

# COURSE DETAIL

## DYNAMICS AND CONTROL

**Country**

United Kingdom - England

**Host Institution**

University College London

**Program(s)**

University College London

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Mechanical Engineering

**UCEAP Course Number**

134

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

DYNAMICS AND CONTROL

**UCEAP Transcript Title**

DYNAMICS & CONTROL

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

This course provides students with an understanding of modern dynamic mechanical systems and their interaction with the world. Movement, sensing, control, and stability are modelled and discussed through examples such as self-driving cars, magnetic levitating (mag-lev) trains and satellite systems. The course provides physical experience of dynamic, vibrational, and resonant behavior, as well as strategies to improve dynamic response, control vibration, and stabilize inherently unstable systems. Students become familiar with modelling and analysis of dynamic systems and the methods to control them.

### Language(s) of Instruction

English

### Host Institution Course Number

MECH0023

### Host Institution Course Title

DYNAMICS AND CONTROL

### Host Institution Course Details

<https://www.ucl.ac.uk/module-catalogue/modules/dynamics-and-control-MECH0023>

### Host Institution Campus

University College London

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

Mechanical Engineering

### Course Last Reviewed

2022-2023

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