

Table of Curriculum

Classification	Course No.	Computer Code	Course Name	Lecture; Lab; Credit (Assignment)	Semester	Note	
Interdisciplinary Elective Major Courses	Mandatory	STE505	48.505	Semiconductor Process Laboratory	2:6:3	Summer	
		STE605	48.605	Semiconductor Memory Devices and SoC Designs	3:0:3	Fall	◆
		EE571	35.571	Advanced Electronic Circuits	3:0:3(6)	Spring	
		CS550	36.550	Software Engineering	3:0:3(4)	Spring	
	Elective	PH441	20.441	Introduction to Plasma Physics	3:0:3(4.5)	Fall	◎
		PH611	20.611	Advanced Solid State Physics I	3:0:3(4.5)	Spring/Fal	
		PH613	20.613	Semiconductor Physics	3:0:3(4.5)	Spring/Fall	
		PH621	20.621	Advanced Wave Optics	3:0:3(4.5)	Spring/Fall	
		PH643	20.643	Applied Plasma Physics	3:0:3(4.5)	Spring/Fall	
		CH471	23.471	Polymer Chemistry	3:0:3(3)	Fall	◎
		CH671	23.671	Organic Chemistry of High Polymers	3:0:3(3)	Spring or Fall	
		CH672	23.672	Specialty Polymer Chemistry	3:0:3(3)	Spring or Fall	
		CH674	23.674	Organic Electronic Materials	3:0:3(3)	Spring or Fall	
		CH675	23.675	Introduction to Lithography	3:0:3(3)	Spring or Fall	
		CH774	23.774	Special Topics in Polymer Chemistry II	3:0:3(3)	Spring or Fall	
		MS613	34.613	Solid State Physics	3:0:3(3)	Fall	<input type="checkbox"/> EE661
		MS635	34.635	Semiconductor Integrated Process Design	3:1:3(3)	Fall	
		MS642	34.642	Electronic Packaging Technology	3:0:3(2)	Spring	
		MS654	34.654	Surface Science	3:0:3(2)	Spring	
		MS684	34.684	Principles of Semiconductor Devices	3:0:3(3)	Spring	<input type="checkbox"/> EE561
		MS696	34.696	Special Topics in Advanced Materials I (Advanced semiconductor intergrated process design)	3:0:3(3)	Spring/Fall	<input type="checkbox"/> EE665
		EE432	35.432	Digital Signal Processing	3:0:3(6)	Spring/Fall	◎
		EE511	35.511	Computer Architecture	3:0:3(6)	Spring	
		EE535	35.535	Digital Image Processing	3:0:3(6)	Spring	
		EE561	35.561	Introduction to VLSI Devices	3:0:3(6)	Spring	<input type="checkbox"/> MS684
		EE566	35.566	MEMS in EE Perspective	3:0:3(6)	Fall	
		EE568	35.568	Introduction to Organic Electronics	3:0:3(6)	Spring	
EE573	35.573	Introduction to VLSI Systems	3:0:3(6)	Spring			
EE641	35.641	Monolithic Microwave Integrated Circuits	3:0:3(6)	Fall			
EE661	35.661	Solid State Physics	3:0:3(6)	Fall	<input type="checkbox"/> MS613		
EE663	35.663	High Frequency Electronic Devices	3:0:3(6)	Spring			
EE665	35.665	CMOS Front-End Process Technology	3:0:3(6)	Spring	<input type="checkbox"/> MS696		
EE676	35.676	Analog Integrated Circuits	3:0:3(6)	Fall			
EE678	35.678	Digital Integrated Circuits	3:0:3(6)	Fall			
EE679	35.679	Analog and Mixed Signal Circuits for Communication	3:0:3(6)	Spring			

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	EE762	35.762	Advanced MOS Device Physics	3:0:3(6)	Fall	
	EE766	35.766	Plasma Electronics	3:0:3(6)	Fall	
	EE772	35.772	Electronic Circuits for Green Energy	3:0:3(6)	Fall	
	CS453	36.453	Formal Software Verification Techniques	3:0:3(6)	Fall	◎
	CS500	36.500	Design and Analysis of Algorithms	3:0:3(6)	Spring	
	CS510	36.510	Computer Architecture	3:0:3(6)	Spring	
	CS530	36.530	Operating System	3:0:3(6)	Spring/Fall	
	CS632	36.632	Embedded Operating Systems	3:0:3(6)	Fall	
	CBE473	39.473	Microelectronics Processes	3:0:3(3)	Spring/Fall	◎
	CBE525	39.525	Molecular Electronics	3:0:3(3)	Spring/Fall	
	CBE581	39.581	Micro-Chemical and Biomolecular System	3:0:3(3)	Spring	
	CBE623	39.623	The Film Nanotechnology	3:0:3	Fall	
	CBE682	39.682	Organic Nano-Structured Materials	3:0:3(3)	Spring	
	CBE773	39.773	Recent Topics in Chemical&Biomolecular Engineering(Electroactive Polymeric Materials and Devices)	3:0:3(3)	Spring/Fall	
Research	STE998	48.998	MS Internship	0:0:1	Summer/Winter	
	STE999	48.999	Ph.D Internship	0:0:1	Summer/Winter	
	STE960	48.960	MS Thesis Research			
	STE980	48.980	Ph.D. Thesis Research			

◎: Course mutually recognized by undergraduate and graduate programs

◆: MS Elective □: Substitutable Courses

※ Only one subject is counted when one takes 2 equivalent substitutable courses

- ex) 1. 1 course of EE561(Introduction to VLSI Devices), MS684(Principles of Semiconductor Devices)
2. 1 course of EE665(CMOS Front-End Process Technology), MS696(Special Topics in Advanced Materials I(Advanced semiconductor intergrated process design))
3. 1 course of EE661(Solid State Physics), MS613(Solid State Physics)

※Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.