COURSE DETAIL

THERMODYNAMICS AND STATISTICAL MECHANICS
Country Singapore
Host Institution National University of Singapore
Program(s) National University of Singapore
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Physics
UCEAP Course Number 109
UCEAP Course Suffix
UCEAP Official Title THERMODYNAMICS AND STATISTICAL MECHANICS
UCEAP Transcript Title THERMODYN&STAT MECH
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course is intended for students who wish to acquire a deep understanding of systems of many particles. The course considers the fundamentals of thermodynamics and statistical mechanics and is a prerequisite to advanced statistical mechanics. It covers topics including: the laws of thermodynamics, thermodynamic functions, ideal gases, and heat engines; microcanonical ensemble, canonical ensemble, Boltzmann distribution, and partition function; and an introduction to quantum gases.

Language(s) of Instruction
English

Host Institution Course Number
PC2135

Host Institution Course Title
THERMODYNAMICS AND STATISTICAL MECHANICS

Host Institution Course Details
https://nusmods.com/courses/PC2135/thermodynamics-and-statistical-mechanics

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Physics

Course Last Reviewed
2023-2024

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