

COURSE DETAIL

INTRODUCTION TO MOBILE ROBOTICS

Country

United Kingdom - Scotland

Host Institution

University of Edinburgh

Program(s)

Intern: Scotland, University of Edinburgh

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

145

UCEAP Course Suffix**UCEAP Official Title**

INTRODUCTION TO MOBILE ROBOTICS

UCEAP Transcript Title

INTRO MOB ROBOTICS

UCEAP Quarter Units

4.00

UCEAP Semester Units

2.70

Course Description

A mobile robot is a machine controlled by software that uses sensors and other technology to identify its surroundings and move around its environment. This course provides a general understanding of mobile robotics and related concepts, covering topics such as sensing, computer vision (i.e., visual perception), state estimation (e.g., localization and mapping), and motion planning. The emphasis is on algorithms, probabilistic reasoning, optimization, inference mechanisms, and behavior strategies, as opposed to electromechanical systems design. Practically useful tools and simulators for developing real robotic systems are also covered in this course.

Language(s) of Instruction

English

Host Institution Course Number

INFR10085

Host Institution Course Title

INTRODUCTION TO MOBILE ROBOTICS

Host Institution Course Details

<http://www.drps.ed.ac.uk/22-23/dpt/cxinfr10085.htm>

Host Institution Campus

University of Edinburgh

Host Institution Faculty

Host Institution Degree

Host Institution Department

School of Informatics

Course Last Reviewed

2022-2023

[Print](#)