of a portfolio of evidence demonstrating the achievement of learning outcomes (LOs) 1–4. This portfolio should comprise samples from assignments completed **3 modules** from **Semester 1**. For each assignment described, the students are required to:

1. Describe the problem to be solved in the assignment and its main requirements;
2. Describe and justify the approach used to solve the problem;
3. Briefly describe the solution achieved.

3 Final Report

The structure of the report is not predefined and it is part of the assessment. However, some format requirements apply:

- The report should be submitted via the Turnitin link on Moodle in **PDF format only**
- Number of pages: between **3 (Minimum)** and **5 (Maximum)**
- Use font **Times New Roman, Size 12, 1.5 Spacing**
- Ensure that your **name in full** (as per NCI official documents) and **student number** are clearly visible on the front page

4 Marking Grid

This assignment is worth 50% of the final mark and it will be graded using the marking grid in Table 1.

Table 1: Marking Grid Portfolio Computational Thinking

Assessment Criteria	Per Assessment	General
Problem Description	5%	–
Approach Description	10%	–
Approach Justification	10%	–
Solution Description	5%	–
Document Structure	–	5%
Quality	–	5%