Applications of Biomedical Engineering (MPHY0039)

Description
This module illustrates how the foundation knowledge of biomedical engineering is used in the provision of clinical services. Topics include: 1. electrophysiology: electroencephalography (EEG), electrical impedance tomography (EIT) and electromyography (EMG); 2. respiratory measurement: mechanics of breathing, diffusing capacity, whole body plethysmography; 3. urology: lower urinary tract, bladder, incontinence technology; 4. rehabilitation robotics and assistive technology: manual wheelchair, robots; 5. rehabilitation engineering: prosthetic leg, functional electrical stimulation.

A video description can be found at the UCL Media Central.

Key information
- **Year**: 2019/20
- **Credit value**: 15 (150 study hours)
- **Delivery**: UG L6, Campus-based
- **Reading List**: [View on UCL website]
- **Tutor**: Dr Terence Leung
- **Term**: Term 2
- **Timetable**: [View on UCL website]

Assessment
- Written examination (main exam period): 100%

Find out more
For more information about the department, programmes, relevant open days and to browse other modules, visit [ucl.ac.uk](http://ucl.ac.uk)
Applications of Biomedical Engineering (MPHY0039)

**Description**
This module illustrates how the foundation knowledge of biomedical engineering is used in the provision of clinical services. Topics include: 1. electrophysiology: electroencephalography (EEG), electrical impedance tomography (EIT) and electromyography (EMG); 2. respiratory measurement: mechanics of breathing, diffusing capacity, whole body plethysmography; 3. urology: lower urinary tract, bladder, incontinence technology; 4. rehabilitation robotics and assistive technology: manual wheelchair, robots; 5. rehabilitation engineering: prosthetic leg, functional electrical stimulation.

A video description can be found at the UCL Media Central.

**Key information**
- **Year**: 2019/20
- **Credit value**: 15 (150 study hours)
- **Delivery**: PGT L7, Campus-based
- **Reading List**: [View on UCL website](#)
- **Tutor**: Dr Terence Leung
- **Term**: Term 2
- **Timetable**: [View on UCL website](#)

**Assessment**
- Written examination (main exam period): 100%

**Find out more**
For more information about the department, programmes, relevant open days and to browse other modules, visit [ucl.ac.uk](http://ucl.ac.uk)
Applications of Biomedical Engineering (MPHY0039)

Description

This module illustrates how the foundation knowledge of biomedical engineering is used in the provision of clinical services. Topics include: 1. electrophysiology: electroencephalography (EEG), electrical impedance tomography (EIT) and electromyography (EMG); 2. respiratory measurement: mechanics of breathing, diffusing capacity, whole body plethysmography; 3. urology: lower urinary tract, bladder, incontinence technology; 4. rehabilitation robotics and assistive technology: manual wheelchair, robots; 5. rehabilitation engineering: prosthetic leg, functional electrical stimulation.

A video description can be found at the UCL Media Central.

Key information

Year: 2019/20
Credit value: 15 (150 study hours)
Delivery: UGM L7, Campus-based
Reading List: View on UCL website
Tutor: Dr Terence Leung
Term: Term 2
Timetable: View on UCL website

Assessment

- Written examination (main exam period): 100%

Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk

Disclaimer: All information correct as of August 2019. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.