

**建國科技大學 日間部 111學年度入學 四年制 電子工程系 開課表**  
Curriculum for Department of Electrical Engineering, 2022, Day School, Chienkuo Technology University

111403

共同必修	通 識 General Education	一年級Freshman				二年級Sophmore				三年級Junior				四年級Senior				合計 Total		
		上學期 First semester		下學期 Second semester		上學期 First semester		下學期 Second semester		上學期 First semester		下學期 Second semester		上學期 First semester		下學期 Second semester				
		學分 Credit	時數 Hour	學分 Credit	時數 Hour	學分 Credit	時數 Hour	學分 Credit	時數 Hour	學分 Credit	時數 Hour	學分 Credit	時數 Hour	學分 Credit	時數 Hour	學分 Credit	時數 Hour			
專業基礎 Professional Basics	國文 Chinese	2	2	2	2	國語英文 Workplace English	2	2	傳導(一) Liberal Arts (I)	2	2									
	英文 English	2	2	2	2	歷史與人生 Historiography & Life	2	2	傳導(二) Liberal Arts (II)	2	2									
	運動與健康(一)(二) Exercise and Health (I-II)	2	2	2	2	公民社會 Civil Society			傳導(三) Liberal Arts (III)			2	2							
	藝術入門 The Gateway to Arts			2	2			傳導(四) Liberal Arts (IV)			2	2								
	<b>小計total</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>8</b>	<b>小計total</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>小計total</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>小計total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	基礎數學 Foundation mathematics	3	3																	
	化學 Chemistry	2	2	2	2															
	物理 Physics	3	3	3	3															
	微積分 Calculus			3	3															
	<b>小計total</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>小計total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>小計total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>小計total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
專業必修 Professional Required	數位邏輯與實驗 Digital logic and experimental	3	4			電子學(一)(二) Electronic(1)(2)	3	3	3	3	專題製作(一)(二) Graduation Project(1)(2)	1	2	1	2					
	計算機概論 Introduction to Computer Science	3	3			電子實習(一)(二) Electronics Practicum(1)(2)	2	3	2	3	工業電子實習 Industrial Electronics Lab	3	4							
	印刷電路板製作實習 PCB Design and Manufacturing Lab	2	3			半導體概論與實習 Semiconductors	3	4			科技英文 Technology English			2	2					
	電腦軟體應用 Application of computer software	1	2			電路學(一) Electronic Circuits (1)	3	3			電子科技創意 Electronic-technology innovation	3	3							
	計算機程式 Computer Programming			2	3	微電腦應用與實習(一)(二) Microcomputer Applications and Practicum (1)(2)	3	4	3	4										
	數位系統設計與實習 Digital Systems Design and Laboratory			3	4	光電工程與實習 Photonic Engineering and Experiments			3	4										
						物件導向程式設計 Object-Oriented Programming			3	3										
	<b>小計total</b>	<b>9</b>	<b>12</b>	<b>5</b>	<b>7</b>	<b>小計total</b>	<b>14</b>	<b>17</b>	<b>14</b>	<b>17</b>	<b>小計total</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>小計total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>必修合計Total</b>	<b>23</b>	<b>26</b>	<b>21</b>	<b>23</b>	<b>必修合計Total</b>	<b>18</b>	<b>21</b>	<b>16</b>	<b>19</b>	<b>必修合計Total</b>	<b>8</b>	<b>10</b>	<b>10</b>	<b>11</b>	<b>必修合計Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	專業選修 Professional Elective	基礎 foundation	工程數學(必選) Engineering Mathematics(Required)	2	2			技能實務訓練(必選) Practical technique training(Required)	3	4			工業安全與衛生 Industrial Safety & Health	3	3					
電路學(二) Electronic Circuits (2)						3	3	電子學(三) Electronics(三)	3	3			智慧財產與專利申請實務 Intellectual Property and The Practice of Patent Application	3	3					
訊號與系統 Signals and Systems						3	3	從業實習 Industrial practice	2	2			電子產品生產實務 Manufacture and Practice of Electronic Products			3	3			
								電磁學 Electromagnetics			3	3	電子產品銷售實務 Electronic products sales practices			3	3			
資訊科技 Information Technology		生活資訊與通訊 Introduction of life information and communication	3	3			網路應用與實習 Internet of Things application and Practicum	3	4			動畫製作與實習 Animation and internships	3	4						
		手機app程式設計 Smartphone_app_program design				3	3	人工智慧應用與實習 Artificial Intelligence Application Practice	3	4			互動式網頁設計 Active Web Page Programming	3	3					
								智慧生活設計與實習 Smart Life Design and Practice			3	4	遊戲程式設計 Design of game program			3	3			
								大數據應用設計與實習 Design and Practicing for Big Data Applications			3	4	多媒體編輯實務 Multimedia editing practices			3	3			
應用電子 Applied electronics		微電腦應用 Microcomputer applications	視窗程式設計 Windows Programming Languages	3	3			感測元件應用與實習 Introduction of common sensors and its applications	3	3			微控制器應用與實習 Application and experiment of microprocessor	3	4					
