

COURSE DETAIL

WATER RESOURCES ENGINEERING

Country

Australia

Host Institution

University of New South Wales

Program(s)

University of New South Wales

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Civil Engineering

UCEAP Course Number

111

UCEAP Course Suffix**UCEAP Official Title**

WATER RESOURCES ENGINEERING

UCEAP Transcript Title

WATER RESOURCES ENG

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course examines engineering hydrology and its application in water resources management and flood estimation. Topics discussed include hydrological cycle, climatology, atmospheric circulation, meteorological measurements, precipitation, streamflow measurement, runoff components, hydrograph analysis, loss rates, IFD and design storm hyetographs, flood frequency analysis, unit hydrographs concepts and linear reservoir method, groundwater, hydraulic conductivity, Darcy's law, intrinsic permeability, water potential, hydraulic head, unsaturated zone, aquifers, aquicludes, aquitards, steady state flow, transient flow, effective stress, transmissivity, storativity, pump test interpretation.

Language(s) of Instruction

English

Host Institution Course Number

CVEN3501

Host Institution Course Title

WATER RESOURCES ENGINEERING

Host Institution Course Details

<https://www.unsw.edu.au/course-outlines/course-outline#year=2025&term=Term%201&...>

Host Institution Campus

Host Institution Faculty

Civil and Environmental Engineering

Host Institution Degree

Host Institution Department

Course Last Reviewed

2024-2025

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