COURSE DETAIL

THE BIOECONOMY: A STRATEGY FOR SUSTAINABLE FUEL, MATERIAL AND CHEMICAL PRODUCTION

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
130

UCEAP Course Suffix

UCEAP Official Title
THE BIOECONOMY: A STRATEGY FOR SUSTAINABLE FUEL, MATERIAL AND CHEMICAL PRODUCTION

UCEAP Transcript Title
BIOECONOMY

UCEAP Quarter Units
5.00

UCEAP Semester Units
3.30

Course Description

This course introduces students to the fundamental principles of biomass feedstock supply for the bioeconomy, with a focus on both dedicated production of biomass and recovery of residues/wastes. The physical characterization and chemistry of biorenewable feedstocks such as bioenergy crops, algae, forestry, and agricultural residues are examined. The course examines the varying supply chains (collection, storage, transport) for different biomass sources for further processing to bioenergy and bioproducts via biorefining. The focus of the course is on the application of engineering science to develop integrated biomass feedstock management systems with an emphasis on sustainability.

Language(s) of Instruction
English

Host Institution Course Number
BSEN30310

Host Institution Course Title
THE BIOECONOMY: A STRATEGY FOR SUSTAINABLE FUEL, MATERIAL AND CHEMICAL PRODUCTION

Host Institution Course Details
https://hub.ucd.ie/usis/!W_HU_MENU.P_PUBLISH?p_tag=MODULE&MODULE=BSEN30310#:~:t...

Host Institution Campus
University College Dublin

Host Institution Faculty

Host Institution Degree

Host Institution Department

Engineering & Architecture

Course Last Reviewed
2024-2025

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