

# Department of Industrial Engineering and Management

## 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	112.04.14	
	College Curriculum	112.05.17	
	University Curriculum	112.05.29	
	Academic Affairs	112.05.29	
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	89 Credits	General Education	22 Credits
		Major Required	67 Credits
		College Major	0 Credits
Elective	39 Credits	General Education	8 Credits
		Major Elective	31 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
Professional	Professional	Students must obtain at least one	Regulations of Each
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 「G05」 : Professional Certificate Course Remark : 「T02」 : EMI Courses (English-Medium Instruction) are offered as scheduled during the semester.								
First Semester, First Year					Second Semester, First Year				
Course Category	Course Number	Course Name	Credit s/Hou rs	Notes	Course Category	Course Number	Course Name	Credit s/Hou rs	Notes
General Education	496106	Chinese(1)	2/2		General Education	496206	Chinese(2)	2/2	
General Education	492001	English(1)	2/2		General Education	492002	English (II)	2/2	
General Education	4912A0	physical education (1)	1/2		General Education	4912B0	physical education (2)	1/2	
General Education	490106	Community Service and Learning(1)	0/1		General Education	490206	Community Service and Learning(2)	0/1	
General Education	497A00	General Courses (I)	2/2		General Education	497B00	General Courses (II)	2/2	
Major Required	406497	Physics	3/3		Major Required	406431	Calculus ( II )	3/3	
Major Required	406496	Calculus ( I )	3/3		Major Required	435605	Calculus (2)	3/3	
Major Required	406058	Computational Thinking and Creative Programming	2/3	Computer Course	Major Required	406007	Programming Language	2/3	Computer Course
Major Required	406421	Industrial Engineering and Management	3/3		Major Required	406424	Material Management	3/3	
Major Required	406441	Manufacturing Processes	2/3	T02	Major Required	406444	Computer Aided Graphics	1/3	Computer Course
					Major Required	406525	Introduction of Measurement	1/3	
20 Credits, 24 Hours					20 Credits, 27 Hours				
First Semester, Second Year					Second Semester, Second Year				
Course Category	Course Number	Course Name	Credit s/Hou rs	Notes	Course Category	Course Number	Course Name	Credit s/Hou rs	Notes
General Education	496506	Human Rights and Legal	2/2		General Education	496306	Practical Chinese	2/2	
General Education	492003	English(III)	2/2		General Education	496406	Contemporary Taiwan and Moder World	2/2	
General Education	4913C0	physical education (3)	1/2		General Education	492004	English (IV)	2/2	
General Education	497C00	General Courses(III)	2/2		General Education	4913D0	physical education (4)	1/2	
Major Required	406008	Internet Application	2/3	Computer Course	General Education Liberal Arts Elective	497D00	General Courses (IV)	2/2	
Major Required	406403	Statistics ( I )	3/3		Major Required	406516	Statistics ( II )	3/4	
Major Required	406422	Work Study	3/4		Major Required	406519	Database Management System	1/3	Computer Course
Major Required	406518	Economics	2/3		Major Required	406801	Accounting	2/3	

Major Elective	406923	Ethics and Professional Ethics	2/2		Major Elective	406914	Career Consulting	2/2	
Major Elective	406925	Organizational Behavior	2/2		Major Elective	406922	The Training of Creative Thinking	2/2	
Major Elective	406940	Managing English Introduction	2/2		Major Elective	406981	Intelligent robot application	3/3	
Major Elective	406993	Material Requirement Planning	3/3		Major Elective	406998	Occupational safety and hygiene	3/3	
26 Credits, 30 Hours					25 Credits, 30 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	406425	Quality Management	3/4		Major Required	406432	Human Factors Engineering	3/3	
Major Required	406461	System Analysis and Design	2/3	Computer Course	Major Required	406505	Production and Operations Management	3/4	T02
Major Required	406501	Engineering Economy	3/3		Major Required	406529	Enterprise Resource Planning	3/3	
Major Required	406512	Operations Research	3/3		Major Elective	406824	Quality Assurance	3/3	
Major Elective	406806	Reliability Engineering	3/3		Major Elective	406842	Computer Aided Manufacturing	3/3	
Major Elective	406898	Management Information Systems	3/3		Major Elective	406895	Industry Analysis	3/3	
Major Elective	406908	Commerce Automation	3/3		Major Elective	406915	Multimedia Applications	3/3	Computer Course
Major Elective	406921	Marketing Management	3/3		Major Elective	406919	Logistics Management	3/3	
Major Elective	406926	Distribution Industry Management	3/3		Major Elective	406927	Service Management	2/2	
Major Elective	406929	Information Analysis and Application	2/3	Computer Course	Major Elective	406936	Finance Management	3/3	
Major Elective	406939	Cost Accounting	2/2		Major Elective	406982	Regression analysis application	3/3	
Major Elective	406996	Industrial Engineering Practice Internship(1)	4/8		Major Elective	406997	Industrial Engineering Practice Internship(2)	4/8	
					Major Elective	406999	Operational Research Application	2/2	
34 Credits, 41 Hours					38 Credits, 43 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	492106	English Proficiency qualification	0/2	G03	College Major	40TND9	Interdisciplinary program learning	0/1	G01
Major Required	406427	Facilities Planning	3/4		College Major Required	40TNF1	Interdisciplinary Micro Course Program for Engineering Digital Technology	0/1	G02
Major Required	406531	Practical Project	2/2	G04	Major Required	406504	Professional Certificate Verification	0/2	G05

Major Elective	406830	Big Data Analysis Technology and Application	3/3		Major Elective	406701	Lean Production Management	3/3	
Major Elective	406896	Industrial Engineering Practice Internship(3)	4/8		Major Elective	406828	Total Quality Management	3/3	
Major Elective	406916	Production Automation	3/3		Major Elective	406829	Project Management	3/3	
Major Elective	406920	E-Commerce	3/3		Major Elective	406831	Smart Manufacturing	3/3	
Major Elective	406928	Investment and Finance	3/3		Major Elective	406843	Computer Integrated Manufacturing	3/3	
Major Elective	406930	Enterprise Resource Planning System	3/3		Major Elective	406889	Management of Case Study	3/3	
Major Elective	406932	Supply Chain Management	3/3		Major Elective	406897	Industrial Engineering Practice Internship(4)	4/8	
Major Elective	406938	Introduction of Operation Risk Management	3/3		Major Elective	406909	Human Resources Management	3/3	
Major Elective	406946	Business Operations Simulation	3/3		Major Elective	406937	Strategy Management	3/3	
Major Elective	406961	Semester Internship ( I )	9/18		Major Elective	406941	ERP Application for Manufacturing Module	3/3	
Major Elective	406978	Quality Engineering	3/3		Major Elective	406966	Semester Internship ( II )	9/9	
Major Elective	406983	System simulation application	3/3		Major Elective	406979	Introduction to Fuzzy Theory	3/3	
Major Elective	406994	Summer off-campus internship	3/3						
51 Credits, 67 Hours					43 Credits, 51 Hours				