Assessment Schedule – 2015
Technology: Demonstrate understanding of basic concepts from computer science (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

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

Candidate work in excess of 10 pages must not be marked.

Where a candidate has used a small font, markers should make a judgement about where to stop marking. This judgement should be made relative to 10 pages of Arial 12-point font.

Where work is illegible, it cannot be marked.

Digital submissions that cannot be read cannot be marked.

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of basic concepts from computer science involves: describing the key characteristics and roles of algorithms, programs and informal instructions 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 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 describing the role of a user interface and factors that contribute to its usability.	Demonstrate in-depth understanding of basic concepts from computer science involves: explaining how algorithms are distinct from related concepts such as programs and informal instructions 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 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 explaining the need for programs to translate between high and low level languages explaining how different factors of a user interface contribute to its usability.	Demonstrate comprehensive understanding of basic concepts from computer science involves: comparing and contrasting the concepts of algorithms, programs, and informal instructions determining and comparing the costs of two different iterative algorithms for the same problem of size n 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 discussing how different factors of a user interface contribute to its usability by comparing and contrasting related interfaces.

Appendix 1

<table>
<tr><td colspan="2">Markers must exercise professional judgement to decide if a report demonstrates understanding. The following appendix provides guidance for markers making this judgement.
A report must use information to demonstrate understanding.
Reports described wholly or substantially by one or more of the statements in the left column demonstrate understanding.
Reports described wholly, or substantially, by one or more of the statements in the right column do not demonstrate understanding.</td></tr>
<tr><td colspan="2">Where the report is made up of both used and reproduced information, the marker must decide if the report is successful against the standard when the reproduced information is ignored.</td></tr>
<tr><td>Evidence of use of information</td><td>Evidence of reproduction of information</td></tr>
<tr><td>Candidate’s report describes and explains the candidate’s use, in their practice, of information relating to the standard.</td><td rowspan="2">Information is presented in isolation from the candidate’s Technological experiences. It offers nothing or little to suggest the information is related to a course of instruction at level 6.</td></tr>
<tr><td>Information from the candidate’s practice, research, the practice of others, and teaching is related to the candidate’s technological experiences.
The report describes experiences you would expect to come from a course of instruction derived from The Technology Learning area the NZC.
These could include but are not limited to
• testing and trialling within a modelling process
• developing a conceptual statement
• developing a conceptual design
• development of a brief
• material selection
• refinement of a brief
• development of a prototype
• development of a one-off solution.
Further examples may be added.</td></tr>
<tr><td>Information from research, the practice of others, or teaching is reported in the candidate’s own voice.</td><td>Information is NOT in the candidate’s voice. The word choice, sentence structure, sentence length, punctuation and so on are not what a candidate could be expected to produce.</td></tr>
<tr><td>Referenced, complex research information unchanged by paraphrase is related to other information in a manner that unambiguously constructs meaning. (very rare)</td><td>Unreferenced, complex, research information is presented as though it is the candidate’s own work.</td></tr>
<tr><td colspan="2">Where the marker suspects a report is a deliberate attempt to deceive the report should be referred to the panel leader using the Irregular Booklet process.</td></tr>
</table>