교과목번호	430.201A	강좌번호	002	교과목명	논리설계 및 실험	학점	4

담당교수	성명 : 백윤홍　　(직 : 교수)	Homepage : sor.snu.ac.kr/ypaek
	E-mail : ypaek@snu.ac.kr	전화번호 : 880-1748
	면담시간/장소 : email로 선약시 언제든지	

수업목표	To learn basic theories of logic design including Boolean algebra and logicminimization and operation principles of logic devices. It also covers designmethods for combinational logic and sequential logic

교재 및 참고문헌	Randy H. Katz and Gaetano Borriello, Contemporary Logic Design 2nd, PrenticeHall. 전기공학부 실험 교재 "논리설계 및 실험"

평가방법	출석	과제+실습	퀴즈	시험	-	-	합계
	5%	35%	30%	30%	%	%	100%
	비고						

수강생 참고사항	

부정행위자 에 대한 처리	학칙에 따라 처리

	주(기간)	강의내용
강의 계획	1주	Introduction (Ch.1)
	2주	Introduction (Ch.1) Combinational Logic (Ch.2)
	3주	Combinational Logic (Ch.2) Lab 1. 측정 장비의 사용법과 논리 게이트의 이해
	4주	Working with Combinational Logic (Ch.3) Quiz 1
	5주	Working with Combinational Logic (Ch.3) Combinational Logic Techniques (Ch.4) Lab 2. Boolean algebra and logic simpification
	6주	Combinational Logic Techniques (Ch.4) Lab 3. K-map, multi-level, multi-output logic 실험
	7주	Combinational Logic Techniques (Ch.4) Sequential logic (Ch.6) Lab 4. PLD, steering logic 실험
	8주	Sequential Logic (Ch.6)
	9주	Finite state machines (Ch.7) Quiz 2 Lab 5. Latch/flip-flop 구현
	10주	Finite state machines (Ch.7) Working with Finite state machines (Ch.8) Lab 6. Memory를 이용한 combinational logic implementation and 7segment display control
	11주	Working with Finite state machines (Ch.8) Lab 7. Counter 와 register
	12주	Sequential Logic Techniques (Ch.9) Lab 8. FSM
	13주	Case Studies in Logic Design (Ch.5) Lab 9. Traffic light controller 의 구현을 통한 FPGA 실습
	14주	Case Studies in Logic Design (Ch.10) Lab 10. Term project
	15주	Exam Lab 10. Term project (continued)