

LEVEL 4 ASSESSMENT SPECIFICATION

Student name:		Student ID number:	
Programme:	CertHE Computing Skills for Workplace		
Module:	Networks and Cyber Security Essentials		
Module code:	ACCA4024	Contribution to Overall Module Assessment (%):	50%
Lecturer:	Amit Naik	Internal Verifier:	Sadhana Jha
Assignment Title:	Synthesize a solution to a potential real life scenario	Word count (or equivalent):	2000
Submission deadline:	Thursday [Week 10] 13/08/2026 by 2.00 pm	Return date of provisional marks & written feedback:	Friday, September 4, 2026
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Alternative submission method (if applicable): Late submission of the assessment will result in a late penalty mark: Work which is submitted up to 1 week late will be capped at 40% for the first attempt and will be awarded a mark of 0% for re-assessment. Late submission penalties may be lifted only if there is an approved extenuating circumstances claim. Work submitted more than 1 week late will be considered as a non-submission and will not be marked. The work may be considered as a submission for reassessment if offered by an Examining Board or if there is an approved extenuating circumstances claim.		
Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

**Module Learning Outcomes
(from module syllabus)**

Demonstrate systematic understanding of security policies and measures to mitigate internal and external attacks and threats in a network.

TASK DESCRIPTION

Use of Generative AI in Assessment

(Lecturer to indicate Yes or Not against each element)

RESEARCH	For this assessment, you can use Generative AI to support you in research and data analysis.	Yes ☒ No ☐
STRUCTURE	For this assessment, you can use Generative AI to support you in structuring your submission, including creating a draft argument structure, identifying parts and headings, etc.	Yes ☐ No ☒
PROOFREADING	For this assessment, you can use Generative AI to check your own text/creation for grammatical and syntactical mistakes, including getting suggestions to rephrase your work.	Yes ☒ No ☐
WRITING	For this assessment, you can use Generative AI to create text for submission.	Yes ☐ No ☒
CREATIVE	For this assessment, you can use Generative AI to create creative materials, such as images.	Yes ☐ No ☒
PROGRAMING	For this assessment, you can use Generative AI to create and check code.	Yes ☐ No ☒
NONE	For this assessment, you are not allowed to use any type of Generative AI support. This includes research support, structure support, writing/proofreading support and creative support.	Yes ☐ No ☒

Background:

Cybersecurity has become a critical issue for organizations across all sectors, including manufacturing. The rise of Industry 4.0, automation, and the Internet of Things (IoT) has increased the interconnectivity of systems, creating new vulnerabilities. Modern manufacturing environments rely on smart machines, remote monitoring systems, and connected supply chains, all of which expose sensitive operational data to potential cyberattacks.

Recent incidents of ransomware targeting industrial control systems and data theft from supply chain partners have shown how cyber threats can disrupt production, cause financial loss, and damage a company's reputation.

Scenario:

You are the IT Security Manager for SteelForm Manufacturing Ltd (SFM), a medium-sized manufacturing company that produces custom-engineered components for the automotive and aerospace industries. SFM has recently adopted smart manufacturing technologies, including IoT-enabled sensors, automated machinery, and a cloud-based production management system. Over the past few months, the company has faced several security incidents, including malware infections, phishing emails targeting procurement staff, and unauthorized access attempts to its production network.

The company's board is increasingly concerned about industrial espionage, data breaches, and potential downtime caused by cyberattacks. You have been tasked with developing a comprehensive cybersecurity and data governance policy to strengthen protection against internal and external threats.

Task

You are required to conduct relevant research using credible sources and appropriate diagrams to synthesize a solution that addresses the following aspects:

- Identification of Threats: Clearly identify potential internal and external threats facing the company.
- Security Policies: Develop a set of security policies that align with best practices in network and cyber security.
- Mitigation Measures: Propose specific measures to mitigate identified threats, detailing how each measure will be implemented.
- Monitoring and Response: Outline a plan for monitoring the network and responding to security incidents (flow chart or diagram would be useful).
- Training and Awareness: Describe a training program for staff to ensure compliance with the new security policies.

Deliverables

- Report: Produce a detailed report (2000 words) addressing the above aspects. Ensure that your report is well-structured, with clear headings and subheadings. Use diagrams where appropriate to illustrate your points.
- Presentation: Prepare a 10-minute PowerPoint or Google slides presentation summarizing your findings and recommendations. This should be designed for the board of directors to understand the importance of your proposed measures. Include your PowerPoint presentation as an appendix in your report.

