The curriculum introduces the chemical laws, atomic weight and the chemical formulas. Then, finding the middle point and distance between two points is studied. Statistics showing second degree equations (analysis and integral), coordinate systems, and other topics are covered.

The curriculum introduces self-introduction, tense question forms, have and have got, count and non-count nouns. Expressions of quantity, verb patterns, what is (are) like, comparatives & superlatives, relatives, time clauses, and other topics are studied.

This course focuses on the operation of cooling water pumps in the station and their main parts, systems, and equipment. In addition to understanding the chemical processes and their applications in a special system.

This course deals with the study of hydraulic circuits and its applications in live, comparing between these circuits and mechanical electrical circuits.

This course focuses on measuring devices and tools, in addition to how to read and record the data obtained from these measuring devices.

This course focuses on water types and the disinfection systems. In addition, chlorination systems and equipment. Also, studying how to measure PH & conductivity.

This course introduces the fundamentals of computer computing (definition and components). It dissolves the barrier between the trainee and the computer operation system. An interface in XP - searching - dealing with files & references - dividing windows into groups - programs - files - references - an interface in Microsoft - XP definition - uses of XP - cancel - insert - pictures & texts - tables - Text format.

This course studies the relationships between the technical and their managers, how to organize the relationships with other departments and the different methods to solve the problems in the work.
THIRD TRAINING SEMESTER

Course Title: Piping & Vessel
Course Code: WP 208
Lecture Hours: 2
Practical Hours: 4
Total Hours: 6
Credits: 4
Course Description: This course study the mechanical devices and their applications, control and maintenance operations for valves, studying pipes and networks, and their troubleshooting.

Course Title: Fluid Mechanics(1)
Course Code: WD 212
Lecture Hours: 2
Practical Hours: 4
Total Hours: 6
Credits: 3
Course Description: This course aims to study the fluid properties such as (specific weight, specific gravity, etc) and Pascal law, applications on pressures measurement by using manometer and flow rate. In addition to the required power to operate pumps and find the efficiency.

Course Title: Technical English (1)
Course Code: EN 201
Lecture Hours: 1
Practical Hours: 2
Total Hours: 3
Credits: 2
Course Description: Desalination, Distillation, R.O, Corrosion, Friction & lubrication, Turbine, boilers and Fossil fuels pumps and valves.

Course Title: Mechanical Maintenance Tasks
Course Code: WP 253
Lecture Hours: 0
Practical Hours: 2
Total Hours: 2
Credits: 2
Course Description: This course focuses on maintenance and the management frame for maintenance. And how to be a good maintenance mechanic and jobs should maintenance mechanic do such as repair and maintenance records and operation cards with contents.

Course Title: Fluid Mechanics (2)
Course Code: WD 262
Lecture Hours: 2
Practical Hours: 4
Total Hours: 6
Credits: 3
Course Description: This course deal with study flow of liquids through pipes; application of "Bernouilli-equation" - flow over weirs such as (v & u notch) - Impact of water jet - Series & parallel pump test set - power required for running pumps-losses in piping.

Fourth Training Semester

Course Title: Air Compressors
Course Code: WP 252
Lecture Hours: 2
Practical Hours: 2
Total Hours: 4
Credits: 3
Course Description: This course study air system parts, compressed air laws, actual cycle for compressed air, parts of compressors and their types, control and operations for compressors and their troubleshooting.

Course Title: Technical English (2)
Course Code: EN 251
Lecture Hours: 1
Practical Hours: 2
Total Hours: 3
Credits: 2
Course Description: Water conservation - waste water Treatment, Heat energy, Preventive Maintenance (Boilers), Water heater, Bearing and cranes, machine Hazards, Accident reporting and investigation. Finally accident prevention.

Course Title: Assistance machinery
Course Code: WP 255
Lecture Hours: 1
Practical Hours: 2
Total Hours: 3
Credits: 2
Course Description: This course emphasizes on the pump station auxiliaries systems such as water intake system, suction & discharge pipes, clarifying water systems, strainers, filters and craning systems.