

SOFTWARE DEVELOPMENT : COMPUTER AIDED OF  
REINFORCED CONCRETE DESIGN IN  
ACCORDANCE WITH BS 8110

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## ABSTRACT

The development of a computer aided software of reinforced concrete analysis and design is presented herein. The program has been developed based on British Standard Code of Practice BS 8110 : 1985. This computer software is capable of analysing and designing reinforced concrete elements such as continuous beam, solid slab, column and shallow foundation. The result of this analysis and design can be displayed on the screen or printed as hardcopy. It has been organised efficiently.

The software has been developed for the IBM or Compatible Personal Computer System, and it is written in BASIC Language where Microsoft (QuickBASIC) Compiler and Editor Version 4.0 were used.

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## CHAPTER 1

### INTRODUCTION.

The main step in the problem analysis is to review the problem carefully in order to identify what information must be produced to solve the problem in obtaining the solution. A procedure to produce the results from the given data must be designed as a detailed sequence known as ALGORITHM. The algorithms is best shown by using a flowchart which uses symbols to display each operation in their sequence.

Next, is to express the algorithm in a programming language, which have its own syntax.

Finally, the computer program is adopted to solve the problems.

#### 1.1 OBJECTIVE AND SCOPE OF WORK.

The main objective of the project is to develop a computer aided program for the analysis and design of reinforced concrete structures. The developed program is capable of analysing and designing the reinforced concrete elements (i.e. beam, slab, column and shallow foundation).

The program or software consists of 7 execution program that are limited software allows the user to input element together configuration and loading data