Your submission will be assessed based on the following criteria:

- Comprehensiveness: Have you identified a wide range of internal and external threats? (10%= 5/50)
- Clarity and Relevance of Policies: Are the proposed security policies clear, relevant, and practical? (20%= 10/50)
- Feasibility of Mitigation Measures: Are the mitigation measures realistic and achievable within the context of FinSecure Ltd? (10%= 5/50)
- Monitoring and Incident Response: Is there a robust plan for ongoing monitoring and incident response? (10%= 5/50)
- Staff Training Program: Does the training program effectively promote security awareness among staff? (20%= 10/50)
- Presentation: Does the presentation outline the importance of your report? Include as appendix in your report. (30%= 15/50)

Some factors that may be consider in aiding appropriate solution(s) but not limited to them are:

- Utilize industry standards such as ISO 27001, NIST, or GDPR compliance guidelines when developing your security policies.
- Consider the latest trends in cyber threats, such as ransomware, insider threats, and social engineering tactics.
- Engage with frameworks like the CIA Triad (Confidentiality, Integrity, Availability) to assess the implications of your proposed measures.
- Include references to relevant literature, case studies, or examples from other organizations to support your recommendations.

Conclusion

This assessment aims to evaluate your ability to develop a systematic understanding of security policies and measures in a real-world context. Your recommendations will not only enhance the security posture of company but also foster a culture of security awareness across the organization.

GUIDANCE FOR STUDENTS IN THE COMPLETION OF TASKS

NOTE: The guidance offered below is linked to the five generic assessment criteria overleaf.

1. Engagement with Literature Skills

Your work must be informed and supported by scholarly material that is *relevant* to and *focused* on the task(s) set. You should provide evidence that you have accessed an appropriate *range* of sources, which may be academic, governmental and industrial; these sources may include academic journal articles, textbooks, current news articles, organisational documents, and websites. You should consider the *credibility* of your sources; academic journals are normally highly credible sources while websites require careful consideration/selection and should be used sparingly. Any sources you use should be current and up-to-date, mostly published within the last five years or so, though seminal/important works in the field may be older. You must provide *evidence* of your research/own reading throughout your work, using a suitable referencing system, including in-text citations in the main body of your work and a reference list at the end of your work.

Guidance specific to this assessment: All work must be appropriately researched and referenced with an extensive range of relevant and credible literature. High-level referencing skills consistently applied. Most references should be current and Laws must cite current legislation in the appropriate government site(s).

2. Knowledge and Understanding Skills

At level 4, you should be able to demonstrate knowledge of the underlying concepts and principles associated with your area(s) of study. *Knowledge* relates to the facts, information and skills you have acquired through your learning. You demonstrate your *understanding* by interpreting the meaning of the facts and information (knowledge). This means that you need to select and include in your work the concepts, techniques, models, theories, etc. appropriate to the task(s) set. You should be able to explain the theories, concepts, etc. to show your understanding. Your mark/grade will also depend upon the *extent* to which you demonstrate your knowledge and understanding.

Guidance specific to this assessment: You will need to show application of skills and research in the assignment by demonstrating exceptional, detailed knowledge and understanding of the basic underlying concepts and principles. May go beyond established theories.

3. Cognitive and Intellectual Skills

You should be able to present, evaluate and interpret qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of your subject(s) of study. You should be able to evaluate the appropriateness of different approaches to solving problems related to your area(s) of study and/or work. Your work must contain evidence of logical, analytical thinking. For example, to examine and break information down into parts, make inferences, compile, compare and contrast information. This means not just describing what! But also justifying: Why? How? When? Who? Where? At what cost? You should provide justification for your arguments and judgements using evidence that you have reflected upon the ideas of others within the subject area and that you are able to make sound judgements and arguments using data and concepts. Where relevant, alternative solutions and recommendations may be proposed.

Guidance specific to this assessment: Your work must demonstrate critical evaluation and analysis of concepts and principles; argument and judgement; the limits of their knowledge, and how this influences their analyses and interpretations of your research. *You must identify a wide range of internal and external threats, proposed security policies must be clear, relevant, and practical, mitigation measures must be realistic and achievable within the context of the company/organization, a robust plan for ongoing monitoring and incident response and the training program must effectively promote security awareness among staff. Your work must also justify your findings and provide evidence.*

4. Practical Skills

At level 4, you should be able to apply the basic underlying concepts and principles to evaluate and interpret these within the context of your area of study. You should be able to demonstrate how the subject-related concepts and ideas relate to real world situations and/or a particular context. How do they work in practice? You will deploy models, methods, techniques, and/or theories, in that context, to assess current situations, perhaps to formulate plans or solutions to solve problems, or to create artefacts. This is likely to involve, for instance, the use of real world artefacts, examples and cases, the application of a model within an organisation and/or benchmarking one theory or organisation against others based on stated criteria.

Guidance specific to this assessment: Marks will be awarded based on the quality of your *PowerPoint or Google slides presentation* and *level of detail provided for diagrams, tables, charts* and any other design methods utilise will enhance marks; these should be properly explained and contextualised.

