

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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