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 Course Details

https://www.ucl.ac.uk/module-catalogue/modules/sustainable-water-resource-manag...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Chemical Engineering

Course Last Reviewed

2024-2025

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