

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF THE SPECIALIZED ELECTRICAL  
SERVICES OF A BLOCK OF OFFICES

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**DESIGN OF THE SPECIALIZED ELECTRICAL SERVICES  
OF A BLOCK OF OFFICES**

By

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# CONTENTS

-Contents .....	1
-Acknowledgements .....	2
-Summary .....	3
-Introduction .....	4
-Chapter -1- Lightning protection system .....	5
Section 1- Theory	
Section 2- Determination of weather a lightning protection is needed or not	
Section 3- Installation	
Section 4- Costing	
-Chapter -2- Fire alarm system .....	16
Section 1- Theory	
Section 2- System design	
Section 3- Single line diagrams	
-Chapter -3- Burglar alarm system .....	36
Section 1- Theory	
Section 2- Programming	
Section 3- Single line diagrams	
Section 4- Costing	
-Conclusions .....	69
-Appendices .....	70
-Drawings	

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## SUMMARY

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Design of the specialized electrical services of a block of offices

A security system in a building has to do with the protection against fire, burglar and protection against lightnings.

In the case fire protection, the system must provide an early warning of fire in order to prevent the extension of the fire.

In the case of an intrusion, the burglar alarm system used, is installed in such a way that there is no possibility of entrance in the building .The system is separated into zones so that different modes of operation are possible and in case of an intrusion, the area that the intrusion took place will be known.

In the case of the lightning protection, the system is installed in such a way to provide protection against lightnings.

All these systems are designed and installed according to British Standards regulations. By following these regulations we come to the conclusion that the system is effectively protected against fire, intrusion and lightnings.

## INTRODUCTION

The project is to design the installation of a lightning protection system, a fire alarm system and a burglar alarm system in a building.

The building has three floors, consisted by various shops, apartments and offices.

The project includes the theory, the system design, single line diagrams, costing and drawings for the three security systems.