



**South East Technological University
FACULTY OF LIFELONG LEARNING
ASSIGNMENT**

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| Programme Title | CW_KRITM_M_5 |
| Module Title | Information Security Management |
| Assignment Number | 2 |
| Assignment Type | Written Assignment |
| Weighting | 40% |
| Submission date | 04/12/2024 |

Continuous Assessment Submission Guidelines

Assignments must be submitted via Turnitin. If assignments are not submitted via Turnitin, this will be regarded as a non-submission.

Please observe the suggested word count. Assignments that are too short or too long may be penalised.

Extension Policy

Only in exceptional circumstances will extensions be granted.

Undergraduate and postgraduate extensions cannot be granted by your lecturer. Such extensions can only be granted by the Faculty of Lifelong Learning once a completed extension form and supporting documentation is returned online.

Students can apply for extensions at:

<https://www.itcarlow.ie/study/lifelong-learning/lll-forms/extension-request-form.htm>

Extensions must be sought in advance of the submission date. Extensions will not be granted retrospectively.

The circumstances under which an extension request will be considered include, but are not limited to:

- Unusual personal/family/business reasons
- Where a student is representing their country or university

An extension request is **unlikely** to be considered under the following circumstances:

- Minor illnesses such as a common cold
- Holidays during the academic year
- Multiple assignments due at the one time
- Failure to plan study schedule
- Debs/weddings/social events
- IT and/or computer failure

The Faculty of Lifelong Learning reXX24ve the right to request supporting documentation. If you are applying for an extension that exceeds **5 days** you must submit supporting documentation (e.g. letter from a doctor, employer, line manager etc.) so that any prolonged absence can be verified.

Please note that loss of/damage to a USB stick is not considered a valid reason for an extension. To avoid any unnecessary distress, please ensure that you **back up your work** regularly as you undertake your assignment. By registering with free online storage XX24vices such as Dropbox or Skydrive you can save your work online and access it at any computer. Alternatively use an external hard drive/or just email it to yourself.

Failure to submit a piece of assessment may result in a grade of 0.

Plagiarism Policy

Assignments which have copied work from websites, from other authors, from other students or any other sources will receive a grade of 0. All instances of plagiarism must be reported to the Head of Department who, in turn, is obliged to report them to the Registrar. Students who receive this grade may be asked to justify their actions to the University's plagiarism panel. Students must apply to the examination board at the end of the academic year to re-submit their work in such instances. Please note that copying verbatim from original sources is unacceptable even if you provide references.

Referencing

Please consult the new **Cite Them Right Guide**, accessible through the library homepage for the reference system used by SETU. Please ensure accuracy and consistency in your referencing. The following are the most common reference types that you will need when compiling the reference list at the end of your assignments.

Journal articles:

For example:

Seebohm, P., Gilchrist, A. and Morris, D. (2012) Bold but Balanced: How Community Development Contributes to Mental Health and Inclusion. *Community Development Journal*, 47 (4), pp. 473-490.

Books

For example:

Banks, S. (2012) *Ethics and Values in Social Work*. (4th Ed.) Basingstoke: Palgrave Macmillan.

Book Chapter

If a book is an edited collection with different contributors for each chapter, cite the author of the specific chapter you have used in your work. If you use more than one chapter, cite each author separately. Include the page numbers of the chapter in the bibliography.

For example:

Forde, C. (2009) The Politics of Community Development: Relationship with the State. In: Forde, C., Kiely, E. and Meade, R., eds. *Youth and Community in Ireland: Critical Perspectives*, Dublin: Gill and Macmillan, pp. 49-68.

Webpage

Unless the webpage has a specified individual author, you can treat the organisation as the author. If the year the webpage was created is available, you can give this. If not, simply state 'no date available'. You must also include the date which you last accessed the webpage in brackets at the end of the reference.

For example:

Children's Rights Alliance, (no date available) *What Are Children's Rights?* Available: <http://www.childrensrights.ie/childrens-rights-ireland/childrens-rights-ireland> [accessed 01 September, 2013].

To avoid common referencing mistakes, please note the following:

- In the reference list, place the title of the journal, not the specific journal article, in italics.
- In the reference list, give a full reference for a webpage not just the url.
- When referencing books in the reference list, the place of publication (e.g. Dublin) precedes the name of the publisher (e.g. Gill and Macmillan).
- There is no need to bullet point or number your reference list.
- When citing websites within the main body of your assignment, use the (author, date) formulation rather than the url; i.e. write (Children's Rights Alliance, no date available) rather than inXX24ting the web address.

