Department of Electrical Engineering

Curriculum Requirements for Enrollees in the Academic Year 114 (Fall 2025)

Program	Four-year technical college program of the Day Division			
Group	None			
Class Type	Regular Class			
Special Program	None			
Curriculum Committee	Department Curriculum	114.05.14		
	College Curriculum	114.05.16		
	University Curriculum	114.06.09		
	Academic Affairs	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	75 Credits	General Education	19 Credits	
		Major Required	56 Credits	
		College Major	0 Credits	
Elective	53 Credits	General Education	8 Credits	
		Major Elective	45 Credits	
Graduation	Course Title	Description		Regulations/Notes
Cross-disciplinary Credit Courses	Cross-disciplinary Program Learning(0/1)	Students must complete at least one (micro) credit program offered by their respective college before graduation, or a (micro) credit program from another college with the approval of their own college.		1.Regulations for the Establishment of Credit Programs
Cross-disciplinary Credit Program	Digital Technology Micro- Credit Program Learning(0/1)	A Micro-Credit Program in Digital Technology offered by the student’s respective college		2.Guidelines for the Implementation of Interdisciplinary (Micro) Credit Programs
English Certificate	English Proficiency Test(0/2)	Students must pass the General English Proficiency Test (GEPT) Basic Level (or equivalent) during their studies.		1.Principles for the Implementation of English Courses and English Proficiency Graduation Requirements
Practical Project	Practical Project(2/2)	According to the regulations of each department		1.Regulations for the Implementation of “Practical Projects, Special Projects, Research Projects, and Graduation Design” 2.Regulations of Each Department
Practical Project	Practical Project(2/2)	According to the regulations of each department		1.Regulations for the Implementation of “Practical Projects, Special Projects, Research Projects, and Graduation Design” 2.Regulations of Each Department

Professional	Professional	Students must obtain at least one	Regulations of Each
Off-campus internship	In accordance with the regulations of each department	In accordance with the regulations of each department	In accordance with the University’s Regulations for Student Off-Campus Internships and the relevant regulations of each department
Off-campus internship	In accordance with the regulations of each department	In accordance with the regulations of each department	In accordance with the University’s Regulations for Student Off-Campus Internships and the relevant regulations of each department
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Other Regulations			
Remarks	"Computer Course" means computer access is required (computer and internet usage fee). Graduation Requirements： 「G01」：Cross-disciplinary Credit Program: Cross-disciplinary Learning 「G02」：Cross-disciplinary Credit Program: Digital Technology Micro Program 「G03」：English Proficiency Certificate 「G04」：Practical Project 「G04」：Practical Project 「G05」：Professional Certificate 「G06」：Off-campus Internship 「G06」：Off-campus Internship 「G06」：Off-campus Internship Course Remark： 「T03」：Internship / Practicum Courses are offered as scheduled during the semester. 「T08」：Internship / Practicum Courses are offered as scheduled during the semester. 「T08」：None		

First Semester, First Year					Second Semester, First Year				
Course Category	Course Number	Course Name	Credits/ Hours	Notes	Course Category	Course Number	Course Name	Credits/ Hours	Notes
General Education	496505	Human Rights and Legal	2/2		General Education	496905	Practical Chinese	2/2	
General Education	496805	Literary Appreciation and Expression	2/2		General Education	492002	English (II)	2/2	
General Education	492001	English(1)	2/2		General Education	4912D0	Physical Education(2)	2/2	
General Education	4912C0	Physical Education(1)	2/2		General Education	490405	Community Service & Learning(2)	0.5/1	
General Education	490305	Community Service & Learning(1)	0.5/1		General Education	497B00	General Courses (II)	2/2	
General Education	497A00	Liberal Education (I)	2/2		Major Required	405C02	Physics(2)	3/3	
Major Required	405C01	Physics (1)	3/3		Major Required	405C08	Calculus(2)	3/3	
Major Required	405C07	Calculus (1)	3/3		Major Required	405C45	Computer Program	3/3	Computer Course
Major Required	405C44	IntroductiontoComputer	3/3	Computer Course	Major Elective	405N19	Computer Programming and Application	3/3	Computer Course
Major Elective	405888	Introduction to Electrical Engineering	0/1		Major Elective	405N17	Computer Software Application and Lab.	3/3	Computer Course
Major Elective	405N13	Digital Logic Design	2/2		Major Elective	405N18	Industrial Wiring internship	3/3	T03

21.5 Credits, 23 Hours					26.5 Credits, 27 Hours				
First Semester, Second Year					Second Semester, Second Year				
Course Category	Course Number	Course Name	Credits/ Hours	Notes	Course Category	Course Number	Course Name	Credits/ Hours	Notes
General Education	496405	Contemporary Taiwan and Moder World	2/2		General Education	497D00	General Courses (IV)	2/2	
General Education	492003	English(III)	2/2		Major Required	405N21	Single-Chip Application and Lab.	3/3	T03
General Education	497C00	Common Course(III)	2/2		Major Required	405C13	Electric Circuits(2)	3/3	
Major Required	405N20	Programmable control and internship	3/3	T03	Major Required	405C17	Electronics (2)	3/3	
Major Required	405C12	Electric Circuits (1)	3/3		Major Elective	405N22	Solar photovoltaic systems practice	3/3	T03
Major Required	405C16	Electronics (1)	3/3		Major Elective	405N23	Mechatronics Integration Practice(1)	3/3	T03 T08
Major Required	405C36	Electronics Lab.	2/3	T03	Major Elective	405N24	Professional Electrical Engineering English	3/3	
Major Required	405C49	Engineering Mathematics	3/3		Major Elective	405T33	Internet Programming	3/3	Computer Course
Major Elective	405R52	Power Generation Technology for New and Renewable Resource	3/3	T08	Major Elective	405N31	Applications of Engineering Mathematics	3/3	
Major Elective	405T32	Computer Graphics on Electrical Engineering	3/3	Computer Course	Major Elective	405Q15	Signals and Systems	3/3	

