

Assessment Schedule – 2012**Technology: Demonstrate understanding of basic concepts from computer science involves (91074)**

Final grades will be decided using professional judgement based on a holistic examination of the evidence provided against the criteria.

Issues from the Specifications

Authentic candidate submissions will be recognisable because of specific contexts associated with the work. This does not imply that submissions will arise only from the candidate's practice. However, where the candidate's practice does not provide the immediate source of a specific context, one would expect to see that several sources of information relating to modelling had been applied within a specific context. In both cases, the marker will be able to detect the candidate's voice. In situations where information does not have some aspect of student voice, it is difficult to establish whether the candidate has actually demonstrated understanding or simply identified information.

Candidates who have simply identified information by reproducing information from sources without making use of that information have not demonstrated understanding.

Where a candidate has provided a brief answer, the answer should not be penalised because of length.

Candidate work in excess of 14 pages should not be marked.

Where work is illegible, it cannot be marked.

Digital submissions that cannot be read cannot be marked.

Achievement	Achievement with Merit	Achievement with Excellence
<p>Demonstrate understanding of basic concepts from computer science involves</p> <p>describing the key characteristics and roles of algorithms, programs and informal instructions</p> <p>describing an algorithm for a task, showing understanding of the kinds of steps that can be in an algorithm, and determining the cost of an algorithm for a problem of a particular size</p> <p>describing the role and characteristics of programming languages, including the different roles and characteristics of high level languages and low level (or machine) languages, and the function of a compiler</p> <p>describing the role of a user interface and factors that contribute to its usability.</p>	<p>Demonstrate in-depth understanding of basic concepts from computer science involves</p> <p>explaining how algorithms are distinct from related concepts such as programs and informal instructions</p> <p>showing understanding of the way steps in an algorithm for a task can be combined in sequential, conditional, and iterative structures and determining the cost of an iterative algorithm for a problem of size n</p> <p>explaining how the characteristics of programming languages, including the different characteristics of high level and low level (or machine) languages, are important for their roles</p> <p>explaining the need for programs to translate between high and low level languages</p> <p>explaining how different factors of a user interface contribute to its usability.</p>	<p>Demonstrate comprehensive understanding of basic concepts from computer science involves</p> <p>comparing and contrasting the concepts of algorithms, programs, and informal instructions</p> <p>determining and comparing the costs of two different iterative algorithms for the same problem of size n</p> <p>comparing and contrasting high level and low level (or machine) languages, and explaining different ways in which programs in a high level programming language are translated into a machine language</p> <p>discussing how different factors of a user interface contribute to its usability by comparing and contrasting related interfaces.</p>