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**General Certificate of Education (A-level) Applied**
**June 2011**

# Applied Information and Communication Technology IT05

# (Specification 8751/8753/8756/8757/8759)

## Unit 5: Fundamentals of Programming

# *Report on the Examination*

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# Unit 5: Fundamentals of Programming (IT05)

This unit assesses the candidate's grasp of the fundamental practices and principles that are the foundation of good programming. As such and bearing in mind the likely absence of real clients, most Centres set scenarios for their candidates to undertake. On the whole these scenarios did provide candidates with a reasonable amount of information with which to work out a software specification and produce a programmed solution. Some were very effective in providing candidates with a challenging task that allowed them to access the full range of marks available. Centres are advised to consult their Portfolio Adviser if they need guidance on the suitability of a particular scenario.

A few very good examples of programs were produced that demonstrated a good understanding of the principles and practice of programming, such as those who created a booking system and used Access as the back end database and Visual Basic to create a user interface. This allowed the candidates to clearly show the data types and modular programming, in both the design and implementation, as well as the use of iteration and selection and the data structures used. By doing this, candidates were able to gain higher marks than those candidates who had used only Access. Candidates who had used only Access found it difficult to show the use of iteration and selection, modular structure and the data structures used.

Few candidates gained full marks on AO1, Row 4 where, for 1 mark, candidates must use both selection and iteration structures and, for 2 or more marks, candidates must use "complex selection and repetition structures". Examples of these are structures such as nested IF, CASE, or any other selection structure nested inside a repetition structure, or vice versa. For 3 marks "complex conditions" might use Boolean operators AND, OR, NOT, or combinations of relational operators.

When providing a listing of program code, candidates should be encouraged to copy the code into a word-processing application, as most programming environments only allow the printing of plain text files which often means that indentation is not clear and the lack of margins on pages of code leads to the binding obscuring the code. For 2 or more marks on AO3, Row 6, candidates must properly indent and comment their code.

## Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the Results Statistics page of the AQA Website.

## Converting Marks into UMS marks

Convert raw or scaled marks into marks on the Uniform Mark Scale (UMS) by using the link below.

**UMS conversion calculator** www.aqa.org.uk/umsconversion.