

National Kaohsiung University of Applied Sciences
Industrial Engineering and Management Department, College of Engineering
Curriculum of Four-Year Program in Academic Year 104

Passed at Department Curriculum Committee Meeting on 18 Mar, 2014

Passed at Department Affairs Meeting on 18 Mar, 2014

Passed at College Curriculum Committee Meeting on 4 Apr, 2014

Passed at University Curriculum Committee Meeting on ○○ ○○, ○○

Passed at Academic Affairs Meeting on ○○ ○○, ○○

Year	1 st academic year		2 nd academic year		3 rd academic year		4 th academic year	
Semester	Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2
University required common courses (29/51)	Physical education(1st) 0/2 Practical English 2/2 Service Learning(1st) 0/2.5 University Entry0/1	Physical education(2nd) 0/2 Advanced practical English 2/2 Service Learning(2nd) 0/2.5	Physical education(3rd) 0/2 English listening and speaking training(1st) 1/2 Chinese(1st) 2/2 Core curriculum(1st) 2/2	Physical education(4th) 0/2 English listening and speaking training(2nd) 1/2 Chinese(2nd) 2/2 Core curriculum(2nd) 2/2 Professional ethics 1/1	Physical education(5th) 0/2 Core curriculum(5th) 2/2 Core curriculum(3rd) 2/2 Extended general education 2/2 English competence training 0/2	Physical education(6th) 0/2 Extended general education 2/2	Applied Writing & practice 2/2 Core Curriculum(4th) 2/2 Extended general education 2/2	
Total	2/7.5	2/6.5	5/8	6/9	6/8 or 6/10	2/6 or 2/4	6/6	
College required common courses (9/9)	Calculus(1st)3/3 Physical 3/3							
Total	6/6							
Department required professional courses (55/54/+320)	Production management 3/3 Computer programming 3/3 Introduction to industrial Engineering and management2/2 Creative	Calculus(2nd) 3/3 Economics 3/3 Manufacturing processes 3/3 Introduction to technology management 3/3	Engineering economics 3/3 Statistics(1st) 3/3 Human factor 3/3 Introduction to enterprise resource planning 3/3 Service science	Statistics(2nd) 3/3 Decision making analysis under multi-objectives 3/3 Production scheduling 3/3 Programming and application 3/3	Off-campus internship 3/320 Quality Management3/3	Practice Project(1st) 1/2	Practice Project(2nd) 1/2	

		problem solving 3/3		and innovation 3/3					
Total		11/11	12/12	15/15	12/12	6/3+320	1/2	1/2	
SW	Basis Elective							Off-campus internship(1st) 9credits	Off-campus internship(2nd) 9credits
	Human Factors and production manufacturing program		Engineering graphics 3/3 Work study 3/3	Industrial automation 3/3 Facilities planning 3/3		Physiology foundations in H. F. engineering3/3	Industrial safety and hygiene3/3	Project management 3/3	Lean production amd management3/3 Factory management practice3/3
	Statistic quality management and Quantitative decision making program				Operations research 3/3	Regression Analysis3/3 Performance management3/3	Total quality management 3/3 Introduction to taguchi-method3/3 Statistical package3/3	Experimental design3/3 Reliability analysis 3/3	Sampling survey3/3
	Industrial management and electronic program	Managerial mathematics 3/3	Database system 3/3 Accounting 3/3	Materials management3/3	Logistics management 3/3	E-commerce3/3 Business policy-making analysis3/3	Supply chain management 3/3 Industrial operation and improvement3/3		
	Service innovation and technology management program				Introduction to innovative product R&D management3/3	Introduction to technology and innovation management3/3 Introduction to industrial analysis and innovation3/3	Introduction to technology transfer and evaluation management3/3 Introduction to innovation and intellectual property management3/3	Innovation and entrepreneur practie3/3 Practice and application of innovation management3/3	Patent analysis and intelletual property management3/3 Introduction to new product innovation strategy3/3

I. Remarks:

1. This curriculum is applied to students admitted in Academic Year 104
2. Credit hours of each course (or total) are marked with "credit/hour."
3. Courses of inter-disciplinary programs offered by other departments shall be regarded as elective professional courses of the department.
4. Military Education has become elective courses since Academic Year 2011. The credits are not counted to meet graduation requirements. The courses shall be offered based on practical needs.
5. The course of English Training shall be handled in accordance with the regulations governing undergraduate students' exemption of English training courses of the University.
6. Elective courses: the courses listed in the table are planned courses, which will be offered based on practical needs.
7. For other instruction on course selection, students must follow "Course Selection Guidelines" of the University.

II. Requirement for graduation:

1. The minimal credit number for graduation is 130: (1) 29 credits of University required common courses (including General Education Core and Extension courses) (2) 9 credits of College required common courses (3) 55 credits of department required professional courses (4) at least 37 credits of department elective professional courses (A maximum of 6 credits of from elective professional courses offered by other departments will be recognized.)
2. Students are required to complete the courses of at least one program at the University. (Students may also fulfill the requirement by completing the courses of a module or a track and obtaining a certificate at the department.)
3. Students admitted since Academic Year 2011 are required to complete at least one long-distance course in order to graduate.
4. General Education Core I to V do not have to be taken in sequence. Two to three courses are offered for each core. Students may take a course in each category and acquire 10 credits in total. Courses offered are as follows :
 - General Education Core I : Reading of Humanistic Masterpieces; Introduction to Artistic Creativity
 - General Education Core II: Sociology and Contemporary Society; Management and Knowledge Economics
 - General Education Core III: The Laureates of Nobel Prizes; Modern Issues of Technology
 - General Education Core IV: Taiwan Society and Culture; History of Modern Western Civilization; Introduction to Philosophy
 - General Education Core V: Democracy and Law; Modern Civil Consciousness
5. General Education Extension are separated into three categories—society, humanities, and technology. Students must take three courses for 6 credits.
6. Physical Education is a required course in the first year. The credits are not counted to meet graduation requirements. Students who fail in the course are not allowed to graduate.
7. Students admitted since Academic Year 2013 must obtain a certificate of English proficiency equivalent to TOEIC 400 for graduation.
8. Practicum outside the campus is a University required course and shall be handled in accordance with “National Kaohsiung University of Applied Sciences Regulations Governing Students' Practicum outside the Campus.”

III. Other requirements set by the department:

1. The students studying in any one of the four Program: Program to attend at least every 18 credits required credits and passing grades awarded Certificate Program.
 - Track of Human Factors and production manufacturing program --Professional must take: Human factor, Production scheduling and 4 Elective Program courses.
 - Track of Statistic quality management and quantitative decision making program --Professional must take: Quality management, Decision making analysis under multi-objectives, and 4 Elective Program courses.
 - Track of Industrial management and electronic program --Professional must take: Introduction to enterprise resource planning, Programming and application, and 4 Elective Program courses.
 - Track of Service innovation and technology management program --Professional must take: Introduction to technology management, Introduction to service science and innovation, and 4 Elective Program courses.