

# 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...](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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