Department of Industrial Engineering and Management
Curriculum Requirements for Enrollees in the Academic Year 113 (Fall 2024)

Program	Four-year technical college program of the Day Division			
Group	None			
Class Type	Regular Class			
Special Program	None			
Curriculum Committee	Department Curriculum	113.04.19；115.08.31		
	College Curriculum	113.05.23；115.09.11		
	University Curriculum	113.06.03；115.09.21		
	Academic Affairs	113.06.03；115.09.21		
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	20 Credits	
		Major Required	67 Credits	
		College Major	2 Credits	
Elective	39 Credits	General Education Liberal Arts Elective	8 Credits	
		Major Elective	31 Credits	
		College professional selective courses	0 Credits	
Graduation	Course Title	Description		Regulations/Notes
Interdisciplinary Credit Program	Interdisciplinary Credit Program Studies	Students must complete at least one credit or micro-credit program offered by their home college prior to graduation (or one offered by another college with the approval of their home college).		1. Regulations for the Establishment of Credit Programs
Interdisciplinary Credit Program	Digital Technology Micro-Credit Program Studies	Students must complete the Digital Technology Micro-Credit Program offered by their home college.		2. Guidelines for the Implementation of Interdisciplinary (Micro) Credit Programs

English Certificate	English Proficiency Test	Students must pass the General English Proficiency Test (GEPT) Elementary Level (or an equivalent English proficiency test) prior to graduation.	1. Principles for the Implementation of English Courses and English Proficiency Graduation Requirements
Capstone Project	Capstone Project	Subject to departmental regulations (to be specified by each department).	1. Regulations for the Implementation of Practical Projects, Special Projects, Research Projects, and Graduation Design 2. Regulations of Each Department
Professional Certification	Professional Competency Assessment	Students must obtain at least one relevant professional certificate prior to graduation.	Applicable Departmental Regulations
Other Regulations	跨系選修至多採認9學分		
Remarks	"Computer Course" means computer access is required (computer and internet usage fee). Graduation Requirements: 「G01」：Interdisciplinary Credit Program: Interdisciplinary Credit Program Studies 「G02」：Interdisciplinary Credit Program: Digital Technology Micro-Credit Program Studies 「G03」：English Proficiency Certificate 「G04」：Capstone Project 「G05」：Professional Certificate Course Notes: 「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	Credits /Hours	Notes	Course Category	Course Number	Course Name	Credits /Hours	Notes
General Education Core Required	496806	Literary Appreciation and Expression	2/2		General Education Core Required	496906	Practical Chinese	2/2	
General Education Core Required	492001	English(1)	2/2		General Education Core Required	492002	English (II)	2/2	
General Education Core Required	4912C0	Physical Education(1)	2/2		General Education Core Required	4912D0	Physical Education(2)	2/2	
General Education Core Required	490306	Community Service & Learning(1)	0.5/1		General Education Core Required	490406	Community Service & Learning(2)	0.5/1	
General Education Liberal Arts Elective	497A00	General Courses (I)	2/2		General Education Liberal Arts Elective	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	406090	Programming Language	3/3	上機

Major Required	406089	Computational Thinking and Creative Programming	3/3	上機	Major Required	406424	Material Management	3/3	
Major Required	406421	Industrial Engineering and Management	3/3		Major Required	406444	Computer Aided Graphics	1/3	上機
Major Required	406532	Manufacturing Processes	3/3	T02	Major Required	406525	Introduction of Measurement	1/3	
23.5 Credits, 24 Hours					19.5 Credits, 24 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 Core Required	496506	Human Rights and Legal	2/2		General Education Core Required	496406	Contemporary Taiwan and Moder World	2/2	
General Education Core Required	492003	English(III)	2/2		General Education Liberal Arts Elective	497D00	General Courses (IV)	2/2	
General Education Liberal Arts Elective	497C00	General Courses(III)	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	406403	Statistics (I)	3/3		Major Required	406537	Database Management System	3/3	T02
Major Required	406535	Work Study	3/3		Major Elective	406800	Accounting	3/3	
Major Required	406091	Application of Internet	3/3	上機	Major Elective	406802	English for Industrial Engineering	3/3	T02
Major Elective	406803	Economics	3/3		Major Elective	406914	Career Consulting	2/2	
Major Elective	406923	Ethics and Professional Ethics	2/2		Major Elective	406922	The Training of Creative Thinking	2/2	
Major Elective	406925	Organizational Behavior	2/2		Major Elective	406981	Intelligent robot application	3/3	
Major Elective	406940	Managing English Introduction	2/2		Major Elective	406998	Occupational safety and hygiene	3/3	
Major Elective	406993	Material Requirement Planning	3/3						
28 Credits, 28 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	406512	Operations Research	3/3		Major Required	406432	Human Factors Engineering	3/3	
Major Required	406538	Quality Management	3/3		Major Required	406529	Enterprise Resource Planning	3/3	
Major Required	406539	Quality Management and Practice	1/1		Major Required	406540	Production and Operations Management	3/3	
Major Elective	406806	Reliability Engineering	3/3		Major Elective	406824	Quality Assurance	3/3	
Major Elective	406809	System Analysis and Design	3/3	上機	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	上機
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

Course Category	Course Number	Course Name	Credits /Hours	Notes
General Education Core Required	492249	English Proficiency Qualification	1/N	G03
Major Required	406531	Practical Project	2/2	G04
Major Required	406541	Facilities Planning	3/3	
Major Elective	406830	Big Data Analysis Technology and Application	3/3	
Major Elective	406896	Industrial Engineering Practice Internship(3)	4/8	
Major Elective	406900	Semester Internship (1)	9/9	
Major Elective	406916	Production Automation	3/3	
Major Elective	406920	E-Commerce	3/3	
Major Elective	406928	Investment and Finance	3/3	
Major Elective	406930	Enterprise Resource Planning System	3/3	
Major Elective	406932	Supply Chain Management	3/3	
Major Elective	406938	Introduction of Operation Risk Management	3/3	
Major Elective	406946	Business Operations Simulation	3/3	
Major Elective	406978	Quality Engineering	3/3	
Major Elective	406983	System simulation application	3/3	
Major Elective	406994	Summer off-campus internship	3/3	
52 Credits, 55 Hours				

Second Semester, Fourth Year

Course Category	Course Number	Course Name	Credits /Hours	Notes
College Major Required	40TNJ9	Interdisciplinary Credit Program Studies	1/1	G01
College Major Required	40TNK1	Engineering Digital Technology Micro-Credit Program Studies	1/1	G02
Major Required	406530	Professional Competency Assessment	1/N	G05
Major Elective	406701	Lean Production Management	3/3	
Major Elective	406828	Total Quality Management	3/3	
Major Elective	406829	Project Management	3/3	
Major Elective	406831	Smart Manufacturing	3/3	
Major Elective	406832	Responsible consumption and production	3/3	
Major Elective	406843	Computer Integrated Manufacturing	3/3	
Major Elective	406889	Management of Case Study	3/3	
Major Elective	406897	Industrial Engineering Practice Internship(4)	4/8	
Major Elective	406909	Human Resources Management	3/3	
Major Elective	406937	Strategy Management	3/3	
Major Elective	406941	ERP Application for Manufacturing Module	3/3	
Major Elective	406966	Semester Internship (Ⅱ)	9/9	
Major Elective	406979	Introduction to Fuzzy Theory	3/3	
49 Credits, 52 Hours				