

AY: 2021/22

CIS7028 \_ Information Security - 20 Credits

Term 2

Module Leader: Dr. Liqaa Nawaf

Assessment Brief

Assessment Title: Information Security Final Assessment

WRIT1 RESIT 100%

HAND-OUT DATE: TBA

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# Learning Outcomes

This assessment is designed to demonstrate a student’s completion of the following Learning Outcomes:

* Critically discuss the threats to information storage within a system and appreciate the main types of computer crime
* Appraise approaches to information security and forensic investigation of prominent cyber offences;
* Analyse the technical issues relating to the transmission and storage of data and information relating to Cloud Computing and Big Data
* Discriminate between data management policies associated with Data Protection and the Regulation of Investigatory Powers.

# EDGE

The Cardiff Met EDGE supports students in graduating with the knowledge, skills, and attributes that allow them to contribute positively and effectively to the communities in which they live and work.

This module assessment provides opportunities for students to demonstrate development of the following EDGE Competencies:

|  |  |
| --- | --- |
| ETHICAL | Knowledge of ethical practices in cyber defences |
| DIGITAL | The usage of state of the art digital security controls |
| GLOBAL | Exposure to International standards such as ISO27001 |
| ENTREPRENEURIAL | The opportunities and risks with data and information |

# Assessment Requirements / Tasks (include all guidance notes)

**Activity 1 (2000 words):**

Assume you have been hired as a security consultant by a large-scale enterprise to provide them below the information and recommendations. The enterprise’s Chief Information Officer (CIO) has recently come to know about ISO27001 and wants to know your opinion about alternative standards, its wider benefits to the organization, how to implement the critical elements of ISO27001, and the auditing and certification process. Prepare a report covering the below details.

Task 1.1 (750 words):

* Alternative standards (Cyber essentials) and wider benefits of ISO27001 to the organization

Task 1.2 (1000 words):

* Main clauses need to implement under ISO27001 (750 words)
* Security control objectives applicable for the chosen company (250 words)

Task 1.3 (250 words):

* Auditing and certification process of ISO27001

**Activity 2 (2000 words)**

Task 2.1 (1000 words):

* Data protection by design/default: Compile a report explaining how you would implement Data protection by design and default for a chosen company. The company can be any size which holds personal data of customers, clients, suppliers and employees. Write the implementation of Data Protection by Design and Default for the chosen company

Task 2.2 (1000 words):

* Write a report about a recent information security attacks/breach (which took place recently, from January 2022 onwards). The description should contain a brief description of the current attack (is it any different from the cyber-attacks that took place before COVID-19 or do you see an increasing trend during COVID-19), loss to the organization, details of the vulnerability exposed by the attack (e.g.; CVE), how the attack was manifested (e.g. illustration), the approaches/tools used by the attackers and prevention mechanisms which could have stopped the threat or the vulnerability.

# Assessment Criteria

|  |  |
| --- | --- |
| **Task 1** | **50%** |
| Task 1.1: Alternative standards (Cyber essentials) and wider benefits of ISO27001 to the organization. | 20% |
| Task 1.2: Main clauses need to implement under ISO27001 and Security control objectives applicable to the chosen company. | 25% |
| Task 1.3: Auditing and certification process of ISO27001. | 5% |
| **Task 2:** | **50%** |
| Task 2.1: Write the implementation of Data Protection by Design and Default for the chosen company. | 25% |
| Task 2.2: Illustration of the attack, tools used by the attackers, and recommended preventive mechanisms | 25% |

# Submission Details

Please see Moodle for confirmation of the Assessment submission date.

Submission will be by **4:00pm** on the deadline day.

**Any assessments submitted after the deadline will not be marked and will be recorded as a Non-Attempt.**

The assessment must be submitted as a zip file / pdf / word document through the Turnitin submission point in [Moodle](https://learn.cardiffmet.ac.uk/)

Your assessment should be titled with your Student ID Number, module code and assessment id, e.g. st12345678 CIS7028 WRIT1

# Feedback

Feedback for the assessment will be provided electronically via [Moodle](https://learn.cardiffmet.ac.uk/), and will normally be available 4 working weeks after initial submission. The feedback return date will be confirmed on Moodle.

Feedback will be provided in the form of a rubric and supported with comments on your strengths and the areas in which you improve.

All marks are preliminary and are subject to quality assurance processes and confirmation at the Examination Board.

