

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING COURSE

DIPLOMA PROJECT

DEVELOPMENT OF A COMPUTER AIDED
DISTANCE LEARNING SYSTEM

E/1261

BY: SAMOUTIS AKIS

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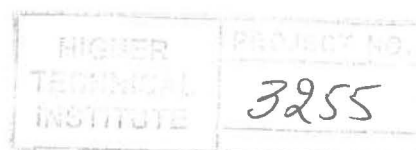


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SUMMARY

The purpose of this project is to set up a minimum system of at least four “students stations” and an “instructor station” system connected via the internet.

Each student station must include the computer, a camera, a microphone. It must have the ability to:

1. Receive live data, video text and sound from the instructor station.
2. Communicative live (sound, text, video and data via the internet with the instructor station for questions.

The instructor station must be able to:

1. Broadcast live to all or selected student stations text, sound, video and data.
2. Address individual student stations and communicate two ways by text, sound, video and data in order to answer questions and give explanations.

My objectives are the following:

- To introduce distance learning and identify its benefits
- To study various modern technologies
- To describe the hardware and software used.
- To describe the operation of the system.
- To connect a student station to the system.
- To connect an instructor station to the system
- To suggest possible improvements and present alternative solutions for accomplishing the same target emphasising technical and financial aspects.

Terms and conditions

A working system must be presented. A centre/instructor station will be able to communicate to a four number of remote stations at different geographical locations broadcasting to them in real time data, video and sound. The communication will be bi-directional. The centre/instructor station will be able to address individual remote stations. The station and the remote sides consist of a PC and a video camera. The internet will be employed for the connection of the system.