26 Credits, 27 Hours					29 Credits, 29 Hours				
First Semester, Third Year					Second Semester, Third Year				
Course Category	Course Number	Course Name	Credits/ Hours	Notes	Course Category	Course Number	Course Name	Credits/ Hours	Notes
Major Required	405C19	Control System	3/3		Major Required	405C22	Project in Practice (2)	1/2	G04
Major Required	405C21	Project in Practice (1)	1/2	G04	Major Required	405C46	Control System Lab.	2/3	T03
Major Required	405C28	Electrical Machinery(1)	3/3		Major Required	405C47	Electrical Machinery Lab.	2/3	T03
Major Elective	405N25	Microprocessors and Lab.	3/3	Computer Course T03	Major Required	405C48	Power Systems	3/3	
Major Elective	405N26	Computer-Aided Circuit Design and Practice	3/3	Computer Course T03	Major Elective	405N29	Distribution Design and Lab.	3/3	T03
Major Elective	405N28	Mechatronics Integration Practice(2)	3/3		Major Elective	405N30	PC-based programming practice	3/3	T03
Major Elective	405T34	Programming and Analysis of Power System	3/3		Major Elective	405884	Mechatronics and Practical of electric vehicles	3/3	
Major Elective	405883	Introduction to Electric Vehicles	3/3		Major Elective	405895	Digital System Design	2/3	
Major Elective	405894	Linear Algebra	3/3		Major Elective	405N33	Deep Learning	3/3	

Major Elective	405N09	Supervisory Control System and Practice	3/3		Major Elective	405Q20	Control System Design	3/3	
Major Elective	405N32	Machine Learning	3/3		Major Elective	405Q24	Power electronics	3/3	
Major Elective	405Q16	Distribution Design	3/3		Major Elective	405Q42	Electrical Machinery(2)	3/3	
Major Elective	405Q21	Elementals of Sensor and Transducers	3/3		Major Elective	405Q71	The introduction of embeded system	3/3	
Major Elective	405Q41	Electromagnetism	3/3		Major Elective	405R15	Materials and Elements of Fiber-Optics	3/3	
Major Elective	405R13	Introduction to Electro-optics Engineering	3/3		Major Elective	405R50	Introduction to Energy Management	3/3	
Major Elective	405R14	Physics of Semiconductor	3/3		Major Elective	405R71	Semiconductor and optoelectronic manufacturing equipment	3/3	
Major Elective	400N01	Teaching assistant practice	1/1						
47 Credits, 48 Hours					43 Credits, 47 Hours				
First Semester, Fourth Year					Second Semester, Fourth Year				
Course Category	Course Number	Course Name	Credits/ Hours	Notes	Course Category	Course Number	Course Name	Credits/ Hours	Notes
General Education	492105	English Proficiency qualification	0/2	G03	College Major	40TND9	Interdisciplinary program learning	0/1	G01
Major Elective	405865	Introduction to Semiconductor Manufacturing Technology	3/3		College Major Required	40TNF1	Interdisciplinary Micro Course Program for Engineering Digital Technology	0/1	G02
Major Elective	405N06	Originality Thinking Training	2/2		Major Required	405C42	Electrical Engineering Practical Capability Certification	0/2	G05
Major Elective	405N07	Personal Character and Professional Ethics	2/2		Major Elective	405848	Thin Film Engineering and Lab	3/3	
Major Elective	405N16	Power electronics Lab.	3/3		Major Elective	405891	Numerical Methods	3/3	
Major Elective	405N34	Virtual Reality Applications	3/3		Major Elective	405N08	Life-Career Counseling	2/2	
Major Elective	405N35	Applications of AI Power Distribution Design	3/3		Major Elective	405Q32	Electrical Supervisory and Control Automation	3/3	
Major Elective	405Q25	Energy Technology.	3/3		Major Elective	405Q33	Renewable Electricity	3/3	
Major Elective	405Q27	System Protections and Coordinations	3/3		Major Elective	405Q34	Power system simulation	3/3	
Major Elective	405Q43	Project Management	3/3		Major Elective	405Q39	Electrical Technology Evaluation	2/2	
Major Elective	405Q49	Summer Internship	3/3	G06 T08	Major Elective	405Q56	Semester Off-campus Internship (2)	9/9	G06
Major Elective	405Q55	Semester Off-campus Internship (1)	9/9	G06	Major Elective	405Q60	Electric Motor Control and Practice	2/4	T03
Major Elective	405Q59	Practic of Electrical Facility Testing	2/3		Major Elective	405R24	The Theory and Technique of Solar Cell	3/3	
Major Elective	405Q85	Industrial distribution and Lab.	3/3	T03	Major Elective	405R81	LED Lighting and Applications	3/3	
Major Elective	405R16	Introduction to Nanotechnology	3/3		Major Elective	405T13	Engineering quality control and budget production	2/4	
Major Elective	405R19	Vacuum Technique	3/3						

Major Elective	405T01	Distribution of electricity regulations	3/3						
51 Credits, 54 Hours					38 Credits, 46 Hours				