

AMITY GLOBAL INSTITUTE

MODULE SYLLABUS

Course	Bachelor of Science Honours in Computer Science (University of London)
Module Title	Physical Computing and Internet of Things
Module Syllabus No. (if any)	CM3040
Syllabus / Content / Learning Outcomes	This course provides an introduction to the development and programming of hardware devices that can sense and act in the environment. The course will explain and demonstrate how the environment, which is inherently continuous, can be monitored by analogue electrical and mechanical sensors, then captured and analysed using a computer, which is a discrete system. A focus of this course is the interface between the digital and the analogue. This study encompasses basic physics, electronics, programming and software engineering. The practical objective of this course is the development of the skills needed for designing and building interactive physical devices.
No. of Teaching Hours	Contact Hours – Lectures, Seminars & online activity (22 x 3) = 66 Independent Preparation, pre-reading and analysis = 84 TOTAL = 150
Teaching Methods	Lectures, tutorials, case-studies analysis, research journals and group discussion.
Assessment Methods and Weightages	Coursework I: Initial Report 30% and Coursework II: Final Report 70% At least 35% in each element of summative assessment and a combined weighted average of at least 40%, subject to the application of rules for compensation.
Skills for Maximising Learning Outcomes	Reading and research
Dates of Examinations, Major Assessments and Assignments	Please refer to www.london.ac.uk exam tables If your effective date of registration is: <ul style="list-style-type: none"> • 1 October, you will take your first examination(s) in March of the following year, • 1 April, you will take your first examination(s) in September of the same year.
Topics covered	<ul style="list-style-type: none"> • Electricity and circuits • Microcontrollers • Sensors • Physical Interaction Design • Physical Computing Projects • Motors and actuators • Communications protocols • Networked Devices • Bodily monitoring • Robots

Note: All Information provided to Amity will be kept strictly confidential except for those required under statutory requirements and by government authorities and relevant university partners and accreditation bodies as part of the regulatory or course requirements.