When quoting directly from an original source within the main body of your assignment, give the page number(s). Try to avoid excessive use of direct quotation.

| MODULE AIM | | | |
|--|--|-----------------------------|------------|
| This module aims to... | | | |
| LEARNING OUTCOMES | | | |
| On successful completion of this module the learner should be able to: | | | |
| 1. Identify and evaluate information security threats, attack methodologies and mitigation strategies | | | |
| 2. Recommend tools and standardise processes to combat security threats and breaches | | | |
| 3. Develop and manage policies and procedures | | | |
| 4. Critique the security of a network and XX24vices with respect to confidentiality, integrity and availability | | | |
| 5. Appraise current legal issues surrounding information security management to ensure organisational compliance and best practice | | | |
| MODULE ASSESSMENT | | | |
| Assessment Component | Details | Learning Outcomes addressed | % of total |
| 1 | Define the Scope of the ISMS | L1, L3 | 10% |
| 2 | Prepare an information security policy statement for you chosen organisation. | L1, L3 | 10% |
| 3 | Carry out a risk assessment that should identify at least 12 information security risks to you chosen organisation, its network, systems and information | L1, L4 | 36% |
| 4 | Describe how you propose to respond (acceptance, mitigation.... etc.) to the 12 risks you identified in the risk assessment. | L1, L2, L3, | 20% |
| 5 | Select information security controls to address 6 of the risks you have identified that need to be mitigated. | L1, L2, L3 | 24% |

Assignment Brief

Assignment:

XX24 has experienced multiple information security breaches over the last two years. They plan to implement an Information Security Management System (ISMS) to improve security management. As the new Chief Information Security Officer (CISO), your initial task is to draft a plan for the ISMS implementation, aiming for ISO 27001 certification in the long term.

You need to complete several tasks related to the ISMS planning stage for this assignment.

Note: The organisation selected as XX24 can belong to any industry or sector. It can be an actual organisation known to you or a fictional one. You are required to clearly describe the organisation and its systems when defining the scope of the ISMS.

Your assignment should incorporate all of the following elements:

1. **Define the Scope of the ISMS.** The scope of the ISMS describes the boundaries of the ISMS in terms of organisational characteristics such as location(s), business functions, assets, and technology. It should include a list of important business functions that are critical to the organisation's mission and survival. It should also include a list of important information, information technology and system assets. **[10 marks]**
2. **Prepare an information security policy statement for you chosen organisation.** This should include a statement of management commitment as well as setting out the organisation's approach to managing information security. **[10 marks]**
3. **Carry out a risk assessment that should identify at least 12 information security risks to you chosen organisation, its network, systems and information.** Use one of the risk assessment models such as NIST SP 800-30. Identify relevant threat events and sources and determine their relevance. Identify vulnerabilities (and their severity) within the organisation that could be exploited by the threat events you identified. You should select vulnerabilities that are appropriate to your chosen organisation. Determine the likelihood of the threat events occurring and being successful, and the type and magnitude of the adverse impacts to the organisation. Finally determine the level of each risk to the organisation. **[36 marks]**
4. **Describe how you propose to respond (acceptance, mitigation.... etc.) to the 12 risks you identified in the risk assessment.** Explain the justification for the responses you have chosen for each risk. **[20 marks]**
5. **Select information security controls to address 6 of the risks you have identified that need to be mitigated.** To address a particular risk, you will typically require a number of controls. Briefly describe how you would implement each of the selected controls. You should include policies, procedures and technical controls. Using the ISO 27002 list of controls, reference each controls selected (e.g. 7.1.1 Inventory of assets). **[24 marks]**

Make whatever logical assumptions about the organisation XX24, its information systems and its information security that you feel are necessary to give you adequate scope to complete this assignment.

3000 words (excluding Reference list and Appendices) – Please include the actual word count at the start of the assignment.

Note that Turnitin includes an AI indicator, if you are using tools which use AI features e.g. Grammarly, please include the name of the tool used and the reasons for using it above the reference list.

Criteria

| Factor being assessed | Poor or Limited Work | Adequate - Acceptable | Good - Very good | Excellent to Outstanding | Weighting |
|--|---|--|---|---|-----------|
| | 1-3 points | 4-5 points | 6-7 points | 8-10 points | |
| Content | Fails to address most points, selects inappropriate techniques, fails to draw appropriate conclusions | Correctly addresses most points, selects appropriate techniques, most conclusions appropriate | Correctly addresses all points, selects appropriate techniques, conclusions appropriate | Correctly and comprehensively addresses all point of the brief. | 35% |
| Knowledge & understanding | Shows inadequate knowledge of the Topic to meet learning outcomes | Shows basic to relevant knowledge of the topic | Shows evidence of relevant and sound knowledge and understanding of the topic with reading beyond the key texts | Shows thorough knowledge and understanding of the topic | 20% |
| Analysis and application | Descriptive and uncritical. Some discussion irrelevant to the title | The essay is limited to description and includes frequent unsupported facts and opinions. For 5+ some discussion using ideas and principles introduced in the module | Shows evidence of analysis using ideas and principles introduced in the module | Essay shows a resourceful and imaginative analysis using ideas and principles introduced in the module and their application to a real world situation. | 20% |
| Reading & referencing | Poor use of reading. Poor or incorrect using of Harvard System | Appropriate use made of a limited range of reading. Largely accurate use of Harvard system | Essay well informed by reading which goes beyond key texts. Accurate use of Harvard referencing technique | Essay fully supported by reference to relevant material. Accurate use of Harvard referencing technique. All sources cited and referenced | 15% |
| Essay structure and use of language | Little evidence of planning the essay or Some structure although key issues may be omitted. Some Repetition - Poor standard of written English. | Evidence of structure relevant to the title. For 5+ Structure supports the discussion and argument | Structure is clear and supports coherent discussion and argument | Clear logical structure which enriches the discussion and argument. Essay displays an excellent use of standard written English | 10% |

