

**District Cooling Systems** 





# **District Cooling Systems**

#### Introduction

District cooling systems can provide buildings in a particular area with chilled water for comfort and process cooling with the benefits to the building owner of greatly reduced or eliminated maintenance cost, much lower space requirements, and no concerns as to plant capacity or load growth. This course covers what designers and owners need to know about district cooling to enable it to provide energy efficiencies and reliable operation. Topics covered include Planning, Central Plant Design, Distribution System Design, Building Interfaces, Thermal Energy Storage, and Operation and Maintenance from both the designer and owner perspectives

## **Course Objectives**

The program provides you a multidiscipline understanding of District Cooling Systems. The program covers the Technology, Business Aspects, Project Implementation, and Contractual Arrangements necessary for such systems.

The rapidly expanding and booming construction business in the Gulf and Africa has focused attention on the use of efficient district cooling systems for new developments. This program is intended for Developers, District Cooling System Providers, Government Agencies, and Building Owners.

# **Targeted Audience**

Designers who are responsible for specification, design, or installation of district cooling systems as well as owners of district cooling systems and others who manage and operate district cooling systems. Owners and Operating staff who are responsible for the decision to transition to district cooling or properly maintain and manage systems.

#### Course Outline

#### Unit 1:

- · Issues & Risks on DCS
- Understanding the Technology

## Unit 2: Business Aspects:

- Business Opportunity
- Strategic Issues
- Business Models
- Feasibility & Design Data Collection & Analysis
- Marketing DCS Projects & Proposals

#### Unit 3:

- Project Implementation
- Strategy
- Planning:
- · Strategic Planning of DCS Projects



• Implementation Planning a DCS Project

## Unit 4:

- Design
- Deployment Phasing
- Project Management of DCS Projects
- Prequalification of DCS Suppliers
- System Provider
- Facility Operator

## Unit 5:

- Customer
- Contractual Arrangements
- Regulatory Aspects
- DCS Planning Workshop
- DCS Management System Workshop