

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

**ELECTRICAL SERVICES
OF A CAFÉ**

E. 1372

GEORGIU ANTONIOS

JUNE 2005

HIGHER TECHNICAL INSTITUTE
ELECTRICAL ENGINEERING DEPARTMENT

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**SUPERVISOR
G. KOURTELLIS**

JUNE 2005

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HIGHER TECHNICAL INSTITUTE	PROJECT NO 3542
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HIGHER
DIPLOMA

Academic
Project no.
Project title

Title: E...

Objectives:

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CHAPTER 1

INTRODUCTION

HIGHER TECHNICAL INSTITUTE DIPLOMA PROJECT

Academic year: 2004/2005

Project number: E.1371

Project supervisor: Mr G. Kourtellis

Title: **Electrical services of a café**

Objectives:

1. Inspection and testing
2. power circuits
3. lighting circuits
4. air condition
5. fire alarm system
6. burglar alarm system
7. balancing phases
8. diversity
9. fault level calculations
10. structured cabling & telephony
11. electricity consumption cost
12. power factor improvement
13. costing of the installation

The whole project is done according to the IEE regulations 16th edition and the E.A.C regulations.

General assumptions:

- height of the distribution boards is 1.8m
- height of switches is 1.3m
- height of sockets 0.3m
- protective devices to be used MCB type B to BS 60898
- height of fused spur units 1.5m
- Z_{ext} is assumed to be 0.4Ω
- C_a, C_i, C_g are assumed to be equal to 1 so calculations concerning this factors will not be performed