

# COURSE DETAIL

## GENERAL PHYSICS II

**Country**

Hong Kong

**Host Institution**

Hong Kong University of Science and Technology (HKUST)

**Program(s)**

Hong Kong Summer, HKUST

**UCEAP Course Level**

Lower Division

**UCEAP Subject Area(s)**

Physics

**UCEAP Course Number**

12

**UCEAP Course Suffix**

S

**UCEAP Official Title**

GENERAL PHYSICS II

**UCEAP Transcript Title**

PHYSICS II

**UCEAP Quarter Units**

4.50

**UCEAP Semester Units**

3.00

### **Course Description**

This course is the second of a series of two general physics courses which employ a calculus-based approach. Key topics include: electric charge and field; Gauss' Law; electric potential; capacitance and dielectrics; current, resistance and EMF; direct-current circuits; magnetic field and magnetic forces; sources of magnetic field; electromagnetic inductions; inductance; alternating current; electromagnetic waves; nature and propagation of light; interference; diffraction. Pre-requisite: single-variable calculus Text: Sears and Zemansky, UNIVERSITY PHYSICS WITH MODERN PHYSICS. Assessment: homework (10%), quizzes (40%), final exam (50%).

### **Language(s) of Instruction**

English

### **Host Institution Course Number**

PHYS1114

### **Host Institution Course Title**

GENERAL PHYSICS II

### **Host Institution Course Details**

### **Host Institution Campus**

HKUST International Summer School

### **Host Institution Faculty**

### **Host Institution Degree**

### **Host Institution Department**

Science

### **Course Last Reviewed**

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