

(SYLLABUS)

1.

(Course Title)		(Instructor)			
(Year)	2023	(Semester)	1	(Course No.)	2150321602
(Class)	02	(Open to)	3 IT ( )	(Course Classification)	-IT / -
/	3.0 (1 ) / 3		100	가	가
(Office)	051306	(Telephone)	028200710	(e-mail)	chlee@ssu.ac.kr
	(FL), (PBL)		+		2023
	(*) (ABEEK Classification)		(*) (ABEEK Requirement)		
(Course Description)	ARM				

ARM , ARM ISA, ARM , ARM I/O	IT	
ARM		
ARM core	IT	

가	( 100 )	( 100%)
	100	100

(Required Texts)		* /ARM System on chip architecture/Steve Furber/Addition-Wesley/2003/2/
	( )	* /ARM System Developer's Guide/A. N. Sloss/Morgan Kaufmann/2004* //2023
	Engaged learning . + 가 : (50%), / (40 %), (10 %)	

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2.

(Week)	(Keyword)	(Description)		(Texts)
01	Introduction to microprocessor	An introduction to processor design		1
02	Processor example	Design of MU0 processor	, ,	1
03	ARM architecture	Programmers model and development tools	, ,	2
04	Assembly programming	ARM assembly language programming (1) - Data processing, data transfer, control flow		2
05	Assembly programming	ARM assembly language programming (2) - Writing simple assembly language programs Assembly tool	, , , , , ,	3
06	ARM organization	ARM organization and implementation - Pipeline organization, instruction execution, and implementation	, ,	4
07	ARM organization ARM instruction set	data processing	, ,	4,5
08	ARM instruction set	register transfer, program examples	, ,	5
09	ARM instruction set	Exception, branch, SWI	, ,	5
10	High level Language	Architectural support for high level language - Data type, expression, conditional statement, loop, function and procedure	, ,	6
11	System Development	Architectural support for system development (1) - Memory interface, AMBA		8
12	System Development	Architectural support for system development (2) - Reference peripheral specification, DMAC, GPIO	, ,	8
13	Design Example	FIR filter system Coding project for FIR filter system	,	
14		( )		6/3( ) 1-3
15	Interrupt	Interrupt mechanism	,	

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3. ( )

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	Open-ended problem		
	Teamwork		
	Communication skills		