

Curriculum Design of the Department of Electrical Engineering of Taipei City University of Science and Technology (for students admitted in 2024 Spring)

February 17, 112 - The first department curriculum development committee of the second semester of the 111 academic year March 13, 112 - Review by the Curriculum Development Committee of the First College of the Second Semester of the 111 Academic Year March 29, 112 - Deliberation by the 1st School Curriculum Development Committee of the second semester of the 111 academic year

Category	Subject name	The first academic year				Subject name	The second academic year				Subject name	The third academic year				Subject name	The fourth academic year			
		Fall		Spring			Fall		Spring			Fall		Spring			Fall		Spring	
		Credit	Hours	Credit	Hours		Credit	Hours	Credit	Hours		Credit	Hours	Credit	Hours		Credit	Hours	Credit	Hours
Basic General Courses	Chinese reading and writing	2	2			Physical Education (3)	2	2												
	Foreign Language (I)			2	2	Foreign Language (II) (III)	2	2	2	2										
	Physical Education (I)	2	2																	
	Physical Education (II) - Golf			2	2															
	Subtotal	4	4	4	4	Subtotal	4	4	2	2	Subtotal	0	0	0	0	Subtotal	0	0	0	0
Category subtotal		14																		
1. Six credits in the foreign language course are required. Students can choose either "English" or "Japanese" as their foreign language course prior to enrollment. 2. Once the language selection is made, changes are not permitted.																				
General Courses of Employment	Workplace etiquette and oral expression	2	2			Law and life			2	2										
	Workplace Applied Writing			2	2															
	Social Responsibility Practice (I) (II)	0	1	0	1															
	Subtotal	2	3	2	3	Subtotal	0	0	2	2	Subtotal	0	0	0	0	Subtotal	0	0	0	0
Category subtotal		6																		
Diversified General Courses	1. To fulfill the requirements of the school's special characteristics of general knowledge planning, students are required to complete 14 credits of "Basic General Course", 6 credits of "General Course of Employment," and 8 credits of "Diversified General Course" upon graduation, totaling 28 credits. 2. "Diversified General Course" comprises pre-selected courses designated by the General Education Center. Following pre-selection, students must choose three courses from the fields of humanities and arts, natural science and technology, and social sciences. Students should select courses from at least two or more fields, totaling 8 credits. 3. Beginning from the 2013 academic year, auxiliary courses offered by colleges, departments, and programs, as announced by the General Education Center, may also be recognized as credits required for General courses. However, courses provided solely by colleges and programs under individual departments will not be acknowledged. 4. "The Celebrity Lecture" is a cross-category elective course, whose credits can be transferred to any "Diversified General Course" (2 credits). Please note that such credit transfer is permitted only once.																			
	Category subtotal																			
Compulsory for college students	Engineering General Course	2	2			Application of science and technology			2	2	Career Lecture Hall	2	2			Lecture on Engineering Industry			2	2
	Subtotal	2	2	0	0	Subtotal	0	0	2	2	Subtotal	2	2	0	0	Subtotal	0	0	2	2
Category subtotal		8																		
Professional compulsory	Circuit Theory	3	3			Electronics	3	3			Robotics	3	3							
	Introduction to robotic programming	2	3			Design and Implementation of Electronic Circuit	2	3			Automatic control practice	2	4							
	Electrical machinery practice	2	3			Programmable control practice	2	3			Industrial control practice	2	4							
	Engineering mathematics			3	3	Information application practice	2	3			Special Project (I) (II)	2	3	2	3					
	Computer-aided design and manufacturing			2	4	Power Electronics			3	3	Power system			3	3					
	Computer software application			3	3	Microprocessor practice			2	3	Industrial robot practice			2	4					
	Digital logic circuit			2	3	Mechanical and electrical integration practice			2	4	Digital factory practice			2	3					
											Internet of Things Design Practice			2	4					
	Subtotal	7	9	10	13	Subtotal	9	12	7	10	Subtotal	9	14	11	17	Subtotal	0	0	0	0
Category subtotal		53																		
Professional elective	Off-campus internship (summer I)			3	*	Off-campus internship (summer II)			3	*	Off-campus internship (summer III)			3	*	Off-campus internship (I) (II)	9	*	9	*
	Introduction to Industry 4.0	3	3			Introduction to electric vehicles	3	3			Introduction to Automatic Engineering	3	3			Practical application of power electronics	3	3		
	Introduction to Communication	3	3			Air pressure control practice	3	3			Massive data analysis	3	3			Embedded system	3	3		
	Introduction to electrical signals			3	3	Patent writing			3	3	Introduction to Semiconductor Equipment	3	3			Signal measurement and monitoring	3	3		
	Industrial power distribution practice			3	3	Interface design practice			3	3	Principle and Application of Sensor			3	3	Digital image processing	3	3		
											Switching power supply			3	3	Machine vision practice	3	3		
											Introduction to Optoelectronics			3	3	Renewable energy			3	3
															Power quality			3	3	
															Principle and application of laser			3	3	
	Subtotal	6	6	9	6	Subtotal	6	6	9	6	Subtotal	9	9	12	9	Subtotal	24	15	21	12
Category subtotal		96																		
Notes	Basic General Course: 14		1. Courses not offered within this department may be pursued through the foreign department as elective courses, provided that applications are submitted prior to the course selection process. Upon approval, these courses can be credited towards graduation elective credits, as determined by each department. The upper limit of credits counted via this method is half of the total credits. 2. The off-campus internship course can be undertaken in one of the following three formats: (1) Summer internship: 8 weeks of internship, 40 hours per week, totaling no less than 320 hours. (2) Term internship: 18 weeks of internship, 40 hours per week, totaling no less than 720 hours. (3) Academic year internship: 36 weeks of internship, 40 hours per week, totaling no less than 1,440 hours. ③ The four-year students of the school should meet the requirements of relevant foreign language ability and professional practical skills to graduate, except for the completion of the requirements of the school's academic regulations.																	
	General Course of Employment: 6																			
	Diversified General Course: 8																			
	Compulsory: 8																			
	Compulsory for majors: 53																			
Professional Electives: 39 credits (Including a minimum of 12 credits in professional core electives). Credits exceeding the requirement for																				
Minimum graduation credits: 128																				