

	First Academic year		Second Academic year		Third Academic year		Fourth Academic year	
Semester	1 <sup>st</sup> term	2 <sup>nd</sup> term	1 <sup>st</sup> term	2 <sup>nd</sup> term	1 <sup>st</sup> term	2 <sup>nd</sup> term	1 <sup>st</sup> term	2 <sup>nd</sup> term
compulsory course (29/50)	Physics (1) 3/3 Physical Education (1) 0/2 Calculus (1) 3/3 Chinese (1) 2/2 Practical English 2/2 Service Learning (1) 0/2 Core Curriculum (1) 2/2 University Started 0/1	Physical Education (2) 0/2 Chinese (2) 2/2 Advanced practical English 2/2 Service Learning (2) 0/2 Core Curriculum (2) 2/2	Physical Education(3) 0/2 English listening and speaking training (1) 1/2 Core Curriculum (3) 2/2 practical writing & practice 2/2	Physical Education(4) 0/2 English listening and speaking training (2) 1/2 Core Curriculum (4) 2/2	Physical Education(5) 0/2 English competence Training 0/2 Core Curriculum (5) 2/2	Physical Education(6) 0/2 Extended General Education 2/2	Extended General Education 2/2 Extended General Education 2/2	Professional ethics 1/1
	6/11	6/10	5/8	3/6	2/6	2/4	4/4	1/1
Specialized compulsory course (73/93)	Physical Chemistry Lab (1) 1/3 Computer aided mechanical drawing 2/3 Precision Instrument & Measurement 2/3 Chemistry 3/3 Computer programming 2/3	Calculus (2) 3/3 Physics (2) 3/3 Physical Chemistry Lab. (2) 1/3 Mechanical manufacture practice 1/3 Precision manufacturing 3/3 Engineering materials 3/3 Static mechanics 3/3	Engineering mathematics (1) 3/3 Dynamics 3/3 Electromechanics 3/3 Thermodynamics 3/3 Mechanics of Materials 3/3	Engineering mathematics (2) 2/2 Materials Testing 1/3 Electrical Experiment 1/3 Mechanisms 3/3 Numerical control tools machine & practice 2/3	Machine Design 3/3 Applied Electronics 3/3 Automatic Control 3/3 Heat transfer 3/3	Thermofluid experiment 1/3 Electronic circuit Ractice 1/3 Group project (1) 1/3	Group project (2) 1/3	
	10/15	17/21	15/15	15/18	12/12	3/9	1/3	
Specialized Elective course (at least 18)	Engineering graphics 2/3 Introduction to mechanical engineering 2/2 Advanced computer aided mechanical drawing 2/3		Casting 3/3 Introduction to engineering design 3/3 Applied Mechanics of Materials 3/3 Thermodynamics with Application 3/3 Fluid mechanics 3/3 Computer Aided Solid Geometric Design 3/3 Cutting principle 3/3 Machine tools 3/3 Industrial safety and health 3/3 Ergonomics / human factors 3/3		Computer Aided Mechanism Design 3/3 Computer aided manufacture 3/3 Heat engines 3/3 Numerical analysis 3/3 Metal Forming 3/3 Dynamics of Machinery 3/3 Heat Exchanger Design and Its Application 3/3 Application of mechanical design 3/3 Creative Design Methods 3/3 Creative Mechanism Design 3/3 Photo-Electric Engineering 3/3 3D computer graphics programming 3/3 Taguchi quality design 3/3 Manufacturing process analysis and design 3/3 Metal Forming Process Design and Analysis 3/3 Non-traditional machining processes 3/3 Energy Application 3/3 Internal Combustion Engine 3/3		Fabrication and Inspection of Pressure Vessel 3/3 Plastics injection molding 3/3 Patent analysis 3/3 Factory Management 3/3 Power plant 3/3 Finite element analysis 3/3 Refrigeration & air conditioning 3/3 Design of Pressure Vessel 3/3 Die & mold design 3/3 Precision Machinery Calibration and Compensation 3/3 Reverse Engineering 3/3 Laser Machining 3/3 Labor safety and health law 3/3 Introduction to LCD fabrication technology 3/3	

3/3 (Credit/teaching hours per week)