

# COURSE DETAIL

## ENGINEERING THERMODYNAMICS AND HEAT TRANSFER

**Country**

Singapore

**Host Institution**

National University of Singapore

**Program(s)**

National University of Singapore

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Mechanical Engineering

**UCEAP Course Number**

112

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

ENGINEERING THERMODYNAMICS AND HEAT TRANSFER

**UCEAP Transcript Title**

ENGR THERMODYN&HEAT

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

This course examines the basic concepts and application of thermodynamics and heat transfer, required for the analysis, modeling and design of processes and thermal-fluid systems in engineering practice. Major topics include the introduction and the application of the First and Second Laws of Thermodynamics, reversible and irreversible processes, entropy, non-flow and flow processes, cycles involving entropy changes, power and refrigeration cycles, as well as convection & radiation heat transfer.

### Language(s) of Instruction

English

### Host Institution Course Number

ME2121

### Host Institution Course Title

ENGINEERING THERMODYNAMICS AND HEAT TRANSFER

### Host Institution Campus

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

Mechanical Engineering

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