



## 12 Software Engineering

# Task 4: Trial HSC Examination

**Exam Date:** 20.8.25

**Distributed:** 23 Jul 2025

**Weighting:** 30 % NESA (100% of report mark)

**Task Type:** Written Exam

### Syllabus Outcome/s:

SE-12-01: justifies methods used to plan, develop and engineer software solutions

SE-12-02: applies structural elements to develop programming code

SE-12-03: analyses how current hardware, software and emerging technologies influence the development of software engineering solutions

SE-12-04: evaluates practices to safely and securely collect, use and store data

SE-12-05: explains the social, ethical and legal implications of software engineering on the individual, society and the environment

SE-12-06: justifies the selection and use of tools and resources to design, develop, manage and evaluate software

SE-12-07: designs, develops and implements safe and secure programming solutions

SE-12-08: tests and evaluates language structures to refine code

### Task Description

Using syllabus outcomes and content as a guide, students will be examined on the key areas of learning listed below:

- Secure Software Architecture
  - Designing software
  - Developing secure code
  - Impact of safe and secure software development
- Programming for the Web
  - Data transmission using the web
  - Designing web applications
- Software Engineering Project
  - Identifying and defining
  - Research and planning
  - Producing and implementation
  - Testing and evaluating

The exam is 2 hours and 40 minutes in length including 10 minutes reading time.

Section I:	20 marks	Objective Response
Section II:	60 marks	Short Answer Response

**Total Marks = 80**

## Preparation for this Task

As this is an examination you will need to prepare for this task by:

- Creating your summary notes page covering each topic listed above (you could use mind maps, flow charts, dot point lists etc).
- Completing practice questions and weekly formative tasks
- Seeking teacher assistance on unclear work
- Ensuring all set work is up to date, including formative tasks and classwork activities

## NESA Glossary of Key Words

Understand the verbs associated with the task. These verbs will provide an understanding of the detail needed to successfully answer the questions. Some of the verbs typically associated with these questions include:

- **Analyse:** Identify components and the relationship between them; draw out and relate implications
- **Describe:** Provide characteristics and features
- **Discuss:** Identify issues and provide points for and/or against
- **Explain:** Relate cause and effect; make the relationships between things evident; provide why and/or how
- **Identify:** Recognise and name
- **Justify:** Support an argument or conclusion
- **Outline:** Sketch in general terms; indicate the main features of

## Details of Submission

Students will complete this task in the Technology Centre on the date listed. Exam requirements are outlined below:

- Students will need to bring a black pen.
- The examination paper will be provided through online means.
- Students are to attempt ALL questions.
- Students are NOT permitted to bring notes into the exam.
- Any student who is absent on the day of the examination must follow the illness/misadventure procedures in the school's assessment policy. Non-completion of the task without successful illness/misadventure appeal will receive a zero-mark and an N-Warning notification, as outlined in the Year 12 Assessment Booklet.

## Teacher Feedback and Student Self-Reflection

The task will be returned to students within **14 days** of the exam date. Teacher feedback including information on how to improve will be provided through written feedback and the marking criteria. Students can clarify or seek further feedback by speaking with their teacher.

Students will be required to complete a self-reflection form at the time they receive their assessment mark and teacher feedback. Self-reflection is an important part of the learning process as it provides an opportunity to reflect on the strength of their performance, as well as areas that have been identified to strengthen in future tasks.

Upon return of the task, students will also be expected to complete a self-reflection.

<https://forms.gle/oKo2B6iQ5UFFQW566>

## How does this link to my learning?

This task will draw together an understanding of fundamental Industrial Technology Multimedia concepts, providing students with the opportunity to demonstrate their knowledge and understanding of the Multimedia industry. This task will also allow students to gain feedback on areas of strength and areas on which to improve for the HSC Course.

The structure and questioning style presented in this task will mirror that of the HSC examination.

## Assessment Procedures

Students should be fully aware of the School Assessment Procedures for their year group. These were provided at the beginning of the school year and are available off the school website under the 'Learning' menu for each year group.