



E1BME001T

Academic Introductory Talk Series

Biomedical Engineering Talk (Level I): Medical Data Analysis

Dr Gary Tam

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31 Oct 2022 12:00 noon

Intended Learning Outcomes

Upon completion of the programme, participants should be able to:

- 1. Describe the scope and main purpose of biomedical engineering.
- 2. Explain the basic concepts of some selected topics in medical data analysis.
- 3. Recognise that biomedical engineering is a promising area to develop a career.



Introduction

Biomedical Engineering (BME) is an interdisciplinary field in which biology, medicine, and engineering technologies are combined and applied innovatively to solve human health problems. This talk will first give a brief overview of BME. Then, an area of BME – Medical Data Analysis - will be introduced. Selected topics in it will also be discussed, e.g. analysis of DNA microarray data, brain signal processing, and brain-computer interface.

The speaker, Dr Gary Tam, has worked on research in Bioinformatics (an area belonging to BME) for about 10 years. His research mainly focused on analysis of DNA microarray data from medical experiments, topics including gene selection, tumour classification and gene regulatory network reconstruction.

Schedule

Session	Date	Time	Venue
1	3 Dec	11:00 a.m 1:00 p.m.	Room 403, HKAGE

Target Participants

- S1 S6 HKAGE student members only in 2022/23 school year.
- Class size: 40
- * First-come, first-served.

Certificate

E-Certificate will be awarded to participants who have attended the talk.

Medium of Instruction

English

Remark: E1BME001T-2 on 17 Dec has the same content as this talk. and E1BME001T-2 will be conducted in Cantonese. Interested students please apply either E1BME001T or E1BME001T-2 only.

This talk is one of the items in the four domains of the Holistic Talk Series. The objective is to facilitate the all-round development of student' gifted potential.



The Hong Kong Young Academy of Sciences (YASHK) talk series

Talks are about emerging technology to inspire students' motivation in pursing knowledge in specialized areas.



Academic Introductory Talk Series

Introduce trendy topics to widen the students' horizons.



Celebrities share their life-changing moments to enhance students' aspirations for life.



Professionals explain the latest trend in their industry to give students an insight to plan their future.



