COURSE DETAIL

BIONIC HUMAN AND THE FUTURE OF BEING HUMAN
Country Hong Kong
Host Institution Chinese University of Hong Kong
Program(s) Chinese University of Hong Kong
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Engineering
UCEAP Course Number 38
UCEAP Course Suffix
UCEAP Official Title BIONIC HUMAN AND THE FUTURE OF BEING HUMAN
UCEAP Transcript Title BIONIC HUMAN FUTURE
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course exposes students to a range of state-of-the-art developments in biomedical engineering. It invites students from various disciplines to discuss the long-term societal impacts and ethical implications of these technological advances, particularly in human enhancements beyond therapy. The course starts by illustrating the many amazing designs in the human body and yet how vulnerable it is in terms of injuries, diseases and ageing. Examples on how modern biomedical engineering helps us face our human conditions are given, such as musculoskeletal prosthetics and orthotics, cardiovascular implants, neuro-engineering, stem cells and regenerative medicine, gene editing, bio-nanotechnology, intelligence and artificial intelligence, and senses and artificial senses. A historical account of human quest for “living” machine, including a brief coverage of modern movies on bionic human then follows. The course wraps up with some social, ethical and philosophical reflections on the above issues and on the meaning of being human, opening up questions concerning the perennial human quest of becoming super human.

Language(s) of Instruction
English

Host Institution Course Number
BMEG 1217,UGEB1217

Host Institution Course Title
BIONIC HUMAN AND THE FUTURE OF BEING HUMAN

Host Institution Course Details
https://rgsntl.rgs.cuhk.edu.hk/aqs_prd_applx/Public/tt_dsp_crse_catalog.aspx

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Biomedical Engineering

Course Last Reviewed
2025-2026

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