Unit 4 Data Analytics

Unit 4 Outcome 2 – SAC task template

Instructions

The purpose of this template is to assist teachers with the development of the Unit 4 Outcome 2 School-assessed Coursework task and in the meeting of requirements by following the VCE assessment principles. Teachers can use this template to insert the necessary content for the School-assessed Coursework task.

The following content is included in this template:

* Relevant VCAA resources for the development of the Unit 4 Outcome 2 SAC task.
* The Unit 4 Outcome 2 statement.
* The Unit 4 Outcome 2 Key knowledge.
* The Unit 4 Outcome 2 Key skills.
* Details related to task development including:
  + task
  + conditions
  + case study/scenario
  + assessment (marking scheme)

Use of commercial tasks

When referring to or using a commercially produced task teachers need to ensure that the tasks they develop are to be sufficiently modified from the original commercial task.

All commercially produced tasks must be cross-checked against the:

* outcome statement
* key knowledge
* key skills.

Also, for authentication reasons, the context (the background to the case study or scenario) and the content (the organisation’s current security strategies, threats to their security and legal and ethical issues) of the task must be significantly changed from the original publication each year. This involves the current year’s commercial task as well as previous years and also any previous year’s school-developed assessment tasks.

VCAA Resources

The following resources for developing the Unit 4 Outcome 2 School-assessed Coursework task can be found on the Applied Computing: Data Analytics study page:

* Applied Computing Study Design (2020–2024)
* VCE Applied Computing: Data Analytics School-based Assessment report (2020)
* Advice for teachers (Unit 4 Data Analytics)
* On-demand videos:
* Unit 4 School-based Assessment
* Background to the Unit 4 Outcome 2 SAC
* Planning the Unit 4 Outcome 2 SAC
* Assessing the Unit 4 Outcome 2 SAC
* Using the Unit 4 Outcome 2 SAC Template
* Unit 4 School-based Assessment Audit
* Support material:
* 2024 VCE Applied Computing: Data Analytics Unit 4 Outcome 2 Assessment task development template – blank
* 2024 VCE Applied Computing: Data Analytics Unit 4 Outcome 2 Assessment task development template – plan
* 2024 VCE Applied Computing: Data Analytics Unit 4 Outcome 2 Developing a marking scheme – sample
* 2024 VCE Applied Computing: Data Analytics Unit 4 Outcome 2 SAC Template

The following resource can be found on the VCE General advice and policy page:

* VCE assessment principles

Unit 4 Outcome 2

On completion of this unit the student should be able to respond to a teacher-provided case study to investigate the current data and information security strategies of an organisation, examine the threats to the security of data and information, and recommend strategies to improve current practices.

Key knowledge

*Digital systems*

* characteristics of wired, wireless and mobile networks
* types and causes of accidental, deliberate and events-based threats to the integrity and security of data and information used by organisations
* physical and software security controls for preventing unauthorised access to data and information and for minimising the loss of data accessed by authorised and unauthorised users
* the role of hardware, software and technical protocols in managing, controlling and securing data in information systems
* the advantages and disadvantages of using network attached storage and cloud computing for storing, communicating and disposing of data and information

*Data and information*

* characteristics of data that has integrity, including accuracy, authenticity, correctness, reasonableness, relevance and timeliness

*Interactions and impact*

* the importance of data and information to organisations
* the importance of data and information security strategies to organisations
* the impact of diminished data integrity in information systems
* key legislation that affects how organisations control the collection, storage, communication and disposal of their data and information: the *Health Records Act 2001*, the *Privacy Act 1988* and the *Privacy and Data Protection Act 2014*
* ethical issues arising from data and information security practices
* strategies for resolving legal and ethical issues between stakeholders arising from information security practices
* reasons to prepare for disaster and the scope of disaster recovery plans, including backing up, evacuation, restoration and test plans
* possible consequences for organisations that fail or violate security measures
* criteria for evaluating the effectiveness of data and information security strategies.

Key skills

* analyse and discuss the current data and information security strategies used by an organisation
* propose and apply criteria to evaluate the effectiveness of current data and information security strategies
* identify and evaluate threats to the security of data and information
* identify and discuss possible legal and ethical consequences of ineffective data and information security strategies
* recommend and justify strategies to improve current data and information security practices.

Task

[**Insert** the name of the task here.]

[When developing the task refer to the *Unit 4 Outcome 2 Key knowledge and Key skills*, *Advice for teachers – Sample approaches to developing an assessment task* and the *Unit 4 Outcome 2 Support material* on the study page for further information.]

Conditions

[**Insert** the conditions for the task here.]

Case study/scenario

[**Insert** the case study/scenario here.]

[**Insert** the structured questions or brief prompts for the written report here. Include marks allocated for each question or brief prompt.]

Assessment

[**Insert** your marking scheme for the School-assessed Coursework task here. **Note:** Do not insert the VCAA Performance descriptors here without modifying them to meet your task.]

[Determine how you will be assessing student performance in response to the case study. Will it be through structured questions, a report in written format or a report in multimedia format? Refer to the *Unit 4 Outcome 2 Key skills* and the *Advice for teachers – VCAA Performance descriptors* and the *2024 VCE Applied Computing: Data Analytics Unit 4 Outcome 2 Developing a marking scheme - sample* on the study page for further information.]

[Marking schemes should be clear and accessible for students to help ensure that they can achieve the full range of marks. When developing marking schemes, schools must ensure criteria within the marking scheme are appropriately weighted. Marking schemes should also provide sufficient opportunity for schools to differentiate between levels of achievement. Schools must also ensure that the appropriate number of marks are awarded to the task.]