# HIGHER TECHNICAL INSTITUTE

### **ELECTRICAL ENGINEERING COURSE**

### **DIPLOMA PROJECT**

# DEVELOPMENT OF THE MAIN CONTROL PANEL OF A FACTORY USING A PROGRAMMABLE LOGIC CONTROLLER (PLC)

E / 987

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## **SUMMARY**

TITLE: "Development of the main control panel of a factory using a Programmable Logic Controller (PLC)"

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### In the present report:

- a) The programming capabilities of the "Ladder Language" are investigated.
- b) The characteristics and capabilities of the programmable controllers are examined.
- c) An application programme for the main control panel of a factory using a PLC (Allen-Bradley SLC 500) is developed.
- d) The costing of such system is provided and comparison with a conventional method is made.

# **CONTENTS**

- 1. INTRODUCTION TO PLC
- 2. SLC-500 HARDWARE
- 3. SLC-500 SOFTWARE THE LADDER LANGUAGE
- 4. APPLICATION CASE STUDY
- 5. COSTING
- 6. APPENDICES