

SYSTEMS ANALYSIS IN CIVIL ENGINEERING
(DEVELOPMENT OF COMPUTER PROGRAMS FOR APPLICATION)

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MAY 1987

A Report submitted to the School of Engineering, Institut Teknologi MARA in partial fulfillment of the requirements for the Advanced Diploma in Civil Engineering.

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ACKNOWLEDGEMENT

We would like to express our utmost appreciation to our project advisers Puan Hanizah Abdul Hamid and Encik Sahol Hamid Abu Bakar for their help, guidance and advice in carrying out this project.

We would also like to thank our friends who have helped us in the preparation of this report.

PREFACE

Civil engineering systems analysis or systems engineering is a very useful method used for decision-making process using the theories of engineering, management and economics to obtain the best or optimum design for a particular problem.

The use of computers has been able to enhance its application to a wider field of users and provided more opportunities to obtain the optimum design that would result in the most economical choice.

Since the economic consideration is a very important criteria to select the alternatives to be used and the choice of a project, systems analysis will in future be more widely used by professionals in the construction industry, irrespective whether they will be doing management or design work. It has the twin advantages of reducing cost and increasing efficiency.

Certain systems analysis method are already included in the construction management syllabus. It is therefore hoped that this development of programs will facilitate a wider use of systems analysis in engineering courses and increase the ability of engineers to look into the problems encountered comprehensively in order to obtain the best alternative.

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