Assessment Schedule – 2025

Digital Technologies and Hangarau Matihiko: Demonstrate understanding of a computer science concept (91898)

Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
*Demonstrate **understanding** of a computer science concept* involves: • identifying the computer science concept • providing details of how the concept is used, is implemented, or occurs • explaining how the concept has been or could be applied to address an opportunity • explaining relevant mechanisms that shape the concept.	*Demonstrate **in-depth understanding** of a computer science concept* involves: • explaining the impact of the concept.	*Demonstrate **comprehensive understanding** of a computer science concept* involves: • explaining key problems or issues related to the concept.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 2	3 – 4	5 – 6	7 – 8

Evidence

Question One – Artificial intelligence

N1	N2	A3	A4	M5	M6	E7	E8
Makes a few comments, but the response is incomplete or does not relate to the chosen topic.	Makes comments that have some relevance to the chosen topic, but with insufficient detail.	**Explains** how artificial intelligence (AI) makes use of the various sensors in the car. Gives TWO ways in which AI improves car safety. **Explains** how natural language processing OR neural networks is used or implemented, or occurs. **Explains** how AI is needed in healthcare. *OR* **Explains** the opportunity machine learning has provided in healthcare. Some aspects of the response may be partial or weak.	Explains, **in detail**, how AI makes use of the various sensors in the car. Explains, **in detail**, TWO ways in which AI improves car safety. Explains, **in detail**, how natural language processing OR neural networks is used or implemented, or occurs. Explains, **in detail**, how AI is needed in healthcare. *OR* Explains, **in detail**, the opportunity machine learning has provided in healthcare.	Explains, **giving examples**, what can be done to future-proof AI-generated content in social media. *OR* Explains, **giving examples**, known ethical issues that have occurred from the use of AI generated content in social media. Some aspects of the response may lack detail.	Explains, **in depth**, what can be done to future-proof AI-generated content in social media. *OR* Explains, **in depth**, known ethical issues that have occurred from the use of AI generated content in social media.	Explains key problems or issues with AI in car safety systems. Answers include clear links to computer science concepts. Some aspects of the response may be missing, for example: relevance, purpose, need, effectiveness.	Explains, **in detail**, key problems or issues with AI in car safety systems. Answers include clear links to computer science concepts.

N0 = No response; no relevant evidence.

Question Two – Computer encryption

N1	N2	A3	A4	M5	M6	E7	E8
Makes a few comments, but the response is incomplete or does not relate to the chosen topic.	Makes comments that have some relevance to the chosen topic, but with insufficient detail.	**Explains** how early garage door openers used dip switches for security, and how effective they were. **Explains** how modern garage door openers use encryption, and gives TWO ways in which they improve security. **Explains** how SHA-256 (Secure Hash Algorithm) OR the key exchange problem is used or implemented, or occurs. **Explains** how encryption is needed in healthcare. *OR* **Explains** the opportunity encryption has provided in healthcare. Some aspects of the response may be partial or weak.	Explains, **in detail**, how early garage door openers used dip switches for security, and how effective they were. Explains, **in detail**, how modern garage door openers use encryption, and gives TWO ways in which they improve security. Explains, **in detail**, how SHA-256 (Secure Hash Algorithm) OR the key exchange problem is used or implemented, or occurs. Explains, **in detail**, how encryption is needed in healthcare. *OR* Explains, **in detail**, the opportunity encryption has provided in healthcare.	Explains, **giving examples**, what can be done to future-proof AES (Advanced Encryption Standard). *OR* Explains, **giving examples**, known ethical issues in privacy with encryption. Some aspects of the response may lack detail.	Explains, **in depth**, what can be done to future-proof AES (Advanced Encryption Standard). *OR* Explains, **in depth**, known ethical issues in privacy with encryption.	Explains key problems or issues with remote garage door opener security. Answers include **clear links to computer science concepts**. *Note: The answer can include key problems and issues that are current, and / or those that have been resolved.* Some aspects of the response may be missing, for example: relevance, purpose, need, effectiveness.	Explains, **in detail**, key problems or issues with remote garage door opener security. Answers include clear links to computer science concepts.

N0 = No response; no relevant evidence.