

Course Title	()	()	Semiconductor Fabrication Processes
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() Lecturer	()	/ / (Course No. /)	006147/ /3
(/HP) Contact No.		/ (Class Hour/Venue)	13:30-15:00
(Course Prerequisite)		(Target Student)	3
E-mail (E-mail Address)		/Office Hour (Office/Office Hour)	812 / 15:00-17:00

(Objectives)	(crystal growth, cleaning, lithography, oxidation, diffusion, ion implantation, thin film deposition, etching, back-end processing) Term Project
(Competencies related to this course)	<input checked="" type="checkbox"/> (Logical and Critical Thinking) <input checked="" type="checkbox"/> (Creative and Convergent Thinking) <input type="checkbox"/> (Self-management Competency) <input checked="" type="checkbox"/> (Problem Solving Competency) <input type="checkbox"/> (Communication Competency) <input type="checkbox"/> (Global Competency) <input type="checkbox"/> (Community Competency)
CQI (Continuous Quality Improvement Plan)	가
(Text book)	- Xiao, "Introduction to Semiconductor Manufacturing Technology, 2nd Edition", SPIE (2012) (2020)
(Assignment book)	- Plummer et al., "Silicon VLSI Technology: Fundamentals, Practice, and Modeling", Prentice Hall (2000) - "Silicon Run" VTR tape () - Doering and Nishi(ed), "Handbook of Semiconductor Manufacturing Technology" (2007)
(Assignment)	1 pdf 가 Term project powerpoint
가 (Course Grading)	[가] (%) : 30, (%) : 40, 가 (%) : 20, (%) : 10, - 가 F

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(Week)	(Course Contents)	(Etc.)	
1	Introduction and Historical Perspective		
2	Modern CMOS Technology		
3	CMOS Process Flow		
4	Fabrication and Basic Properties of Silicon Wafers		
5	Clean Rooms, Wafer Cleaning, and Gettering		
6	Lithography		
7	Thermal Oxidation and the Si/SiO ₂ Interface		
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(Week)	(Course Contents)	(Etc.)	
9	Dopant Diffusion		
10	Ion Implantation		
11	Thin Film Deposition I		
12	Thin Film Deposition II		
13	Etching		
14	Interconnect		
15	3D Devices		
16			

