

Wastewater Treatment and Reuse

"The course presents the units of a municipal waste treatment facility. Mainly the prolonged ventilation method and other methods are examined and presented. This method is applied in small to medium-sized cities in Greece. Therefore, the units for pre-treatment, biological treatment, disinfection of treated waste by chlorination, ozonation or UV radiation and treatment of sludge are presented. It also aims to highlight the optimal way that urban effluent waste can be utilized in agricultural production.

The technologies and processes being taught are aimed at: a) dealing with the environmental effects and problems caused by these wastewaters, and b) how the products of their treatment can be used in agriculture.

The course includes the following individual subjects:

- a. Waste characteristics,
- b. Preliminary treatment,
- c. biological treatment,
- d. Decontamination,
- e. Treatment of sludge,
- f. Waste reuse in irrigation,
- g. Environmental nuisances and their treatment,
- h. Design of units"