Further information on the Academic and Feedback Policy in available in the Academic Handbook ([Vol 1, Section 4.0](http://www.cardiffmet.ac.uk/registry/academichandbook/Documents/AH1_04_00.pdf))

# Marking Criteria

|  |  |
| --- | --- |
| **70 – 100%**  **(1st)** | A very comprehensive technically correct submission. All major aspects of the assignment covered. Clear expression of ideas. A very high standard of presentation. All problems identified and solutions are feasible and within the restrictions of the assignment. All sources acknowledged and referenced to a high standard. |
| **60-69%**  **(2:1)** | Most major aspects of the assignment covered with supporting explanation and discussion of their roles. Some minor technical errors and misconceptions. Good identification of problems and good solutions. Good presentation and standard of referencing. |
| **50-59%**  **(2:2)** | Fair identification of problems and reasonable solutions provided. Some technical errors and misunderstandings. Fair standard of presentation. Good referencing with minor omissions. |
| **40-49%**  **(Narrow Fail)** | Limited identification of problems and solutions provided are of limited practicality. Technical errors and misunderstandings present. Poor or incomplete referencing of information. Basic standard of presentation. |
| **35-39%**  **(Marginal Fail)** | Poor identification of problems and solutions provided are of very limited practicality. A number of technical errors and misunderstandings present. Poor or incomplete referencing of information. Basic standard of presentation. |
| **<35%**  **(Fail)** | No identification of problems and solutions provided are of very limited practicality. Many technical errors and misunderstandings present. Very poor or incomplete referencing of information. Very basic standard of presentation. |

# Additional Information

## Referencing Requirements (Harvard)

The Harvard (or author-date) format should be used for all references (including images).

Further information on Referencing can be found at Cardiff Met’s [Academic Skills](https://study.cardiffmet.ac.uk/AcSkills/Pages/Referencing.aspx) website.

## Mitigating Circumstances

If you have experienced changes or events which have adversely affected your academic performance on the assessment, you may be eligible for Mitigating Circumstances (MCs). You should contact your Module Leader, Personal Tutor or Year Tutor in the first instance.

An application for MCs, along with appropriate supporting evidence, can be submitted via the following link to the [MCs Dashboard](https://cis.cardiffmet.ac.uk/MitCircs/MitCircs/StudentDashboard)

Applications for MCs should ideally be submitted as soon as possible after circumstances occur & at the time of the assessment. **Applications must be submitted before the relevant** [**Examination Board**](http://www.cardiffmet.ac.uk/registry/exams/Pages/Examination-Boards.aspx)**.**

Further information on the Mitigating Circumstances procedure is available in the Academic Handbook ([Volume 1, Section 5](http://www.cardiffmet.ac.uk/registry/academichandbook/Pages/Ah1_05.aspx))

## Unfair Practice

Cardiff Metropolitan University takes issues of unfair practice **extremely seriously**. The University has distinct procedures and penalties for dealing with unfair practice in examination or non-examination conditions. These are explained in full in the University's Unfair Practice Procedure (Academic Handbook: [Vol 1, Section 8](http://www.cardiffmet.ac.uk/registry/academichandbook/Pages/Ah1_08.aspx))

Types of Unfair Practice, include:

**Plagiarism,** which can be defined as using without acknowledgement another person’s words or ideas and submitting them for assessment as though it were one’s own work, for instance by copying, translating from one language to another or unacknowledged paraphrasing. Further examples include:

* Use of any quotation(s) from the published or unpublished work of other persons, whether published in textbooks, articles, the Web, or in any other format, which quotations have not been clearly identified as such by being placed in quotation marks and acknowledged.
* Use of another person’s words or ideas that have been slightly changed or paraphrased to make it look different from the original.
* Summarising another person’s ideas, judgments, diagrams, figures, or computer programmes without reference to that person in the text and the source in a bibliography or reference list.
* Use of services of essay banks and/or any other agencies.
* Use of unacknowledged material downloaded from the Internet.
* Re-use of one’s own material except as authorised by the department.

**Collusion**, which can be defined as when work that that has been undertaken with others is submitted and passed off as solely the work of one person. An example of this would be where several students work together on an assessment and individually submit work which contains sections which are the same. Assessments briefs will clearly identify where joint preparation and joint submission is specifically permitted, in all other cases it is not.

**Fabrication of data**, making false claims to have carried out experiments, observations, interviews or other forms of data collection and analysis, or acting dishonestly in any other way.