

## COURSE DETAIL

### THERMAL PHYSICS AND PROPERTIES OF MATTER

**Country**

United Kingdom - England

**Host Institution**

King's College London

**Program(s)**

King's College London

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Physics

**UCEAP Course Number**

134

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

THERMAL PHYSICS AND PROPERTIES OF MATTER

**UCEAP Transcript Title**

THERMAL PHYS/MATTER

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

This course will introduce the principles of kinetic theory and thermodynamics. Students learn to use the zeroth law of thermodynamics to describe scales of temperature; use the first law of thermodynamics to investigate changes in internal energy, involving the exchange of heat and/or work; apply the second law to heat engines and calculations of efficiency; show how the second law leads to the concept of entropy; use thermodynamic potentials for different thermodynamic conditions; and basics of kinetic theory.

## Language(s) of Instruction

English

## Host Institution Course Number

5CCP4000

## Host Institution Course Title

THERMAL PHYSICS AND PROPERTIES OF MATTER

## Host Institution Course Details

<https://www.kcl.ac.uk/abroad/module-options/thermal-physics-properties-of-matter>

## Host Institution Campus

## Host Institution Faculty

## Host Institution Degree

## Host Institution Department

Physics

## Course Last Reviewed

2025-2026

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