



Power and Water  
University of  
Technology  
( P W U T )

**Over 40** years of  
experience in special training  
for Power and Water Industry

Oct-2010



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**Ministry of Energy (MOE)** of Islamic Republic of Iran is Responsible for Power (Generation, Transmission and Distribution) and Water (Water and Wastewater) industries in the country.

**P**ower and Water University of Technology (PWUT) is a full size academic and higher education center (university) affiliated to the MOE. PWUT with 30 years of experiences and very modern technical and training facilities is offering short courses and degree programs for the personnel of the power and water industries.

### History:

- ❖ Founded in 1970 in Tehran for offering short courses and was named as the Center for Special Training.
- ❖ Started B.Sc. degree programs (specially for the MOE personnel) in 1982 and was renamed as Sh. Abbaspour Training and Research Center.
- ❖ Started B. Sc. Programs under supervision of Ministry of Science, Research and Tech. in 1990 and was renamed as PWUT.
- ❖ Started Water and Waste Water Engineering M.Sc. Joint program with IHE (The Netherlands) in 1992.
- ❖ Started 10 more M.Sc. programs in 1994
- ❖ Increased the number of joint short course, programs with foreign companies (like TOTAL, ELF, Shell, AGIP) and international organizations (like FAO) from 2000.
- ❖ Started Ph.D. (Joint) program with French universities in 2001.

### Facilities:

- ❖ Main Campus in Tehran in an Area About 600,000sqm.
- ❖ More than 100 Academic Staff
- ❖ About 200 Visiting Instructors from Industry
- ❖ More than 100 Labs and Workshops
- ❖ Computer Network and Internet Facilities (300 tel. lines)
- ❖ Library and Technical Document Center
- ❖ Standard Classrooms and Conference Saloons (3 amphitheater with 500 seats)
- ❖ Audio and Video Center
- ❖ Sport Facilities( Standard Football Grass Field, Volleyball and Basketball Gym., Swimming Pool, Physical Fitness Gym., Sona and more.)

### PWUT Organization:

- ❖ Board of Trustees (Deputy of his E-celency President of the L.R. of Iran, Minister of Energy, Minister of Science, Research and Technology, Deputies of Ministry of Energy and President of the PWUT)
- ❖ President Deputies
- ❖ Head of Departments

### PWUT Structure :



## Dept. of Water and Wastewater Engineering:

### Selected Short Courses:

- 1-Microorganisms in activated sludge and Biofilm Processes
- 2-Water Demand Management (in Potable Water Sector)
- 3-Environmental Management System for Small and Medium Sized Organizations
- 4-Surface Water treatment: Conventional and Advanced Technology
- 5-Criteria for Sewage works Design
- 6-Water Supply Pumping Station Design
- 7-Operation & Maintenance of Urban Sanitation Infrastructures
- 8-Water Treatment Processes and Plants
- 9-Water Quality Control
- 10-Low Cost Water Supply and Treatment
- 11-Marine Pollution
- 12-Advanced Treatment of drinking water for Removal of organic matters
- 13-Waste Stabilization ponds in warm Climates
- 14-Sources of water pollution and their Controls

### Degree Programs:

- Water and Wastewater, B.Sc.
- Water and Wastewater, M.Sc.
- Water and Wastewater Utilities, M.Sc.

### Selected Labs and Workshops:

- Water and Wastewater Chemistry Reference Lab.
- Water and Wastewater Microbiology lab.
- Unit Operation Lab.
- Leakage Test and Measurement in Distribution Networks Workshop
- Hydraulics Workshop
- Pumps Workshop



## Department of Water Engineering:

### Selected Short Courses:

- 1-Design of Marine and offshore Structures
- 2-Construction Management Techniques
- 3-Preparing an aquifer's input data (quantitative) for Modflow and analyzing
- 4-Deep Foundations
- 5-MAT Foundations
- 6-Cavitation on Hydraulic Structure
- 7-Introduction to Value Management
- 8-Spatial Subjects Problems in groundwater
- 9-Qualitative and quantitative Protection in groundwater
- 10-Irrigation System Maintenance
- 11-Drilling technology in groundwater wells
- 12-Water Resources Planning
- 13-Seismic Assessment & Rehabilitation of Power Networks
- 14-Installation and maintenance of Irrigation and distribution project
- 15-Earthquake Damage Detection in Lifeline
- 16-Trenchless Technology
- 17-Modern Technology at waste-water networks management
- 18-Using of Instrumentation in Civil Engineering
- 19-The Stability Control of Concrete Dams
- 20-Environmental aspects on Dam & Irrigation Network
- 21-Acquaintance with electrical logs for determining aquifer's parameters & boundary Conditions

### Degree Programs:

- Hydraulic structures, B.Sc.
- Operation of dam and irrigation network, B.Sc.
- Water resources management, M.Sc.
- Engineering geology, M.Sc.
- Geotechnical engineering, M.Sc.
- Hydraulic structures construction management, M.Sc.
- Water resources engineering, M.Sc.

### Labs and Workshops:

- Geology and geomorphology Lab.
- Water resources Lab.
- Sedimentation Lab.
- Geophysics Lab.
- Rock mechanics Lab- Soil mechanics Lab.
- Concrete and building material Lab.
- Hydro-machinery Lab.
- Surveying and photogrammetry Lab.
- Hydrometeorological station Lab.

