

**Master Program in Nano-Electronic Engineering and Design (For students admitted in Fall, 2025)**

E/C	Field	Subject	Crt.	Grade	Fall	Spring	
Compulsory		Research on Special Topics (I)(II)	4	1	2	2	
		Seminar (I)(II)	2	1	1	1	
Elective	College co-construction courses	English Speaking and Presentation (I)	2	1	2		
		English Speaking and Presentation (II)	2	1		2	
		English Technical Writing (I)	1	1	1		
		English Technical Writing (II)	1	1		1	
	Common courses	Applied Artificial Intelligence	3	1	3		
		Design for Quality	3	1	3		
		Introduction to VLSI: Technology and Design	3	1	3		
		Reliability Engineering for Integrated Circuit Technology	3	1		3	
		Biomedical Electronics Design	3	1		3	
	Advanced Manufacturing	Nanoscale Design	3	1	3		
		VLSI Forensics	3	1	3		
		Field-Effect Semiconductor Devices	3	1		3	
	IC Design	Computing Electronics Design	3	1	3		
		Analogue Integrated Circuit Design	3	1	3		
		VLSI Testing and Testable Design	3	1		3	
		Mixed Signal Systems by Design	3	1		3	
	Semiconductor Device Manufacturing	Physics and Characterization of Semiconductor Devices	3	1		3	
		Semiconductor Manufacturing	3	1		3	
		Semiconductor Device Fabrication and Development Practice	3	1		3	
	Note	<p>1. Graduation credit: 30.                      (1) Compulsory credit: 6. (2) Elective credit: 18. (3) Thesis credit: 6 (Granted after passing the degree examination and submitting the approved thesis.)                      2. For the 18 elective credits, students may select <b>up to 6 credits</b> from the graduate course(s) (taught in English) under the College of Engineering.                      3. The elective courses jointly constructed by the college are included in the electives of other departments.                      4. For international students who take the courses of "English Speaking and Representation" and "English Technical Writing", the credits are not counted for the graduation credit.</p>					