CENG2030 FUNDAMENTALS OF EMBEDDED SYSTEM DESIGN

LECTURE 0: COURSE INTRODUCTION

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INTENDED LEARNING OUTCOMES

- Possess the basic concepts of embedded system design
- Use drawing software to accomplish 3D drawing and part assembling
- Analyze the basic electronic circuits for hardware design
- Program the micro-controller for software design
- Understand the operating principles of common sensors and actuators for system I/O

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INSTRUCTOR & TA

Role	Name	Email	Office
Instructor	Dr. SUM Anthony	kwsum@cse.cuhk.edu.hk	SHB 125
TA	ZHANG Lu	lzhang@cse.cuhk.edu.hk	N/A
TA	ZHANG Xiaojin	xjzhang@cse.cuhk.edu.hk	N/A
TA	LI Wei	wli@cse.cuhk.edu.hk	N/A
TA	YAO Guangliang	glyao@cse.cuhk.edu.hk	N/A

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LECTURE & LAB

Day	Time	Venue
Lecture (Mon)	2:30 - 3:15pm (1 hour)	Online
Lab (Thu)	12:30 - 2:15pm (2 hours)	Online

- Attend all the lectures & labs
- Submit lab sheets by the end of each lab session
- NO LATE submission will be accepted

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SCHEDULE

Week	Lecture (Mon, 2:30-3:15pm)	Lab (Thu, 12:30-2:15pm)	Deadline
1	Course Introduction & 3D Drawing	3D Drawing (Demo)	Lab1 (Cancelled)
2	3D Parts Assembling	3D Parts Assembling (Demo)	Lab2 (Cancelled)
3	Instrumentation and Measurement	Instrumentation and Measurement	Lab3
4	Basic Circuit Analysis	Basic Circuit Analysis	Lab4
5	Operational Amplifier + HW1	Lunar New Year	---
6	Lunar New Year	Operational Amplifier	Lab5
7	Arduino Programming	Arduino Programming	Lab6
8	Project I	Project I	HW1
9	Project I	Project I	Project 1
10	Finite State Machine	Finite State Machine	Lab7
11	Sensor and Actuator	Sensor and Actuator	Lab8
12	Reading Week	Reading Week	
13	Easter	Project II	
14	Project II	Project II	
15	Final Quiz	Project II	Quiz + Project 2

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ASSESSMENT

Assessment Items	Percentages
Laboratory x 6	30%
Homework x 1	10%
Project x 2	30%
Final Quiz	30%

- To pass the course, you are required to obtain 40% or above in the Final Quiz
- Attendance of Lectures/Tutorials will not be assessed, but will be taken for records

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ACADEMIC HONESTY

- Zero tolerance: Plagiarism, cheating, misconduct in test/exam will be reported to the Faculty Disciplinary Committee for handling.
- Penalty: Zero marks for the concerned assignments/test/exam/whole course, reviewable demerits, non-reviewable demerits, suspension of study, dismissal from University.
- University Guidelines to Academic Honesty
  - http://www.cuhk.edu.hk/policy/academichonesty/

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STUDENT/FACULTY EXPECTATIONS

- Let's join hands to create a positive, respectful, and engaged academic environment inside and outside classroom.

- Full version of student/faculty expectations on teaching and learning
  - http://star.erg.cuhk.edu.hk/upload/StaffStudentExpectations.pdf

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ANY QUESTIONS ?

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