

# HIGHER TECHNICAL INSTITUTE

## MECHANICAL ENGINEERING COURSE

### DIPLOMA PROJECT

**DESIGN AND IMPLEMENTATION OF A PART RECOGNITION SYSTEM  
FOR A ROBOT ARM**

**M/619**

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**JUNE 1992**

HIGHER TECHNICAL INSTITUTE	PROJECT NO 2048
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## SUMMARY

In the introduction, a brief explanation of what a part recognition system is provided.

As the first objective of the project was to become familiar with the Robot a relevant background on Robots is provided in chapter 2.

In Chapter 3, are explained the different types of Robots that exists and in Chapter 4 the ways that a Robot can be programmed.

In Chapter 5 the reasons for using Robots are explained.

Chapter 6 contains the design criteria for the system.

Chapter 7 contains the methods of part recognition.

Chapter 8 explains how the system operates.

Chapter 9 provides brief information about sensors.

Chapter 10 provides information about the computer interface.

In Chapter 11 the system constructed for the project is explained.

Chapter 12 contains the software developed for the project.

Chapter 13 contains the motions of the robot.

Finally in Chapter 14 are the conclusions of the project.

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PROGRAM

MANUAL SUBROUTINE

AUTOMATIC

SEMI

DECISION

ROBOT PROGRAMS

START

MIN 1

MAX 2

DRAWINGS

CYLINDER A1/A2

BASE B1/B2