

COURSE DETAIL

LEGO ROBOTICS WORKSHOP

Country

United Kingdom - England

Host Institution

University of Cambridge, Pembroke College

Program(s)

Summer in Cambridge

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Engineering

UCEAP Course Number

110

UCEAP Course Suffix

S

UCEAP Official Title

LEGO ROBOTICS WORKSHOP

UCEAP Transcript Title

LEGO ROBOTICS

UCEAP Quarter Units

5.00

UCEAP Semester Units

Course Description

This intensive practical course revolves around technical problem solving, engineering and programming using Lego Mindstorms sets. Students design, build, and program autonomous robotic systems to perform tasks such as measuring the gravitational constant or constructing a time piece. Students encounter and acquire an understanding of all aspects of such an architectural challenge, including research, design, hardware construction and software implementation. After some carefully selected introductory problems, teams of two students move on to design and build their own constructions. In order to facilitate creative thinking and free exploration, teams choose their projects freely, without constraints, under advisement. Teams work continuously throughout the duration of the course, with scheduling and planning at their own discretion, while receiving guidance and help from the instructors during the timetabled sessions. The course culminates in a series of presentations, where teams have a chance to demonstrate the fruits of their newly acquired skills and share their experiences.

Language(s) of Instruction

English

Host Institution Course Number**Host Institution Course Title**

LEGO ROBOTICS WORKSHOP

Host Institution Course Details

<https://www.pem.cam.ac.uk/international-programmes/pembroke-cambridge-summer-pr...>

Host Institution Campus**Host Institution Faculty**

Science and Mathematics

Host Institution Degree

Host Institution Department

Course Last Reviewed

2024-2025

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