

**Course List for Doctor of Philosophy (Ph.D.) Degree Program
in Department of Computer Science and Information Engineering
Chang Gung University (For students admitted in Fall, 2025) , Apr. 14th, 2025**

Area	Compulsory	Course Title	Total Credits	Year	1st Semester	2nd Semester
Common	✓	Seminar (I)	2	1	2	
	✓	Seminar (II)	2	1		2
	✓	Seminar (III)	2	2	2	
	✓	Seminar (IV)	2	2		2
College Common	✓	English Technical Writing (I)	1	1	1	
	✓	English Technical Writing (II)	1	1		1
	✓	Scientific Writing	0			
Professional		Data Engineering	3	1	3	
		Service-Oriented Architecture (SOA)	3	1	3	
		Personal Communications	3	1	3	
		High-Speed Networks and Applications	3	1	3	
		Selected Topics on Network Systems	3	1	3	
		Embedded Operating Systems	3	1	3	
		System Performance Analysis	3	1	3	
		Advanced Computer Architecture	3	1		3
		Digital Signal Processing	3	1	3	
		Wireless Networks	3	1		3
		Parallel and Distributed Systems	3	1		3
		Cyber-Physical Systems	3	1		3
		Selected Topics on Mobile Communications	3	1		3
Remarks	1. Graduation credits: <u>34</u> (1) Compulsory credits: <u>10</u> (including the 8 credits of Seminar and the 2 credits of English Technical Writing). (2) Elective credits: <u>18</u>. 18 credits of elective courses for the doctoral program, of which at least 9 credits of elective courses of the department must be taken. A maximum of 9 credits of English-taught courses taught by the doctoral programs of the Department of Electrical Engineering and the Department of Electronics Engineering can be taken. If you want to take electives from other departments' English-taught courses for doctoral programs can only be taken with the approval of the department chair, up to 3 credits. (3) All students have to take the course Scientific Writing in every semester after the first year. The <u>6</u> credits of Dissertation will be awarded upon the completion of oral defense exam. 2. Graduation requires meeting the English proficiency threshold: The standards for passing the English proficiency test are implemented according to the "English Proficiency Requirements for Graduate Students of the College of Engineering, Chang Gung University". 3. Seminar provides 2 credits for each semester in the first 4 semesters, and it is compulsory for all students who have not graduated in the first 4 semesters. 4. The courses are provided for Ph.D. and Master students. 5. Both "English Technical Writing (I)" and "English Technical Writing (II)" are required courses for Ph.D. students. One must complete "English Technical Writing (I)" first with a score no less than 70, before being allowed to take "English Technical Writing (II)".					