

Department of Electronic Engineering

Curriculum Requirements for Enrollees in the Academic Year 111 (Fall 2022)

Program	Four-year technical college program of the Day Division								
Group	None								
Class Type	Regular Class								
Special Program	None								
Curriculum Committee	Department Curriculum	111.05.03、114.02.24、114.04.15							
	College Curriculum	111.05.20、114.03.03、114.05.16							
	University Curriculum	111.06.06、114.03.10、114.06.09							
	Academic Affairs	111.06.06、114.03.10、114.06.09							
Graduation Credits /Study Duration	At least 128 credits required (normally 4 years).								
Credit Load per Semester	Students in Grades 1 and 2 must take no fewer than 16 credits and no more than 28 credits per semester. Students in Grades 3 and 4 must take no fewer than 9 credits and no more than 25 credits per semester.								
Required and Elective	Credits		Subject Category		Credits				
Required	88 Credits		General Education		16 Credits				
			Major Required		72 Credits				
			College Major		0 Credits				
Elective	40 Credits		General Education		8 Credits				
			Major Elective		22 Credits				
Other Regulations									
Remarks	"Computer Course" means computer access is required (computer and internet usage fee).								
First Semester, First Year					Second Semester, First Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
General Education	403001	Chinese(1)	2/2		General Education	403002	Chinese(2)	2/2	
General Education	400E00	English(I)	2/2		General Education	400F00	English(II)	2/2	
General Education	403088	Community Service & Learning(1)	0/1		General Education	403031	Community Service & Learning(2)	0/2	
General Education	400A00	physical education (1)	1/2		General Education	400B00	physical education (2)	1/2	
General Education	300A00		2/2		General Education	300B00	General Courses (II)	2/2	
Major Required	403A03	Physics(1)	3/3		Major Required	403A04	Physics(2)	3/3	
Major Required	403A05	Physics Lab.	1/2		Major Required	403A07	Calculus(2)	3/3	
Major Required	403A06	Calculus(1)	3/3		Major Required	403026	Introduction to Computer	2/3	Computer Course
Major Required	403A20	Introduction to Electronic Engineering	1/1		Major Required	403A08	Electrical Circuits	3/3	
Major Required	403C10	Introduction of Intelligent Control	2/2		Major Required	403B50	Career Counseling	2/2	
Major Required	403C11	Electronic Lab	2/3		Major Required	403C12	Practice of Intelligent Control Application	2/2	
Major Required	403042	Labor education (1)	0/1		Major Required	403043	Labor education (2)	0/1	

19 Credits, 24 Hours					22 Credits, 27 Hours				
First Semester, Second Year					Second Semester, Second Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
General Education	400G00	English(III)	2/2		General Education	400H00	English (IV)	2/2	
General Education	400C00	Physical Education (III)	1/2		General Education	400D00	physical education (4)	1/2	
General Education	300C00		2/2		General Education	300D00	General Courses (IV)	2/2	
Major Required	403017	Practical Chinese	2/2		Major Required	403049	Human Rights and Legal Education	2/2	
Major Required	403048	Contemporary Taiwan and Modern World	2/2		Major Required	403A10	Electronic Circuits(2)	3/3	
Major Required	403A09	Electronic Circuits(1)	3/3		Major Required	403A16	Digital System Design	3/3	
Major Required	403A22	Embedded System Overview	2/3		Major Required	403A71	Semiconductor Component Physics	3/3	
Major Required	403B51	Engineering Mathematics	3/3		Major Required	403C14	Introduction to Computer Network	2/3	Computer Course
Major Required	403B53	Philosophy Ethics	2/2		Major Required	403C15	Program Design	2/3	Computer Course
Major Required	403C13	Integrated Circuit Logic Design and Practice	3/4		Major Elective	403P48	The principle and applications of sensor and actuator	3/3	
					Major Elective	403P49	Fundamentals of optics	3/3	
					Major Elective	403P50	Introduction to Smart Manufacturing	3/3	
					Major Elective	403P51	Embedded System Interface Design	2/3	
22 Credits, 25 Hours					31 Credits, 35 Hours				
First Semester, Third Year					Second Semester, Third Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
Major Required	403C16	Introduction to Artificial Intelligence	2/3		Major Elective	403P12	Solar Cell Measurement Practices	2/3	
Major Required	403J02	Introduction to Electromagnetics	3/3		Major Elective	403P14	Optoelectronic Devices	3/3	
Major Required	403K06	Wafer Process Technology	3/3		Major Elective	403P54	Programmable Logic Controller Principle and Application	3/3	
Major Required	403K07	Technology of Semiconductor Packing	3/3		Major Elective	403P55	Deep Learning Practice	3/3	
Major Elective	403P52	Electronic Material	3/3		Major Elective	403P56	Mobile Device Application Practice	2/3	
Major Elective	403P53	Air Pressure Principle and Application	3/3		Major Elective	403P92	Generative AI: Text and Image Synthesis Principles and Practice	3/3	
Major Elective	403Q16	Optoelectronic Display Devices	3/3		Major Elective	403Q02	Semiconductor Devices and Process Simulation Lab.	2/3	Computer Course
Major Elective	403Q34	Solar Cell Overview	3/3		Major Elective	403W05	Antenna Design Praticice	2/3	
					Major Elective	403X22	Semiconductor Manufacturing Instruments	3/3	
					Major Elective	403X23	Introduction to Equipment Package	3/3	

23 Credits, 24 Hours					26 Credits, 30 Hours				
First Semester, Fourth Year					Second Semester, Fourth Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
Major Required	403027	English Proficiency qualification	0/2		College Major	40TND9	Interdisciplinary program learning	0/1	
Major Elective	403P18	Practice of IoT Integrated Application	2/3		College Major Required	40TNF1	Interdisciplinary Micro Course Program for Engineering Digital Technology	0/1	
Major Elective	403P24	Summer off-campus internship	3/3		College Elective Course	40TNG5	Industrial College Off-Campus Internship (2)	9/9	
Major Elective	403P47	Introduction to IC Packaging and Testing	3/3		College Elective Course	40TNG6	Professional competence certification	1/1	
Major Elective	403P57	Introduction to Smart Vehicles	3/3		Major Required	403A62	Practical ability of electronic certification	0/3	
Major Elective	403P58	Introduction to Electrostatic Protection Principles	3/3		Major Required	403B47	Practical Training	2/4	
Major Elective	403P59	Visual Recognition Application Practice	2/3		Major Elective	403N12	Creativity	2/2	
Major Elective	403P64	Semester Off-campus Internship (1)	9/9		Major Elective	403N23	Semiconductor Reliability Engineering	3/3	
Major Elective	403P95	Basic Electronic Device Theory and Applications	3/3		Major Elective	403N92	Business Practice	2/6	
Major Elective	403Q04	Optoelectronic Display Devices	3/3		Major Elective	403P16	Advanced Packaging Process Technology	3/3	
Major Elective	403Q28	The Measurement of the Semiconductor Device Lab	2/3		Major Elective	403P60	Integrated Circuit Failure Analysis	3/3	
Major Elective	403W11	Testing for EMC Compliance	2/3		Major Elective	403P62	Smart Factory Practice	2/3	
					Major Elective	403P63	Smart Manufacturing Digital Virtual and Real Integration	2/3	
					Major Elective	403P65	Semester Off-campus Internship (2)	9/9	
					Major Elective	403P93	Advanced Semiconductor Memory Device Fabrication Technology	3/3	
					Major Elective	403P94	Advanced Semiconductor Device Theory and Practice	3/3	
35 Credits, 41 Hours					44 Credits, 57 Hours				