Department of Computer Science (CS + EE Program)

2015/2016 Academic Year (AY) **(May 2015 revision)**

Required Courses for CS + EE Program										
Course Title	Required Credits	AY1		AY2		AY3		AY4		Remarks
		Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	
物理(一)(二) Physics (I)(II)	6	3	3							Pick 1 out of 3 (Note 3)
普通生物(一)(二) General Biology (I)(II)										
化學(一)(二) Chemistry (I)(II)										
微積分(一)(二) Calculus(I)(II)	8	4	4							
線性代數 Linear Algebra	3	3								
計算機概論與程式設計 Intro. to Computers and Programming	3	3								
物件導向程式設計 Object-oriented Programming	3		3							
離散數學 Discrete Mathematics	3		3							
資料結構 Data Structures	3			3						
數位電路設計 Digital Circuit Design	3		3							
數位電路實驗 Digital Circuit Lab.	2			2						
演算法概論 Intro. to Algorithms	3				3					
作業系統概論 Intro. to Operating Systems	3					3				
計算機組織 Computer Organization	3				3					
資訊工程專題(一)(二) Computer Science and Engineering Projects(I)(II)	4						2	2		
微處理機系統實驗 Microprocessor System Lab.	2					2				
電路與電子學(一) Electrical Circuits and Electronics (一)	3			3						
編譯器設計概論 Intro. to Compiler Design	3					3				
訊號與系統 Signals and Systems	3				3					

軟硬體協同設計概論與實作 Hardware-Software Co-design and Implementation	3						3			
導師時間 Mentor's Hours	0	0	0							(Note 1)
資訊工程研討 Computer Science Seminars	0					0				
基礎程式設計 Basic Programming	0				0					Pass=Passing Basic Computer Programming Exam (Note 2)
Total	61									

Graduation Requirements: 128 credits (English-medium courses: 8 credits).

Note 1：61 credits (CS+EE Program)＋27 credits (Elective Professional Courses)＝88 credits (at least).

Note 2：Elective Professional Courses: all elective courses offered by the Dept. of CS (including elective courses in both undergraduate and graduate programs)

A. Important prerequisite on course selection:

(1) **Introduction to Computers and Programming [Fall of AY 1]** and **Object-Oriented Programming [Spring of AY 1]**

→Pass either one of the aforementioned courses before taking **Data Structures [Fall of AY 2]** and **Introduction to Algorithm [Spring of AY 2]**.

(2) **Data Structures [Fall of AY 2]**

→Pass the aforementioned course before taking **Intro. to Algorithm [Spring of AY 2]**.

(3) **Basic Programming [Spring of AY 2]**

→Pass the aforementioned course before taking **Computer Science and Engineering Projects (I) [both Fall and Spring of AY 3]** and **Computer Science and Engineering Projects (II) [Spring of AY 3 and Fall of AY 4].**

→Pass the aforementioned course before taking **Hardware-Software Co-design and Implementation [Spring of AY 3]**.

→Pass the aforementioned course before taking **Intro. to Compiler Design [Fall of AY 3]**.

(4) **Computer Science and Engineering Projects (I) [both Fall and Spring of AY 3]**

→ Pass the aforementioned course before taking **Computer Science and Engineering (II) [Spring of AY 3 and Fall of AY 4]**.

B. Students must complete one professional, English-medium course offered by the Department of CS.
（**Note: Projects or seminars are not included**）

Note 1：All the undergraduate freshmen are required to take “Mentor Hour” every semester (0 credits) and pass two courses before graduation.

Note 2：To pass “Basic Programming”, students must pass the “Basic Computer Programming Exam”.

Note 3：Students who complete “Physics (I) and (II)”, which are 8 credits in total, may waive 2 credits from other elective courses.

Note 4：Students who select elective courses from other Departments and Colleges must fill out an application form before the deadline of course enrollment. The application must be approved by the Chairman of the Dept. of CS for the credits to be accepted as part of the graduation credits. Any application after the deadline would not be accepted.