

# COURSE DETAIL

## THERMODYNAMICS AND RENEWABLE ENERGY TECHNOLOGIES

**Country**

Singapore

**Host Institution**

National University of Singapore

**Program(s)**

National University of Singapore

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Materials Science

**UCEAP Course Number**

118

**UCEAP Course Suffix****UCEAP Official Title**

THERMODYNAMICS AND RENEWABLE ENERGY TECHNOLOGIES

**UCEAP Transcript Title**

THERMODYNAMICS&ENER

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

This course introduces students to fundamentals of thermodynamics, including the laws of thermodynamics, entropy, thermodynamic relationships, chemical and phase equilibrium, etc. This course explores their application in renewable energy technologies. The course expands upon fundamental thermodynamics to provide a brief overview of renewable energy technologies as well as design considerations, energy efficiency, and global market potential. The course requires students to take prerequisites.

## Language(s) of Instruction

English

## Host Institution Course Number

MLE2102

## Host Institution Course Title

THERMODYNAMICS AND RENEWABLE ENERGY TECHNOLOGIES

## Host Institution Course Details

<https://nusmods.com/courses/MLE2102/thermodynamics-and-renewable-energy-technol...>

## Host Institution Campus

## Host Institution Faculty

## Host Institution Degree

## Host Institution Department

Materials Science and Engineering

## Course Last Reviewed

2024-2025

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