5. Transferable Skills for Life and Professional Practice

Your work must provide evidence of the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility. This includes demonstrating: that you can communicate the results of your study/work accurately and reliably, and with structured and coherent arguments; that you can initiate and complete tasks and procedures, whether individually and/or collaboratively; fluency of expression; clarity and effectiveness in presentation and organisation. Work should be coherent and well-structured in presentation and organisation.

Guidance specific to this assessment: You must submit a report which should be *approximately 2,000 words in length*. The report should be presented in an academic way (IEEE/ACM format) and therefore must include an abstract, an introduction, a conclusion and a list of references. The report must be submitted via Turnitin as well.

This will be assessed based on the written and presentational quality of your report:

- Flow
- Professionalism
- Comprehension (grammar and spelling)
- Completeness and presentation of report

STUDENT FEEDBACK FORM

This section details the *extent* to which the assessment criteria are demonstrated by you, which in turn determines your mark. The marks available for each category of skill are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills	15	
2. Knowledge and Understanding Skills	10	
3. Cognitive and Intellectual Skills	40	
4. Practical Application Skills	25	
5. Transferable Skills for Life and Professional Practice	10	

Assessment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)

Late Submission Penalties (tick if appropriate)

Up to 1 week late (40% Max)

Over 1 week late (0%)

%

GENERIC ASSESSMENT CRITERIA

Level 4

In accordance with the Framework for Higher Education Qualifications, at the end of Level 4 students will be expected to have demonstrated knowledge of the basic underlying concepts and principles of a subject, and an ability to evaluate and interpret these within the context of that area of study. They should be able to present, evaluate and interpret qualitative and quantitative data in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of their subject(s) of study. They will have learned how to evaluate different approaches to solving problems, and will be able to communicate the results of their study/work accurately and reliably, and with structured and coherent arguments. They will be able to undertake further training and develop new skills within a structured and managed environment and will have the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility.

Level 4	FAIL	MARGINAL FAIL	SATISFACTORY (3 rd / Pass)	GOOD (2.2 / Pass)	VERY GOOD (2.1 / Merit)	EXCELLENT (1 st / Distinction)	EXCEPTIONAL (1 st / Distinction)
Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
Engagement with literature (including reading, referencing, academic conventions and academic honesty)	Little or no evidence of reading and/or reliance on inappropriate sources. Views and findings mostly unsupported and non-authoritative. Referencing conventions used incoherently or largely absent.	Poor engagement with essential reading. No evidence of wider reading. Reliance on inappropriate sources, and/or indiscriminate use of sources. Heavily reliant on information gained through class contact. Inconsistent and weak use of referencing.	Engagement with a limited range of mostly relevant and credible sources but with some reliance on information gained through class contact. Some omissions and minor errors. Referencing conventions evident though not always applied accurately or consistently.	Engagement with an appropriate range of literature, including sources retrieved independently. Some over-reliance on texts rather than other sources. Referencing may show minor inaccuracies or inconsistencies.	Engagement with a wide range of literature, including sources retrieved independently. Selection of relevant and credible sources. Generally sound referencing, with no/very few inaccuracies or inconsistencies.	Engagement with an extensive range of relevant and credible literature. Consistently accurate application of referencing.	Exceptional engagement with an extensive range of relevant and credible literature. High-level referencing skills consistently applied.
Knowledge and understanding (Knowledge of the basic underlying concepts and principles of a subject.)	Major gaps in knowledge and understanding of the basic underlying concepts and principles of the subject matter. Inclusion of irrelevant	Gaps in knowledge of the basic underlying concepts and principles, with flawed or superficial understanding. Some significant inaccuracies	Limited knowledge and understanding of the basic underlying concepts and principles within the subject area. Some elements may be missing.	Knowledge of the basic underlying concepts and principles is accurate with a good understanding of the field of study	Competent knowledge of the basic underlying concepts and principles. Exhibits very good understanding.	Excellent knowledge and understanding of the basic underlying concepts and principles of the subject.	Exceptional, detailed knowledge and understanding of the basic underlying concepts and principles

