

HIGHER TECHNICAL INSTITUTE

CIVIL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

PRODUCTION OF DRAWINGS WITH
THE AID OF A C.A.D. PACKAGE

C / 908

STYLIANOU DANIEL

JUNE 2000

HIGHER TECHNICAL INSTITUTE

CIVIL ENGINEER DEPARTMENT

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HIGHER TECHNICAL INSTITUTE	PROJECT NO. 3072
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**PRODUCTION OF DRAWINGS WITH
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**BY
STYLIANOU DANIEL**

**PROJECT REPORT SUBMITTED TO
THE DEPARTMENT OF
CIVIL ENGINEERING
OF THE
HIGHER TECHNICAL INSTITUTE
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Finally, I dedicate this project to my beloved wife Anna and I thank her for the support she has provided me for the past few years.

SUMMARY

The purpose of this project is to discuss the applicability of computers in the production of drawings generally, but particularly in the production of drawings for houses and the applicability of AutoCAD R14 for Windows specifically.

This project was designed to offer a general overview of the AutoCAD R14 for windows, but nevertheless give a detailed guidance for the way some commands can be executed. To achieve this the author in many cases included original figures from the program.

AutoCAD has offered many solutions in technical drawing. Some of its advantages are the following.

1. Increased productivity
2. Decreased costs
3. Creates accurate drawings
4. Has no limits in excellence of drawing results
5. Powerful tool for rendering objects and/or drawings
6. Share Drawings etc with other users via the Internet

This particular project has the ambition to make a novice computer user to understand the basic functions of AutoCAD R14, and to be able to distinguish which command is to be used in each case.

Therefore a complete BASIC command index is included within these pages along with a fully detailed set of drawings.

INTRODUCTION

Drawings have since the early ages of existence been part of humans everyday life.

At the beginning drawings were sculpted on stone. Through the centuries methods of drawing have involved and improved. These improvements took many years to happen. The latest development in drawings production is C.A.D. (Computer Aided Design).

In technical drawing one of the most important developments is the software package AutoCAD.

AutoCAD allows the user to draw plans, elevations, sections, and any other kind of drawing he wishes. One of the most important advantages is that it allows the user to draw in any scale.

AutoCAD has many tools that make users life easier. Most of these tools were not available before the development of C.A.D.

Some of these are the construction of arrays, offsets, blocks, etc. Also the user can erase entities or undo previous commands, thus mistakes even though not avoided, can be corrected very easily.

AutoCAD offers more than one ways to execute a command. Commands can be executed using the following devices.

1. Keyboard
2. Mouse.
3. Digitizing tablet.
4. Light pen.

AutoCAD has the disadvantage that is much harder for a beginner to learn drawing using it, than using traditional drawing tools.

But after learning how to use the AutoCAD, the user is paid back for all the time he took, to learn to use the AutoCAD, since his productivity increases, and that time is regained.

Closing this introduction it is necessary to state that C.A.D. continuously develops, and an AutoCAD use has to update his knowledge all the time, if he wants to be updated, and continue gaining from technologies latest developments.