2024Year 1st Semester Syllabus

Created Date	2024-02-13 16:58:02	Last-Modified	2024-02-13 17:01:29
Course Title	COMPUTER ARCHITECTURE	Course Code-Section	EEE3530-01
Credit/Time/ Experiment,Lab,Practical Technique Time	3/Mon2,3,Wed3	Department	Electrical and Electronics Engineering
Time	Mon2,3,Wed3	Location	EngHB041
Exam Date & Time	Midterm exam	Final exam	
Class Language	English	Evaluation Type	Absolute evaluation

Instructor's Profile	Name	Song William Jinho	Contact Information	Telephone	02-2123-2864
	Department	전기전자공학부		Mail	wjhsong@yonsei.ac.kr
	Office	Engineering Hall #3, C410		Interview information	Mon 2-3pm

TA's Name & Contact Information	Name	Wu, Xingbo	Contact Information	Telephone	02-2123-7290

Course Description Brief Introduction of the Course	This course covers the basic concepts, operations, and structures of computer architecture. Class objectives are as follows. * Learning the basic concepts of computer architecture including instruction sets, instruction-level parallelism, pipelining, and caches * Programming practices of computer architectures			
Course Goals	1.	Korean	Learning the basic concepts, operations, and structures of computer architecture	20%
		English	Learning the basic concepts, operations, and structures of computer architecture	
	2.	Korean	Learning the concepts of instruction sets, instruction-level parallelism, pipelining, and caches	50%
		English	Learning the concepts of instruction sets, instruction-level parallelism, pipelining, and caches	
	3.	Korean	Programming practices of computer architecture concepts	30%
		English	Programming practices of computer architecture concepts	
	4.	Korean		0%
		English		
	5.	Korean		0%
		English		

Core Competencies	The total measurable competencies must be 100%. Each course objective should set the competency as 25%. The core and major competencies should equal at least 50%.		
	Basic Academic Ability 50%	Logical Thinking 30%	Problem-solving Ability 20%
Sub-Competencies/Learning Unit1			
Sub-Competencies/Learning Unit2			
Sub-Competencies/Learning Unit3			
Core Competencies(Liberal Arts)Major competency(	Must reflect the interrelationship between core competencies (elective courses) and major competencies (major studies).		
Basic Academic Ability			
Sustainable Development Goals			

Average Recommended Amount of Learning per	Average Reading Volume		Average amount of writing(Based on A4)	

Course Methods (%) Total Amount 100	Lecture	Practice Training	Presentation	Dabate	Team Project
	70%	30%	0%	0%	0%
Course Methods 2 Select Relevant Items	PBL Subject	Capstone Design	CBL, Social Innovation Course	Flipped Classroom	Work Experience,Internsh

Grading Policy(%) Total Amount 100 Free Input for Other Information	Midterm exam	Final exam	Quiz	Individual Assignment	Team Assignment	Attendance	Others
	25%	25%	0%	40%	0%	10%	0%

Assignment/ Report, Project Guide	Title of Assignment/Project Name, and Method of Filling Out	Submission Deadline	Type of Submission and Method
Prerequisite		Online Course Address	

Course Material	Course Material Name	Author	Publisher	Publish Year	ISBN
주교재	Computer Organization and Design Risc-V Edition: The Hardware Software Interface, 2/E	David A. Patterson^John L. Hennessy	Morgan Kaufmann	2021	9780128203316

Main Learner Precautions	Juniors and seniors in EE major

Attatchment	

Weekly Plan

week	Period	Weekly Topic & Contents	Remarks
1	2024-03-02 2024-03-08	Computer abstraction	(3.2.) Spring semester classes begin (3.6. - 3.8.) Course add and drop period
2	2024-03-09 2024-03-15	Instructions	
3	2024-03-16 2024-03-22	Instructions	
4	2024-03-23 2024-03-29	Instructions	
5	2024-03-30 2024-04-05	Arithmetic	
6	2024-04-06 2024-04-12	Arithmetic	(4.8.) First third of the semester ends 04.10 국회의원선거
7	2024-04-13 2024-04-19	Datapath	
8	2024-04-20 2024-04-26	Midterm	(4.20. - 4.26.) Midterm Examinations
9	2024-04-27 2024-05-03	Datapath	(4.29. - 5.1.) Course withdrawal period (5.2. - 5.3.) Application period for S/U evaluation
10	2024-05-04 2024-05-10	Pipelining	(5.2. - 5.4.) Application period for S/U evaluation (5.5.) Children's day (5.6.) Alternative holiday for Children's Day 05.05 어린이날, 05.06 대체공휴일(어린이날)
11	2024-05-11 2024-05-17	Pipelining	(5.15.) The day of Buddha's coming, Second third of the semester ends 05.15 부처님오신날
12	2024-05-18 2024-05-24	Pipelining	
13	2024-05-25 2024-05-31	Memory hierarchy	
14	2024-06-01 2024-06-07	Memory hierarchy	(6.6.) Memorial day 06.06 현충일
15	2024-06-08 2024-06-14	Parallelism	(6.8. - 6.14.) Self-study
16	2024-06-15 2024-06-21	Final	(6.15. - 6.21.) Final Examinations

• Students with disabilities(SWDs) can request accommodations related to lectures, assignments, or tests by contacting t
he course professor at the beginning of semester.
(However, accommodations may vary depending on the essentiality of lecture and discretion of professors.)

[Lecture]
- Visual Impairment: alternative, braille, enlarged reading materials, note-taker
- Physical Impairment: alternative reading materials, access to classroom, note-taker, assigned seat
- Hearing Impairment: note-taker/stenographer, recording lecture
- Intellectual Disability/Autism: note-taker

[Assignments and Test]
- Visual/Physical/Hearing Impairment: (reasonable) extra days for submission, alternative type of assignment, extende
d test time, alternative type of test, arranging separate test room, and proctors, test ghostwriter
- Intellectual Disability/Autism: (reasonable) extra days for submission, alternative type of assignment