

# HTI E-LEARNING SYSTEM

**BY**

Christoforos Hadjigeorgiou

DIPLOMA REPORT SUBMITTED TO THE  
HIGHER TECHNICAL INSTITUTE  
NICOSIA, CYPRUS

In partial fulfillment of the requirements  
For the award of the diploma  
In Computer Studies

PROJECT NUMBER: CS/401

**Project Supervisor: Mr. CHRISTOS MAKAROUNAS**  
**External Auditor: Mr. NICOS PHILIPPOU**

HIGHER TECHNICAL INSTITUTE	PROJECT NO 3746
----------------------------------	--------------------

# Investigation Phase

## Initial Investigation

### Introduction

The Higher Technical Institute (HTI) is a government owned Institute created initially to serve the industry needs of the time by training people to go directly into specific industries. It currently offers the following 5 courses:

- Computer Studies
- Electrical Engineering
- Mechanical Engineering
- Civil Engineering
- Marine Engineering

This project aims to create a learning system for HTI in order to solve the problems of the current system; providing contemporary capabilities. The current system does not allow much flexibility in the way that the courses are delivered and communication between lecturer and student is limited. Moreover, a lecturer is unable to contact students except by telephone or when the student is at the institute and vice versa. Also it does not allow for an easy approach by the lecturers: each lecturer is obliged to cover their material resulting in the inability to further explain difficult parts during lectures. So questions that the students may develop during lectures may not get answered unless they meet with the lecturers outside the lecture.

These problems create the need for a new system which will provide an up to date method for dealing with these setbacks and provide an easy way to manage information regarding the lectures and anything related.

The solution proposed is for an online web-site based system which will be easily manageable, widely accessible and provide a user friendly interface.

## Table of Contents

Investigation Phase .....	4
Initial Investigation .....	4
Introduction .....	4
1.1 Initial Investigation Activity.....	6
1.1.1 Information About The Organisation.....	6
1.1.2 Information About The People .....	11
1.1.4 Information About The Work .....	16
Conclusion.....	18
Feasibility Study.....	19
Introduction .....	19
1.2 Feasibility Study Report.....	19
1.2.1 Recommended Solutions .....	19
1.2.2 Financial Feasibility .....	22
1.2.3 Operational Feasibility .....	22
1.2.4 Technical Feasibility.....	23
1.2.5 Human Factors Feasibility.....	23
1.2.6 Schedule Feasibility.....	23
1.2.7 Proposed Solution.....	25
Conclusion.....	26
Analysis.....	27
And.....	27
General Design Phase .....	27
Introduction .....	27
2.1 New System Design Specification .....	28
2.1.1 Overview Narrative .....	28
2.1.2 System Function .....	30

2.1.3 Processing .....	30
2.1.4 Data Dictionary.....	30
2.1.5 Inputs – Outputs.....	30
2.1.6 User Interface with the System.....	31
2.1.7 Data Files .....	31
2.1.8 Security and Controls .....	31
2.1.9 Management Overview.....	32
Detailed Design .....	33
And .....	33
Implementation Phase .....	33
3.1 Technical Design .....	33
3.1.1 Backup and Recovery .....	33
3.1.2 Updates .....	33
3.1.3 Human Machine Interface .....	33
3.2 Testing .....	35
3.2.1 During Development .....	35
3.2.2 After Development .....	35
3.2.3 During and after development by the client .....	35
3.3 Design And Programming.....	37
3.4 User Training.....	38
Installation Phase .....	39
Review Phase .....	40
5.1 After Installation.....	40
Summary .....	41
APPENDIX A .....	42
HTI Faculty & Staff.....	42
APPENDIX B.1 .....	50
APPENDIX B.2 .....	54