			印刷電路板進階設計與製作 Design and manufacture of printed circuit board advanced				3	3	圖控軟體程式設計與應用 Design and application of the graphic control software Program	3	3			微控制器周邊應用與實習 The microcontroller peripheral applications and experiment			3	4		
	光電半導體 Optoelectronic semiconductors							資料擷取與信號量測分析 Data acquisition and measuring analysis			3	3	嵌入式系統與實習 Embedded System and Experiment			3	4			
								真空設備及薄膜技術 vacuum thin film technology equipment	3	3			系統晶片設計應用與實習 System Chip Design- Application and Practice			3	4			
								LED照明系統之分析與設計 Analysis and design of the LED lighting system			3	3	有機發光元件 Organic Light-emitting Devices	3	3					
								雷射原理與應用 Laser Principles & Applications	3	3			背光顯示器之分析與設計 Back-Light Module of LCD Analysis and Design	3	3					
						太陽能工程實務 Practice of Solar Energy Engineering	3	3			半導體製程技術 Semiconductor Fabrication Technology			3	3					
											平面顯示器學 Introduction to Flat Panel Display			3	3					
												LED晶粒製造與封裝 The technology of LED Die Manufacture and packaging			3	3				
技師 再進修 Vocational re-engineering	嵌入式遊戲製作基礎與實習 Basis and experiment of embedded game manufacture			3	6	嵌入式單晶片應用與實習 Embedded Micro-controller Applied Practice	3	6			嵌入式系統與實習 Design and Implementation of Robotic Embedded Systems	3	6							
校訂課程 Revision courses	全民國防教育軍事訓練(一)-選修 National Defense Education Military Training(I)(Elective)	0	2	0	2							業界實習訓練(選修) Practice and Research on Mechanical Industry(Elective)	4	4						
	勞作教育 Labor Education	0.5	1	0.5	1							業界實習報告(選修) Report and Research on Mechanical Industry(Elective)	2	2						
	青春護照 Youth Passport	0.5	1	0.5	1							業界實習成果評修(選修) Practice Result and Research on Mechanical Industry(Elective)	3	3						
												業界實習能力研修(選修) Industrial Capabilities Training(Elective)			4	4				
												業界實習報告評修(選修) Industrial Capabilities Report(Elective)			2	2				
備註	1.必修總學分數合計 98 學分。(共同必修 46 學分,專業必修 52 學分) 選修最低總學分數 30 學分。(片修選修學分最多不超過12學分) The total number of compulsory credits is 98 credits(46 credits of common compulsory courses and 52 credits of major compulsory courses)The minimum total number of elective credits is 30 credits.(A maximum of 12 credits of elective credits from departments will be recognized). 2.最低畢業總學分 128 學分。 MSM department requires a minimum of 128 credits for graduation. 3.一年級至三年級每學期至少修習16學分,至多修習27學分,四年級每學期至少修習9學分,至多修習36學分。 For the first three years, students must take at least 16 credits and no more than 27 credits per semester. For the fourth year, students must take at least 9 credits and no more than 36 credits per semester. 4.博導一博導四可不必依序修習,但須修完博導一博導四方可畢業。 Students do not need to take the "Liberal Arts" courses (I to IV) in sequence, but they must complete all four courses to graduate. 5.96.03.06表課程與教學委員會通過校外實習辦法。 The Department Curriculum and Teaching Committee meeting approved the off-campus internship method on March 6, 2007. 6.本校學生除應依本校學則規定,修滿應修之學分外,應取得相關證照,以佐證具備下列基本能力,始得畢業。 一、專業能力 二、語文能力 三、電腦能力 身心障礙學生及外國學生不受前項畢業門檻規定之限制。 In addition to completing the required credits according to the school's regulations, students must also obtain relevant certifications to demonstrate that they possess the following basic abilities in order to graduate: 1. Professional ability 2. Language ability 3. Computer ability Students with special conditions are exempt from these requirements. 7.依教育部規定校外實習只計18學分,多修學分按計為興趣修不列入畢業學分。 According to the regulations of the Ministry of Education, off-campus internships only count for 18 credits. Additional credits will be counted as interest electives and will not be included in graduation credits. 8.選修工程學院課程可計入畢業學分以12學分為限。(計畫課程除外) The number of elective courses taken in the School of Engineering that can be counted towards graduation is limited to 12 credits. (Except planned courses) 9.工程學院共同必修:電腦軟體應用(1學分/2學時),計算機程式(2學分/3學時),科技英文(2學分/2學時)。 Required courses of the College of College of Engineering include: Application of computer software (1 credits/2 hours), Computer Programming (2 credits/3 hours), and Technology English (2 credits/2 hours). 10.112.03.05表課程與教學委員會通過-112.03.16表課程與教學委員會通過-112.03.3表課程與教學委員會通過-112.04.19表課程與教學委員會通過。 Passed by the Department Curriculum and Teaching Meeting on March 1, 2023 and Passed by the Curriculum and Teaching Committee of the College on March 16, 2023 and Passed by the school-level curriculum committee on March 31, 2023 and approved by CTU Academic Affairs Meeting on April 19, 2023.																			