國立台灣科技大學 114學年 第2學期　課程大綱

Spring 2026 NTUST Course Outline

授課教師：Saravanan

Instructor:Saravanan Adhim

課程名稱：電子工程專論(三)

Course Title：Special Topics on Electronic Engineering (III)

2026/11/3

課程代號：ET5923701 Course Code 學分數：3 Credits	必選修：選修/半學年 Required/Electve:Elective/Half Yr. 先修課程： Prerequisites
節次教室：F6(IB-607) F7(IB-607) F8(IB-607) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	可能教授的題材包含： 本「電子工程專題」課程的主要目的是向學生提供現代電子工程的全面知識和技術。 The main purpose of this “Special Topics on Electronic Engineering” course is to provide comprehensive knowledge and techniques on modern electronic engineering to the students".
課程大綱： Outline of Lectures	可能教授的題材包含： 先進電子元件、先進電晶體元件及積體電路製造技術、光纖及其應用、工業控制電子元件、物聯網設備、高頻積體電路、光電工程、先進矽技術、先進CMOS設計與製造、光電元件技術及OLED-QLED-uLED技術。Advanced Electronic components, advanced Transistor components and integrated circuits fabrication technology, Optical fibers and their applications, Industrial control electronic components, IoT devices, High Frequency Integrated Circuit, Optoelectronic engineering, Advanced silicon technologies, advanced CMOS design and fabrication, Photovoltaic device technology and OLED-QLED-uLED technology.
授課方式： Method of Instruction	講授 Lecture：60% 分組討論 Group discussion：10% 案例研討 Case study：10% 操做練習 Practical exercises：20% 講授 Lecture：%
教科書： Textbooks	1. Allan R. Hambley, “Electrical Engineering: Principles and Applications,” 7th ed. 2018, Pearson. 2. Semiconductor Pyhsics-Donald A.Neimen. Third edition. 3. Nanotechnology and Nanoelectronics – Materials, devices and measurement Techniques– Springer.
參考書目： References	1. Class handouts 2. Invited Seminar from electronic Industry (TSMC/Micron). 3. Research articles

修課須知： Notice	There is a TA.
評量方式： Grading	*Attendance and Assignments: 20%. *Mid-term : 40%. *Final Exam/report: 40%.
備註說明： Notes	Basic knowledge on electronic components.