End of Module Assignment

To do: Receive a grade

Due: Monday, 21 April 2025, 11:55 PM

Submit by end of unit 12.

Word count 2,000 words. This assignment carries 40% of the overall module grade.

This is a final module essay assessment to examine your awareness of current affairs, challenges, technological developments, trends, and issues in relation to recent developments in computer science. The essay fulfils the learning outcome where you are to critically appraise the emerging trends in the field of computer science and the professional and ethical requirements for dealing with such contemporary computer-based technologies. For this task, you need to select an organisation as a case example for which secondary information is available through articles, webpages or you may have a contact working for this organisation.

Assignment Topic

Select an emerging theme that you wish to investigate. It may include AI, social media engineering, smart city/living, IoT, virtual environments, cyber security, or any other recent advances.

Possible areas of investigation it can include:

- Cloud computing.
- Big data.
- Internet of Things.
- E-healthcare using Al.
- Cyber Security.
- Intelligent Systems.

Decide on the direction of your research and a company for which you will conduct a case study. Your research should be of interest to current societal needs and be applied on a case organisation.

- Carry out background research on your chosen topic. The aim of this step is for you to find out what is current in the chosen topic, and what research has been carried out so far. This will help you to decide the direction of your research.
- You must select an organisation which you will be investigating as a case example in your essay. This should be a suitably large corporation on which you will apply the concepts of information system strategy and management.
- Select an appropriate title for your essay. The research carried out so far should help you in this. HINT: Try to come up with a title that is catchy and will attract the curiosity of a reader.

Now investigate the issues below in the context of your chosen organisation. Your investigation should be limited to the scope of your chosen topics, i.e., social media, virtual environment, corporate and social responsibility, cloud management, big data, or artificial intelligence.

- a. Office, process, and document automations have changed the business atmosphere in terms of operations and co-operations. Evaluate, with examples, how your chosen organisation has adapted the technology that has facilitated the changes in working practices and habits, productivity, and management efficiencies.
- b. Critically discuss and evaluate the benefits and drawbacks of implementing such technology in the organisation.
- c. Competitive advantage is one of the benefits businesses strive to achieve in the application and use of information systems. Critically analyse (with the aid of diagrams, models and/or frameworks) how the organisation can achieve efficiency by implementing the technology that you are proposing.
- d. Outline the threats, security and other challenges that your proposed technology can impose on the organisation. What recommendations do you have to protect this organisation from these threats?

Assignment Guidance

Your essay should contain the following aspects (the associated grading criteria are highlighted in the requirements below, to be reviewed alongside the criteria grid on the Module Resources page):

- A description of the context of your essay in the form of an overview, i.e., the theme and organisation you have selected, background and the
 rationale for selection. (Knowledge and Understanding weighted at 10%)
- Research contents on the technology analysed, its associated problems, and solution proposal (see points (a) and (b)). (Knowledge and Understanding weighted at 20%)
- An in-depth review of the proposed solution, use of models for application/enhancement of the technology, i.e., technology adaptation models, and identifying social impacts and threats (see points (c) and (d)). (Criticality weighted at 30%)
- A scholarly review of the suggested solution (equally addressed in points (a) to (d)). (Use of Relevant Sources weighted at 20%)

Presentation and Structure of your findings (weighted at 10%) includes spelling, organisation, as well as evidence of proofreading. You will also be assessed on the correct use (and format) of citations and references in your work (Academic Integrity weighted at 10%).

Learning Outcomes

Identify and explain the architecture, structure, and functionality of basic components of a computer system.

 Critically appraise the emerging trends in the field, such as cloud computing, big data, cyber security, and the professional and ethical requirements for dealing with such contemporary computer-based technologies.

Turnitin Originality Check

Before submitting your assignment, it is important to check the originality of your work by submitting your assignment to Turnitin.

By submitting your assignment to this tool you will receive an originality report which can be used to check that you have not included other authors work without correct citation. It is important to note that submitting your work to the Turnitin Originality Check tool does not count as a submission of your final work. You must still submit your assignment below.

Academic Integrity and Plagiarism

We take academic integrity very seriously. Academic integrity means acting with fairness and honesty, giving credit to others where you are referring to their ideas or research and respecting the work of others. Plagiarism is defined as: 'Using or copying the work of others (whether written, printed or in any other form) without proper acknowledgement'. Before you finalise your assignment take time to check that all your statements are backed up with supporting evidence, that all sources you use - whether referring to their ideas, quoting directly or paraphrasing - are correctly referenced in the text. Correct use of referencing acknowledges the academic whose work has informed yours, enables the reader to find the sources you have used and demonstrates your ability to find and analyse relevant information.

Failure to properly acknowledge the work of others is an academic offence and may result in your work incurring a penalty or, in the most serious cases, you being removed from the course for academic dishonesty.

If you are unsure about referencing or plagiarism there are useful resources available in the Study Skills Hub which is accessible from the menu on the left hand side. If you are still experiencing difficulties with academic integrity then you can contact the Study Skills Team for individualised support.

Please note, a word count penalty applies to this assessment.

If your assessment exceeds the word count limit or range by more than 10% then your awarded grade will be reduced by 10% grade points. For more information please see your **student handbook**.

Not meeting the word count

There is no grade reduction applied if your assignment does not meet the word count range or limit, but to maximise your opportunity to achieve the highest grade possible, you should aim to meet the word count or range as closely as possible.

Departmental guidelines on preparation and submission of coursework

- Assignments should be submitted in either MS Word or Open Office format unless stated otherwise on the assignment submission page.
- Use standard margins: 1" (2.5cm) on all sides.
- Use standard Arial 12-point font size.
- Use double-line spacing.
- Pages should be numbered consecutively.
- Your work should be correctly referenced using the UoEO Harvard Referencing style.