國立高雄科技大學電機與資訊學院建工校區
電子工程系博士班
電腦與通訊工程組資格考核筆試參考用書

111 年 4 月 19 日 110 學年度第 2 學期第 4 次電通系務會議通過
115 年 9 月 24 日 115 學年度第 1 學期第 4 次電通系務會議通過

考試科目	用書及範圍
線性代數	Steven J. Leon, *Linear Algebra with Applications*, 10th ed. (Global Edition), Pearson Prentice Hall, 2021. 範圍：Chapter 1, 2, 3, 4 (all sections), Chapter 5 (section 1, 2, 3, 5, 6), Chapter 6 (section 1, 3, 4)
隨機變數與統計	Alberto Leon-Garcia, *Probability, Statistics, and Random Processes for Electrical Engineering*, 3rd ed., Prentice Hall, 2008. 範圍：Ch3.1~3.5, Ch4.1~4.7, Ch5.1~5.9, Ch6.1~6.4, Ch7.1~7.3
電子學	Behzad Razavi, *Fundamentals of Microelectronics*, 2nd ed., John Wiley & Sons, 2012.
作業系統	Abraham Silberschatz, Peter Baer Galvin, and Greg Gagne, *Operating System Concepts* 10/e global edition, John Wiley & Sons, 2019.（新月代理） 範圍：Part One~Part Five
通訊原理	Bruce Carlson, *Communication Systems*, 5th ed., McGraw-Hill. 範圍：Ch1~Ch6, Ch11, Ch14.
訊號與系統	J. H. McClellan, R. W. Schafer and M. A. Yoder, "DSP First" Global Edition, 2/E, Pearson Education, Inc., Hoboken, NJ, USA, 2016. (開發代理)
電腦演算法	R.C.T. Lee, S.S. Tseng, R.C. Chang, Y.T. Tsai, Introduction to the Design and Analysis of Algorithms: A Strategic Approach, McGraw-Hill, International Edition, 2008.
計算機組織	D.A. Patterson and J.L. Hennessy, *Computer Organization and Design MIPS Edition: The Hardware/Software Interface*, 6th ed., Morgan Kaufmann, 2021. 範圍：Ch.1~5.
離散數學	Kenneth H. Rosen, *Discrete Mathematics and Its Applications*, 8th ed., McGraw Hill, 2019. 範圍：Ch. 1~11. (東華圖書代理)
資料庫系統	Abraham Silberschatz and Henry F. Korth, Database System Concepts, 6th ed., Mc Graw Hill, 2011. (新月圖書代理)
資料結構	Ellis Horowitz, Sartaj Sahni, and Susan Anderson-Freed, *Fundamentals of Data Structures in C*, 2nd ed., Silicon Press, 2007. (開發代理)
數位系統設計	Digital Design (with an Introduction to the Verilog HDL, VHDL, and System Verilog) Authors: M. Morris Mano, Michael D. Ciletti Publisher: Pearson
電路學	Raymond A. DeCarlo and Pen-Min Lin, *Linear Circuit Analysis*, 2nd ed., Oxford University Press, 2001.
複變數	Dannis G. Zill and Patrick D. Shanahan, *A First Course in Complex Analysis with Applications*, 2nd ed., Jones & Bartlett Publishers, 2009.（滄海代理）