

Department of Industrial Engineering and Management

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	114.04.24	
	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	89 Credits	General Education	19 Credits
		Major Required	70 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	工業工程實務實習(一)、(二)、(三)、(四)為經本系碩士班導師認定應補修之本系大學部專業課程		

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	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
General Education	496806	Literary Appreciation and Expression	2/2		General Education	496906	Practical Chinese	2/2	
General Education	492001		2/2		General Education	492002	English (II)	2/2	
General Education	4912C0	Physical Education(1)	2/2		General Education	4912D0	Physical Education(2)	2/2	
General Education	490306	Community Service & Learning(1)	0.5/1		General Education	490406	Community Service & Learning(2)	0.5/1	
General Education	497A00		2/2		General Education	497B00		2/2	
Major Required	406497	Physics	3/3		Major Required	406431	Calculus (II)	3/3	
Major Required	406496	Calculus (I)	3/3		Major Required	406090	Programming Language	3/3	Computer Course
Major Required	406089	Computational Thinking and Creative Programming	3/3	Computer Course	Major Required	406424	Material Management	3/3	
Major Required	406421	Industrial Engineering and Management	3/3		Major Required	406533	Introduction of Measurement	3/3	
Major Required	406532	Manufacturing Processes	3/3		Major Required	406534	Computer Aided Drawing	3/3	
23.5 Credits, 24 Hours					23.5 Credits, 24 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	496506	Human Rights and Legal	2/2		General Education	496406	Contemporary Taiwan and Moder World	2/2	
General Education	492003	English(III)	2/2		General Education	497D00		2/2	
General Education	497C00		2/2		Major Required	406404	Statistics (II)	3/3	
Major Required	406536	Work Study and Practice	1/1		Major Required	406501	Engineering Economy	3/3	
Major Required	406092	Internet and AI Applications	3/3	Computer Course	Major Required	406537	Database Management System	3/3	T02
Major Required	406403	Statistics (I)	3/3		Major Elective	406800	Accounting	3/3	
Major Required	406535	Work Study	3/3		Major Elective	406802	English for Industrial Engineering	3/3	T02
Major Required	406091	Application of Internet	3/3	Computer Course	Major Elective	406914	Career Consulting	2/2	
Major Elective	406803	Economics	3/3		Major Elective	406922	The Training of Creative Thinking	2/2	
Major Elective	406923	Ethics and Professional Ethics	2/2		Major Elective	406981	Intelligent robot application	3/3	
Major Elective	406925	Organizational Behavior	2/2		Major Elective	406998	Occupational safety and hygiene	3/3	
Major Elective	406940	Managing English Introduction	2/2						

Major Elective	406993	Material Requirement Planning	3/3						
31 Credits, 31 Hours					29 Credits, 29 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	406512	Operations Research	3/3		Major Required	406529	Enterprise Resource Planning	3/3	
Major Required	406538	Quality Management	3/3		Major Required	406540	Production and Operations Management	3/3	T02
Major Required	406539	Quality Management and Practice	1/1		Major Elective	406824	Quality Assurance	3/3	
Major Elective	406806	Reliability Engineering	3/3		Major Elective	406825	Human Factors Engineering	3/3	
Major Elective	406809	System Analysis and Design	3/3	Computer Course	Major Elective	406842	Computer Aided Manufacturing	3/3	
Major Elective	406867	Information Analysis and Application	3/3		Major Elective	406895	Industry Analysis	3/3	
Major Elective	406898	Management Information Systems	3/3		Major Elective	406915	Multimedia Applications	3/3	Computer Course
Major Elective	406908	Commerce Automation	3/3		Major Elective	406919	Logistics Management	3/3	
Major Elective	406921	Marketing Management	3/3		Major Elective	406927	Service Management	2/2	
Major Elective	406926	Distribution Industry Management	3/3		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, 38 Hours					38 Credits, 42 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	492106	English Proficiency qualification	0/2	G03	College Major	40TND9	Interdisciplinary program learning	0/1	G01
Major Required	406531	Practical Project	2/2	G04	College Major Required	40TNF1	Interdisciplinary Micro Course Program for Engineering Digital Technology	0/1	G02
Major Required	406541	Facilities Planning	3/3		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	406832	Responsible consumption and production	3/3	
Major Elective	406930	Enterprise Resource Planning System	3/3		Major Elective	406843	Computer Integrated Manufacturing	3/3	

Major Elective	406932	Supply Chain Management	3/3		Major Elective	406889	Management of Case Study	3/3	
Major Elective	406938	Introduction of Operation Risk Management	3/3		Major Elective	406897	Industrial Engineering Practice Internship(4)	4/8	
Major Elective	406946	Business Operations Simulation	3/3		Major Elective	406909	Human Resources Management	3/3	
Major Elective	406961	Semester Internship (I)	9/18		Major Elective	406937	Strategy Management	3/3	
Major Elective	406978	Quality Engineering	3/3		Major Elective	406941	ERP Application for Manufacturing Module	3/3	
Major Elective	406983	System simulation application	3/3		Major Elective	406966	Semester Internship (II)	9/9	
Major Elective	406994	Summer off-campus internship	3/3		Major Elective	406979	Introduction to Fuzzy Theory	3/3	
51 Credits, 66 Hours					46 Credits, 54 Hours				