

**建國科技大學 日間部 110學年度入學 四年制 電子工程系 開課表**  
**Curriculum for Department of Electrical Engineering, 2021, Day School, Chienkuo Technology University**

110403

共同必修 Common Required	通 流 General Education	一年級Freshman				二年級Sophomore				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	學分 Credit	時數 Hour			
專業基礎 Professional Basics	國文 Chinese	2	2	2	2	職場英文 Workplace English	2	2			博雅(一) Liberal Arts (I)	2	2							
	英文 English	2	2	2	2	歷史與人生 Historiography & Life	2	2			博雅(二) Liberal Arts (II)	2	2							
	運動與健康(一)(二) Exercise and Health(一)(二)	2	2	2	2	公民社會 Civil Society			2	2	博雅(三) Liberal Arts (III)			2	2					
	藝術入門 The Gateway to Arts			2	2						博雅(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>		
專業必修 Professional Required	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>16</b>
專業必修 Professional Required	數位邏輯與實習 Digital logic and experimental	3	4			電子學(一)(二) Electronics(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			電子學(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 practicum and Introduction to	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 innovate			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										
<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>8</b>	<b>10</b>	<b>10</b>	<b>11</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						
		電子學(二) Electronic Circuits (2)				3	3	電子學(二) Electronics(二)	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	校外實習 Industrial practice	2	2		電子產品生產實務 Manufacture and Practice of Electronic Products			3	3				
	資訊科技 Information Technology	生活溝通與導論 Introduction of life information and communication	3	3				物聯網應用與實習 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							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	視窗程式設計 Windows Programming Languages	3	3				感測元件與應用實務 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				
	資料採集與信號測量分析 Data acquisition and measuring analysis						資料採集與信號測量分析 Data acquisition and measuring analysis			3	3	嵌入式系統與實習 Embedded System and Experiment			3	4				
光電子導體 Optoelectronic semiconductors	真空設備及薄膜技術 vacuum thin film technology equipment						LED照明系統之分析與設計 Analysis and design of the LED lighting system			3	3	超大規模電路製程技術 Very Large-Scale Integrated Circuit Process Technology	3	3						
	雷射原理與應用 Laser Principles & Applications						雷射原理與應用 Laser Principles & Applications			3	3	背光模組之分析與設計 Back-Light Module of LCD Analysis and Design	3	3						
	太陽能工程實習 Practice of Solar Energy Engineering						太陽能工程實習 Practice of Solar Energy Engineering			3	3	半導體製程技術 Semiconductor Fabrication Technology			3	3				
技職 再進 Vocational re-engineering	嵌入式遊戲製作基礎與實習 Basis and experiment of embedded game manufacture			3	6	嵌入式晶片應用實習 Embedded Micro-controller Applied Practice			3	6	嵌入式綠色節能技術與實習 Theory and Practice of Embedded Green Energy Technology			3	6	機器人-嵌入式系統設計與實習 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							產業實習訓練研習(選修) Practice and Research on Mechanical Industry(Elective)	4	4						
	勞作教育 Labor Education	0.5	1	0.5	1							業界實習報告研習(選修) Report and Research on Mechanical Industry(Elective)	2	2						
	青春護照 Youth Passport	0.5	1	0.5	1							業界實習成果研習(選修) Practice Result and Research on Mechanical Industry(Elective)	3	3						
												業界實習能力研習(選修) Industrial Capabilities Traininer(Elective)			4	4				
												業界實習成果報告研習(選修) Industrial Capabilities Report(Elective)			2	2				
備註 Note	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。(專業選修學分最多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 each department 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.博雅一博雅四可不必依序選擇，但須修完博雅一博雅四方可畢業。 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系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限規定之限制。 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按計18學分，多修學分按計為興趣選修不列入畢業學分。 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). 10.112.03.01系課程與教學委員會通過：112.03.16課程與教學委員會通過：112.03.31校級課程委員會通過：112.04.19校務會議訂定通過。 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 the Academic Affairs Meeting on April 19, 2023.																			