



**HIGHER TECHNICAL INSTITUTE**

**MECHANICAL ENGINEERING DEPARTMENT**

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**M/1013**

**DESIGN OF A CENTRAL WASTEWATER TREATMENT  
PLANT**

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**DESIGN OF A CENTRAL WASTEWATER TREATMENT  
PLANT**

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## Objectives

The present project deals with the design of a central wastewater treatment plant. The main purpose for the design of this plant is to take all the wastewater of a Holiday Villas and reuse it for irrigation.

The objectives of this project are:

1. To make a survey on the use of Wastewater Treatment Systems in Cyprus.
2. To describe the operation of the various types of Wastewater Treatment Plants.
3. To design a Central Wastewater Treatment Plant for a building. The design should include:
  - Equipment, duct and pipe sizing
  - Selection of appropriate machinery
  - Detailed drawings for the installation
4. To investigate the economics and cost effectiveness of the above plant.
5. To focus on the trends of using these systems in Cyprus.
6. To prepare a preventive maintenance scheme for the equipment