

COURSE DETAIL

THERMODYNAMICS

Country

Japan

Host Institution

Tohoku University

Program(s)

Engineering and Science

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mechanical Engineering

UCEAP Course Number

113

UCEAP Course Suffix

AV

UCEAP Official Title

THERMODYNAMICS

UCEAP Transcript Title

THERMODYNAMICS

UCEAP Quarter Units

3.00

UCEAP Semester Units

2.00

Course Description

This course analyzes the basic concept and principle of thermodynamics, such as the concept of system, matter and energy, as well as the first and second laws of thermodynamics. The course then explores quantitative state changes of matter and the operation principles and efficiency of heat engine, such as piston engine, jet engine, steam cycle, and refrigeration machine. Finally, the course discusses effective utilization of energy and energy saving.

Language(s) of Instruction

English

Host Institution Course Number

N/A

Host Institution Course Title

THERMODYNAMICS I

Host Institution Course Details

https://uceap.sharepoint.com/:b:/s/DocumentLibrary/IQAUQNn5uH11R5f_TIFYnd7EAeoU...

Host Institution Campus

Tohoku University

Host Institution Faculty

Host Institution Degree

Host Institution Department

Engineering

Course Last Reviewed

2025-2026

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