

**HIGHER TECHNICAL INSTITUTE
CIVIL ENGINEERING DEPARTMENT**

DIPLOMA PROJECT

**STRUCTURAL STEEL DESIGN
AND DETAILING OF A PLAIN TRUSS**

C/994

BY

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HIGHER TECHNICAL INSTITUTE	PROJECT NO

1. INTRODUCTION

BRIEF DESCRIPTION OF OUR PROJECT

This project introduces to us the basic principles and concepts of structural steel design. We will learn to understand the fundamental behavior of structural steel components and apply the methods of structural analysis to the design of multi-storey frames, portal frames, trusses and plate girders. Through computer laboratory and examples for exercise this project covers the response behavior of beams, trusses and frames including stress analysis, interpretation of design codes and global analysis of structures. The project enables us to acquire the knowledge and practical skills which provides a basis for us to apply the computer software in the practice of structural steel design.

For being able to use the computer software we firstly had to practice on some simple examples such as simple trusses, portal frames and simply supported beams. When we eventually managed to learn how to use the computer software, we started the design of our model with the help of our professor Mr. Chris Papaleondiou.

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