

## GENERAL INFORMATION AND MAJOR INTENDED LEARNING OUTCOMES

### Major Title

Computer and Data Engineering

電子計算機及數據工程學

### Degree Award

Bachelor of Engineering in Computer and Data Engineering

工學士 (電子計算機及數據工程學)

### Programme-Major Code

BENGEU4-CDE (Normative 4-year Degree Students)

BENGEU3-CDE (Advanced Standing I Students)

BENGEU2-CDE (Advance Standing II Students)

### Normal Duration and Maximum Study Period

Programme-Major Code	Normal Duration	Maximum Study Period
BENGEU4-CDE	4 years	8 years
BENGEU3-CDE	3 years	6 years
BENGEU2-CDE	2.5 years	5 years

### Minimum and Maximum Credit Load per Semester

In each Semester, except for the Summer Term, full-time students must register for courses of *at least 12 credit units*, and not more than 18 credit units. Students with a CGPA of 3.0 or above before course registration may register for courses of more than 18 credit units (subject to department's approval).

### Professional Recognition

The major has been accredited by the Hong Kong Institution of Engineers, one of the educational requirements for obtaining Charter status. Based on the Washington Accord, graduates will receive reciprocal recognition from equivalent bodies in Australia, Canada, China, Chinese Taipei, Hong Kong-China, India, Ireland, Japan, Korea, Malaysia, New Zealand, Pakistan, Peru, Russia, Singapore, South Africa, Sri Lanka, Turkey, the UK and the US.

## **MAJOR INTENDED LEARNING OUTCOMES**

### **A. Major Aim**

The aim of this major is to provide students with a strong foundation and broad skills in computer and data technologies. Students will be equipped with the theoretical and practical aspects of computer systems. The curriculum encompasses hardware and software design, multimedia technologies, data analytics and security, cloud computing systems, and artificial intelligence. Upon completion of the major, students will be sufficiently prepared for employment, and to pursue postgraduate studies and engage in life-long learning.

### **B. Major Intended Learning Outcome: Demonstrable Outcomes**

On successful completion of this major, students should have the following demonstrable learning outcomes:

1. An ability to apply knowledge of mathematics, science and engineering
2. An ability to design and conduct experiments as well as to analyze and interpret data
3. An ability to design a system, component, or process that conforms to a given specification within realistic constraints
4. An ability to function on multi-disciplinary teams
5. An ability to identify, evaluate, formulate and solve engineering problems
6. Awareness of professional and ethical responsibilities
7. An ability to communicate effectively
8. Knowledge in contemporary issues and an awareness of the impact of engineering solutions in a broad, global and societal context
9. Recognition of the need for life-long learning
10. An ability to use necessary engineering tools