Grading

This work is marked out of **100** and represents **30%** of the overall module grade. The minimum passing grade for this element is **40%**.

Prerequisites

Word Limit 1600 Words, +-**10%,** not including the bibliography. At least ten references are expected, and all references included in the bibliography should be cited in the main text.

Citations and references must use the **APA** referencing system. This is the same one you are required to use in your final year project.

Use current literature to justify your responses and include citations in the body of your text for the answers to each question.

The Topics to cover in this written piece are as follows

2 – Parallelism (800 words)

Course and Fine Grain Parallelism – what are the advantages and disadvantages of these two approaches. Specifically discuss this both in terms of writing the code and using the resulting software to analyse data.

The limits of Parallel programming – Discuss both the lower limit (at which the cost of launching a parallel process to solve a problem wouldn't be worth the computational cost), and the upper limit (at which the computational costs of parallelism begin to outweigh the benefits of using it).

3 – Distribution (800 words)

Distributed computing is used to model complex problems like weather or ocean mapping, with the intention of predicting future behaviour of these systems.

As the hardware to model these systems increases in complexity, more variables are added to the model, what is the cost of this increase in modelling accuracy and detail?

Discuss this in terms of the algorithm used to explain the phenomena, use a specific research effort if it helps you.

	Essay Content	Citations/Refencing	Layout/Readability	
First **≥70**	All points answered to an excellent level of detail.	Excellent use of Citations throughout the work. Hardly any uncited references to external sources	Well laid out and easy to read. Few to no grammatical errors. No unrelated images used.	**First** **≥70**
Upper Second **60-69**	All points answered to a moderate level of detail.	Reasonable use of Citations throughout the work. More frequent use of uncited references to external sources	Well laid out and easy to read. Some grammatical errors. Possibly some unrelated images used.	**Upper Second** **60-69**
Lower Second **50-59**	Some or all points answered to a reasonable level of detail.	Inadequate use of Citations throughout the work. Too much reliance on the same few sources. Hardly any cited references to external sources	Issues with either layout or ease of reading. Some grammatical errors. Possibly some unrelated images used.	**Lower Second** **50-59**
Third **40-49**	Some or all points answered to a poor level of detail.	Citations used poorly; external sources not credited when used.	Bad layout or other problem that interferes with reading. Too many grammatical errors. Possibly some unrelated images used.	**Third** **40-49**
Fail **<40**	Some or all points insufficiently answered.	Citations used inadequately or not present.	Layout is too poor to be acceptable as an academic work.	**Fail** **<40**
Late	0	0	0	**Late**