Department of Electrical Engineering

Curriculum Requirements for Enrollees in the Academic Year 110 (Fall 2021)

Program	Four-year technical college program of the Day Division		
Group	None		
Class Type	Regular Class		
Special Program	None		
Curriculum Committee	Department Curriculum		
	College Curriculum		
	University Curriculum	110.06.07	
	Academic Affairs	110.06.07	
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	82 Credits	General Education	16 Credits
		Major Required	66 Credits
		College Major	0 Credits
Elective	46 Credits	General Education	8 Credits
		Major Elective	38 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	405021	Chinese(1)	2/2		General Education	405022	Chiness(2)	2/2	
General Education	400E00	English(I)	2/2		General Education	400F00	English(II)	2/2	
General Education	405081	Community Service & Learning(1)	0/1		General Education	405082	Community Service & Learning(2)	0/1	
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	405057	Human Rights and Legal Education	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	405C03	Physics Lab.	1/2		Major Required	405C06	Computer Program	2/3	Computer Course
Major Required	405C07	Calculus (1)	3/3		Major Required	405C10	Programmable Logic Control and Lab.	2/3	
Major Required	405C09	Introduction to Electrical Engineering	0/1		Major Required	405C04	Chemistry	3/3	
Major Required	405031	Introduction to Computer Science	2/3	Computer Course	Major Required	405004	Labor education (2)	0/1	

Major Required	405003	Labor education (1)	0/1		Major Required	405014	All-out Defense Education Military Training -Defense Mobilization	0/2	
Major Required	405013	All-out Defense Education Military Training - International Situations	0/2		Major Elective	405892	Computer Programming and Application	1/2	Computer Course
18 Credits, 26 Hours					21 Credits, 29 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	405056	Contemporary Taiwan and Modern World	2/2		Major Required	405023	Practical Chinese	2/2	
Major Required	405C12	Electric Circuits (1)	3/3		Major Required	405C13	Electric Circuits(2)	3/3	
Major Required	405C14	Engineering Mathematics (1)	3/3		Major Required	405C15	Engineering Mathematics (2)	3/3	
Major Required	405C16	Electronics (1)	3/3		Major Required	405C17	Electronics (2)	3/3	
Major Required	405C36	Electronics Lab.	2/3		Major Required	405D42	Single-Chip Application and Lab.	2/3	
Major Elective	405Q10	Logic Design and Lab.	3/3		Major Required	N05207	Thesis	6/6	
Major Elective	405Q47	Computer Software Application and Lab.	2/3	Computer Course	Major Elective	405886	Mechatronics Integration Practice(1)	2/3	
Major Elective	405Q48	PLC practical application	2/3		Major Elective	405893	Internet Applications	2/3	Computer Course
Major Elective	405T16	Green energy and energy conservation engineering	3/3		Major Elective	405Q15	Signals and Systems	3/3	
					Major Elective	405R86	Photovoltaic System Construction Practice	2/3	
					Major Elective	405T02	Industrial Wiring internship	2/3	
28 Credits, 32 Hours					35 Credits, 41 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	405C19	Control System	3/3		Major Required	405C20	Control System Lab	1/3	
Major Required	405C21	Project in Practice (1)	1/2		Major Required	405C22	Project in Practice (2)	1/2	
Major Required	405C28	Electrical Machinery(1)	3/3		Major Required	405C29	Electrical Machinery Lab.	1/3	
Major Elective	405883	Introduction to Electric Vehicles	3/3		Major Elective	405884	Mechatronics and Practical of electric vehicles	3/3	
Major Elective	405887	Mechatronics Integration Practice(2)	2/3		Major Elective	405895	Digital System Design	2/3	
Major Elective	405894	Linear Algebra	3/3		Major Elective	405N10	PC-based programming practice	2/3	
Major Elective	405N09	Supervisory Control System and Practice	3/3		Major Elective	405Q18	Power Systems(1)	3/3	

Major Elective	405N11	Microprocessor and Lab	2/3	Computer Course	Major Elective	405Q20	Control System Design	3/3	
Major Elective	405Q14	Computer-Aided Circuit Design and Practice	2/3	Computer Course	Major Elective	405Q40	Computer Graphics on Electrical Engineering	3/3	Computer Course
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	405Q84	Mechatronics Integration Practice(2)	2/3	
Major Elective	405Q83	Mechatronics Integration Practice(1)	2/3		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	405T08	Industrial distribution and Lab.	2/3		Major Elective	405T31	Distribution Design and Lab.	2/3	
Major Elective	400N01	Teaching assistant practice	1/1						
42 Credits, 48 Hours					38 Credits, 47 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	405058	English Proficiency qualification	0/2		College Major	40TND9	Interdisciplinary program learning	0/1	
Major Elective	405865	Introduction to Semiconductor Manufacturing Technology	3/3		College Major Required	40TNF1	Interdisciplinary Micro Course Program for Engineering Digital Technology	0/1	
Major Elective	405N06	Originality Thinking Training	2/2		Major Required	405C42	Electrical Engineering Practical Capability Certification	0/2	
Major Elective	405N07	Personal Character and Professional Ethics	2/2		Major Elective	405848	Thin Film Engineering and Lab	3/3	
Major Elective	405Q19	Power Systems(2)	3/3		Major Elective	405891	Numerical Methods	3/3	
Major Elective	405Q24	Power electronics	3/3		Major Elective	405896	Power Generation Technology for New and Renewable Resource	3/3	
Major Elective	405Q25	Energy Technology.	3/3		Major Elective	405N08	Life-Career Counseling	2/2	
Major Elective	405Q27	System Protections and Coordinations	3/3		Major Elective	405Q32	Electrical Supervisory and Control Automation	3/3	
Major Elective	405Q43	Project Management	3/3		Major Elective	405Q33	Renewable Electricity	3/3	
Major Elective	405Q49	Summer Internship	3/3		Major Elective	405Q34	Power system simulation	3/3	
Major Elective	405Q55	Semester Off-campus Internship (1)	9/9		Major Elective	405Q39	Electrical Technology Evaluation	2/2	
Major Elective	405Q59	Practic of Electrical Facility Testing	2/3		Major Elective	405Q56	Semester Off-campus Internship (2)	9/9	
Major Elective	405R16	Introduction to Nanotechnology	3/3		Major Elective	405Q60	Electric Motor Control and Practice	2/4	

Major Elective	405R19	Vacuum Technique	3/3		Major Elective	405R24	The Theory and Technique of Solar Cell	3/3	
Major Elective	405R51	Programming and Analysis of Power System	3/3		Major Elective	405R81	LED Lighting and Applications	3/3	
Major Elective	405T01	Distribution of electricity regulations	3/3		Major Elective	405T13	Engineering quality control and budget production	2/4	
48 Credits, 51 Hours					41 Credits, 49 Hours				