# **COURSE DETAIL**

### SUSTAINABLE WATER RESOURCE MANAGEMENT

## **Country**

United Kingdom - England

### **Host Institution**

University College London

## Program(s)

University College London

### **UCEAP Course Level**

**Upper Division** 

## **UCEAP Subject Area(s)**

**Chemical Engineering** 

### **UCEAP Course Number**

146

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

SUSTAINABLE WATER RESOURCE MANAGEMENT

## **UCEAP Transcript Title**

SUSTAINB WATER MGMT

## **UCEAP Quarter Units**

6.00

### **UCEAP Semester Units**

4.00

### **Course Description**

This course will provide a quantitative understanding of the hydrologic cycle, will identify the properties of water as a natural resource, will describe the aspects of the integrated water resource management, as well as the engineering related to water purification processes. The module will recognise socio-economic factors that impact effective water solutions, including urban infrastructure projects and managed urban infrastructure. Models for water transport in the subsurface (hydrogeology) will also be discussed, specifically in relation to the resources sector with focus on the pressure on groundwater quality and quantity, relating to appropriate measures to preserve or improve the quality of water. This will cover aspects of water management to combat water shortage in the energy and mining sectors. Management of wastewater and produced water in the oil and gas sector, involving injection to the reservoir and suitable reclamation treatments will also be considered. Of particular importance for the mining sector, effective tailing management, will be discussed.

## Language(s) of Instruction

English

**Host Institution Course Number** 

CENG0060

**Host Institution Course Title** 

SUSTAINABLE WATER RESOURCE MANAGEMENT

**Host Institution Campus** 

**Host Institution Faculty** 

**Host Institution Degree** 

**Host Institution Department** 

Chemical Engineering

**Print**