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Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
	material. Substantial inaccuracies.	and/or irrelevant material.		but lacks depth and/or breadth.			
Cognitive and intellectual skills (Evaluate underlying concepts and principles of a subject and interpret qualitative and quantitative data in order to develop lines of argument and make sound judgements.)	Wholly or almost wholly descriptive work. Little or no evaluation of the underlying concepts and principles. Failure to develop arguments, leading to illogical or invalid judgements. Minimal or no use of evidence to back up views.	Largely descriptive work, with superficial evaluation of the underlying concepts and principles. Weak interpretation of data, flawed development of arguments and judgements. Information accepted uncritically, uses generalised statements made with scant evidence and unsubstantiated opinions. Ideas sometimes illogical and contradictory.	Limited attempt at evaluation of the underlying concepts and principles, tending towards description. Can interpret qualitative and quantitative data but with some errors. Some evidence to support emerging arguments and judgements but these may be underdeveloped or with a little inconsistency / mis-interpretation.	Good evaluation of the underlying concepts and principles. Can interpret qualitative and quantitative data, with minor errors. An emerging ability to use evidence to support the argument. Mostly valid arguments and logical judgements.	Sound evaluation of the underlying concepts and principles. Can interpret qualitative and quantitative data accurately. Ability to devise arguments using evidence to make mostly appropriate and valid judgements.	Excellent evaluation of the underlying concepts and principles. Can interpret qualitative and quantitative data accurately and with some insight. Excellent ability to devise arguments using evidence and make appropriate and valid judgements.	Exceptional evaluation of the underlying concepts and principles based evidence. Outstanding interpretation of qualitative and quantitative data. Exceptional ability to devise arguments using evidence and make wholly appropriate and valid judgements.
Practical skills (Different approaches to solving problems in particular contexts.)	Limited or no use of taught, basic methods, materials, tools and/or techniques. Little or no appreciation of the context of the application. Very weak evidence of different approaches to	Rudimentary application of taught, basic methods, materials, tools and/or techniques but without consideration and competence. Flawed appreciation of	An adequate awareness and mostly appropriate application of basic methods, materials, tools and/or techniques. Basic appreciation of the context of the application.	A good and appropriate application of basic methods, materials, tools and/or techniques. Clear appreciation of the context of the application. Good evidence of different approaches to	A very good application of a range of basic methods, materials, tools and/or techniques. Very good consideration of the context of the application. Very good evidence of different	An advanced application of a range of taught, basic methods, materials, tools and/or techniques. The context of the application is well considered, and insightful. Excellent evidence of different	Exceptional levels of application and deployment skills in particular practical contexts. Outstanding identification of problems in particular contexts and formulation of

Level 4	FAIL	MARGINAL FAIL	SATISFACTORY (3 rd / Pass)	GOOD (2.2 / Pass)	VERY GOOD (2.1 / Merit)	EXCELLENT (1 st / Distinction)	EXCEPTIONAL (1 st / Distinction)
Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
	problem-solving in particular contexts.	the context of the application. Weak evidence of different approaches to problem-solving in particular contexts.	Can identify problems in particular contexts and propose basic alternative approaches or solutions though there may be errors.	problem-solving in particular contexts and proposes mostly appropriate solutions.	approaches to problem-solving in particular contexts and proposes appropriate solutions.	approaches to problem-solving in particular contexts and proposes appropriate solutions.	wholly appropriate, thoughtful solutions / different approaches.
Transferable skills for life and professional practice (Communicate the results of their study/work accurately and reliably, and with structured and coherent arguments; the qualities needed for employment requiring the exercise of some personal responsibility within a structured and managed environment.)	Work is poorly structured, disorganised, inaccurate and/or confusingly expressed. Very weak use of language and/or very inappropriate style. Failure to work effectively individual or as part of a group. Little or no evidence of the skills for employment requiring the exercise of some personal responsibility.	Work is poorly presented in a disjointed manner. It is loosely, and at times incoherently, structured, with information and ideas often poorly expressed. Weak use of language and/or inappropriate style. Flawed approach to individual or group work, meeting only partial obligations to others. Limited evidence of the skills for employment requiring the exercise of some personal responsibility.	Mostly ordered presentation and structure in which relevant ideas / concepts are reasonably expressed. Work may lack coherence and/or accuracy in places. Can work as part of a group, meeting most obligations to others but perhaps with limited involvement in group activities. Demonstrates the basic skills for employment requiring the exercise of some personal responsibility, with some areas of minor weakness.	Mostly coherent, organised and accurate work, in a suitable structure and is for the most part clearly expressed. Can work effectively independently and/or as part of a team, with clear contribution to group activities. Demonstrates the skills for employment requiring the exercise of some personal responsibility, with some areas of strength and some of minor weakness.	Work is accurate, coherent, fluent, well-structured and organised. Can work effectively independently and/or as part of a team, with very good contribution to group activities. Demonstrates very good skills for employment requiring the exercise of some personal responsibility, with just occasional minor weakness.	Work is coherent, very fluent and is presented professionally. Can work effectively independently and/or as part of a team, with an excellent contribution to group activities. Demonstrates excellent skills for employment requiring the exercise of some personal responsibility with an appetite for further development.	Work is accurate, exceptionally coherent, very fluent and presented well. Can work effectively independently and/or as part of a team, with an exceptional contribution to group activities. Demonstrates exceptional skills for employment requiring the exercise of some personal responsibility with an appetite for further development.

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