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

3.30

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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