COURSE DETAIL

RENEWABLE ENERGY SYSTEMS ANALYSIS
Country Ireland
Host Institution University College Dublin
Program(s) University College Dublin
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Engineering
UCEAP Course Number 168
UCEAP Course Suffix
UCEAP Official Title RENEWABLE ENERGY SYSTEMS ANALYSIS
UCEAP Transcript Title RENEWABLE ENERGY
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

This course introduces the concepts behind the analysis of renewable energy systems. Choice awareness of energy systems are considered in the uptake of renewable energy systems. The fundamentals of generation, cogeneration, and tri-generation are explored for low-carbon/renewable energy systems. Methods and tools for hybrid energy systems integration and optimization to provide specified service loads (electricity, heating, and cooling) are applied considering energy flows, energy systems integration, and bases for sustainable energy systems. Design and analyses of renewables is based on special purpose computer tools with capability for integration of renewable energy resources and/or conversion technologies for multiple energy systems/sectors including energy demand and supply modelling.

Language(s) of Instruction
English

Host Institution Course Number
BSEN40350

Host Institution Course Title
RENEWABLE ENERGY SYSTEMS ANALYSIS

Host Institution Course Details
https://hub.ucd.ie/usis/!W_HU_MENU.P_PUBLISH?p_tag=MODULE&MODULE=BSEN40350

Host Institution Campus
University College Dublin

Host Institution Faculty

Host Institution Degree

Host Institution Department
Engineering

Course Last Reviewed
2023-2024

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