# **COURSE DETAIL**

## **ENGINEERING MATHEMATICS- DIFFERENTIAL EQUATION (I)**

## **Country**

**Taiwan** 

#### **Host Institution**

**National Taiwan University** 

## Program(s)

National Taiwan University

### **UCEAP Course Level**

Lower Division

### **UCEAP Subject Area(s)**

Engineering

### **UCEAP Course Number**

15

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

ENGINEERING MATHEMATICS- DIFFERENTIAL EQUATION (I)

## **UCEAP Transcript Title**

ENGR MATH DIFF EQ

# **UCEAP Quarter Units**

3.00

### **UCEAP Semester Units**

2.00

## **Course Description**

The course, Differential Equations, is a fundamental mathematics course for the students in the EE department. The contents of this course are as follows:

- 1. Introduction: definition and terminology
- 2. First-order differential equation
- 3. Applications of first-order differential equation
- 4. Differential equations of higher order
- 5. Applications of high-order differential equations
- 6. Series solutions of linear equations
- 7. Orthogonal functions and Fourier series
- 8. Boundary-value problems in rectangular coordinates

# Language(s) of Instruction

English

### **Host Institution Course Number**

EE2021

#### **Host Institution Course Title**

ENGINEERING MATHEMATICS- DIFFERENTIAL EQUATION (I)

### **Host Institution Campus**

## **Host Institution Faculty**

## **Host Institution Degree**

## **Host Institution Department**

**Electrical Engineering** 

**Print**