

**Higher Technical Institute  
ELECTRICAL ENGINEERING DEPARTMENT**

**DIPLOMA PROJECT**

**DESIGN OF THE ELECTRICAL SERVICE  
OF A MULTISTORY BUILDING**

**BY  
RODOSTHENOUS LEFTERIS**

**E/1177**

**JUNE 1999**

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HIGHER TECHNICAL INSTITUTE	PROJECT NO. 2973
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**Dedicated to my family  
and real friends....**

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## II

### SUMMARY

#### ELECTRICAL SERVICES OF A MALTISTORY BUILDING

Submitted by: LEFTERIS RODOSTHENOUS

This project deals with the design of the electrical services of a maltistory building.

The electrical installation is composed of the design of the lighting power circuits, air condition, also is composed the design of telephone installation, as well as some other arrangements such as earthing, testing etc. The project includes typical calculations for each part of design and tables with the results of the relevant part.

The whole design was carried out in order to provide the safety operation of the different work for the people working or visiting the building.



### III

#### INTRODUCTION

This project deals with the design of the electrical installation of a Multistory Building.

The project is divided into 13 chapters in which each one deals with a different subject. All chapters are necessary for the completion of the design of electrical installation of a restaurant.

Chapter One is concerned with the illumination design. Illumination is made in order to find the proper lighting in areas such as offices, corridors, kitchens, etc.

Chapter Two, Three, Four, Five and Six is concerned with the technical calculations and information used for the electrical materials (cables, conduits and selected protective device).

Chapter Seven deals with CYTA regulations and is concerned with the telephone installation of the Multistory Building.

Chapter Eight is concerned with the Distribution boards and supply cables.

Chapter Nine states the methods of earthing that must be followed in order to satisfy the I.E.E. regulations.

Chapter Ten states the methods of testing.

Chapter Eleven has to do with fault level calculations.

Chapter Twelve refers to the material and labour costs.

Finally, Chapter Thirteen refers to single line diagrams.