Department of Computer Science and Information Engineering

Curriculum Requirements for Enrollees in the Academic Year 112 (Fall 2023)

Program	Four-year technical college program of the Day Division			
Group	None			
Class Type	Regular Class			
Special Program	None			
Curriculum Committee	Department Curriculum	112.04.17、112.11.28、113.04.25、113.09.03、114.04.15		
	College Curriculum	112.05.17、112.12.05、113.05.23、113.09.11、114.05.16		
	University Curriculum	112.05.29、112.12.12、113.06.03、113.09.23、114.06.09		
	Academic Affairs	112.05.29、112.12.29、113.06.03、113.09.23、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	82 Credits	General Education	22 Credits	
		Major Required	60 Credits	
		College Major	0 Credits	
Elective	46 Credits	General Education	8 Credits	
		Major Elective	38 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
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
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 「G04」：Practical Project			

First Semester, First Year					Second Semester, First Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
General Education	496118	Chinese(1)	2/2		General Education	496218	Chinese(2)	2/2	
General Education	492001		2/2		General Education	496518	Human Rights and Legal	2/2	

General Education	4912A0	physical education (1)	1/2		General Education	492002	English (II)	2/2	
General Education	490118	Community Service and Learning(1)	0/1		General Education	4912B0	physical education (2)	1/2	
General Education	497A00		2/2		General Education	490218	Community Service and Learning(2)	0/1	
Major Required	40IA03	Physics(1)	3/3		General Education	497B00		2/2	
Major Required	40IA05	Laboratory of Physics	1/2		Major Required	40IA04	Physics(2)	3/3	
Major Required	40IA06	Calculus(1)	3/3		Major Required	40IA07	Calculus(2)	3/3	
Major Required	40I013	Introduction to computer science	2/3	Computer Course	Major Required	40IA41	Linear Algebra	3/3	
Major Required	40IA26	Discrete Mathematics	3/3		Major Required	40IA43	Programming Language(2)	3/3	Computer Course
Major Required	40IA51	Programming Language(1)	2/3	Computer Course	Major Elective	40INH2	Python Programming	3/3	Computer Course
21 Credits, 26 Hours					24 Credits, 26 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	496318	Practical Chinese	2/2		General Education	496418	Contemporary Taiwan and Moder World	2/2	
General Education	492003	English(III)	2/2		General Education	492004	English (IV)	2/2	
General Education	4913C0	physical education (3)	1/2		General Education	4913D0	physical education (4)	1/2	
General Education	497C00		2/2		General Education	497D00		2/2	
Major Required	40IA23	Data Structure	3/3	Computer Course	Major Required	40IA16	Digital System Design	3/3	
Major Required	40IA36	Electronic Circuits	3/3		Major Required	40IA22	Computer Architecture	3/3	
Major Required	40IA46	Digital Logic Design	3/3		Major Required	40IA44	Practice of Electronic Circuits	3/3	
Major Elective	40IN02	Morality and Professional Ethics	2/2		Major Required	40IA53	Probability and Statistics	3/3	
Major Elective	40IN58	Electrical Circuits	3/3		Major Elective	40IN01	Career Consulting	2/2	
Major Elective	40IN60	Engineering Mathematics	3/3		Major Elective	40INL4	Data Base Management System	3/3	Computer Course
Major Elective	40INL1	Object Oriented Programming	3/3	Computer Course	Major Elective	40INL5	Java Programming	3/3	Computer Course
Major Elective	40INL2	Principle and Practice of Computer Network	3/3	Computer Course	Major Elective	40INL6	Embedded System Overview	3/3	Computer Course
Major Elective	40INL3	Web User Interface (UI) Design	3/3	Computer Course	Major Elective	40INL7	Frontend Web Development and Design	3/3	Computer Course
					Major Elective	40INP3	Information Security	3/3	Computer Course
33 Credits, 34 Hours					36 Credits, 37 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	40IA38	Algorithm	3/3	Computer Course	Major Required	40IA24	Operating Systems	3/3	
Major Required	40IA47	Microcomputer Theorem and Practice	3/3	Computer Course	Major Required	40IA50	Forums of Computer Science and Information Engineering	2/2	
Major Elective	40IN38	Signals and Systems	3/3		Major Elective	40IN23	Originality Thinking Training	2/2	
Major Elective	40INE7	Artificial intelligence	3/3	Computer Course	Major Elective	40IN48	Digital Signal Processing	3/3	
Major Elective	40INL8	Java Application Practice	3/3	Computer Course	Major Elective	40INF9	Introduction to Cloud Management	3/3	
Major Elective	40INL9	Assembly Language Programming	3/3	Computer Course	Major Elective	40INI4	Deep Learning	3/3	Computer Course
Major Elective	40INM1	Numerical Methods	3/3	Computer Course	Major Elective	40INM6	Defensive and Offensive Cybersecurity	3/3	Computer Course
Major Elective	40INM2	Software Engineering	3/3	Computer Course	Major Elective	40INM7	Embedded System Design	3/3	Computer Course
Major Elective	40INM3	Introduction to Internet of Things	3/3	Computer Course	Major Elective	40INM8	Smart Phone Programming	3/3	Computer Course
Major Elective	40INM4	Practice of Intelligent Robot	3/3	Computer Course	Major Elective	40INO1	Full Stack Web Development and Management Practice	3/3	Computer Course
Major Elective	40INM5	Backend Web Development and Design	3/3	Computer Course	Major Elective	40INO9	The Practice of IOT Integration System	3/3	Computer Course
Major Elective	40INP4	System and Cybersecurity	3/3						

36 Credits, 36 Hours					31 Credits, 31 Hours				
First Semester, Fourth Year					Second Semester, Fourth Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
General Education	492118	English Proficiency qualification	0/2		College Major	40TND9	Interdisciplinary program learning	0/1	G01
Major Required	40IA35	Practical Project	2/4	G04	College Major Required	40TNF1	Interdisciplinary Micro Course Program for Engineering Digital Technology	0/1	G02
Major Elective	40ING2	Big Data Analysis	3/3	Computer Course	Major Elective	40INI3	Practical Applications of Artificial Intelligence	3/3	Computer Course
Major Elective	40IN33	Project Management	3/3		Major Elective	40INI6	Field Practice(2)	12/12	
Major Elective	40INB7	Practice of Image Processing Systems	3/3		Major Elective	40INJ5	Laws and Ethic in Information Security	3/3	
Major Elective	40ING6	Innovation and Entrepreneurship	2/2		Major Elective	40INO7	Server Virtualization Practice	3/3	Computer Course
Major Elective	40INI5	Field Practice(1)	12/12		Major Elective	40INO8	Practicing of 3D Printing	3/3	Computer Course
Major Elective	40INK4	Summer Internship	3/3		Major Elective	40INP2	Practical Training	2/2	
Major Elective	40INO3	Cloud Computing Practices	3/3	Computer Course	Major Elective	40INP6	Practices of Extended Reality Applications	3/3	Computer Course

Major Elective	40IN06	Theory and Applications for Sensors	3/3	Computer Course					
Major Elective	40INP1	Practice of XR Programming	3/3	Computer Course					
37 Credits, 41 Hours					29 Credits, 31 Hours				