

CIRCUITS & ELECTRONICS			
B1	CIRCUITS Sinusoidal Steady State Analysis	“Electric Circuits,” J. W. Nilsson & Susan A. Riedel, 9 th ed., Prentice Hall, Chapters 7 – 10.	Dr. Lakdawala
B2	CIRCUITS Circuit Analysis with the Laplace Transform	“Electric Circuits,” J. W. Nilsson & Susan A. Riedel, 9 th ed., Prentice Hall, Chapter 13.	Dr. Lakdawala
B3	ELECTRONICS	“Microelectronic Circuits,” A. S. Sedra and K. C. Smith, 5 th ed., Oxford Univ. Press, New York, 1998. Chapters: 2-5.	Dr. Namkoong
SYSTEMS, SIGNAL AND IMAGE PROCESSING			
C1	IMAGE PROCESSING	“Digital Image Processing,” R. C. Gonzalez and R. E. Woods, 3 rd ed., Prentice Hall, 2007, Chapters 1 – 4.	Dr. Chen
C2	DIGITAL SIGNAL PROCESSING Discrete-Time System Analysis	“Linear Systems and Signals,” B. P. Lathi, 2 nd ed., Oxford, 2005, Chapters 3, 5.	Dr. Li
C3	DIGITAL SIGNAL PROCESSING Sampling and Fourier Analysis of Discrete-Time Signals and Systems	“Linear Systems and Signals,” B. P. Lathi, 2 nd ed., Oxford, 2005, Chapters 8, 9.	Dr. Li
C4	CONTROL SYSTEMS	“Control Systems Engineering,” N. S. Nise, 6 th ed., Wiley, 2011, Chapters 2 – 11, Secs. 12.1 – 12.2.	Dr. González
C5	COMMUNICATION SYSTEMS	“Fundamentals of Communication Systems,” J. G. Proakis and M. Salehi, Pearson/Prentice-Hall, 2005. Chapters 1 – 7.	Dr. Popescu
C6	COMMUNICATION NETWORKS	<p>Data Link Layer error detection and correction methods</p> <p>Sliding window protocols</p> <p>Multiple access protocols (Aloha variants, CSMA with CD/CA)</p> <p>Routing algorithms (Link State, Distance Vector, RIP, OSPF)</p> <p>TCP congestion control</p> <p>“Computer Networks,” A. S. Tanenbaum, Prentice Hall, 5th Ed., 2011, Sections 3.1 – 3.4, 4.1 – 4.2, 5.1 – 5.6, 6.2, 6.4, 6.5.</p> <p>“Computer Networking: A Top-Down Approach,” J. F. Kurose and K. W. Ross, 5th ed., 2010 Chapters 1, 3–5.</p>	Dr. Xin

COMPUTER SYSTEMS

Ch. 1. Microprocessor systems, microcontrollers and

F1 MICROPROCESSORS

CYBERSECURITY

G1	COMPUTER NETWORKS AND SECURITY	“Computer Networking: A Top-Down Approach,” J. F. Kurose and K. W. Ross, 8th ed., 2021, Chapters 7 and 8	Dr. Alsharif
G2	CYBER DEFENSE FUNDAMENTALS	“Introduction to Cryptography with Coding Theory”, Wade Trappe and Lawrence C. Washington, Chapter 1-9	Dr. Wu
G3	CYBER PHYSICAL SYSTEM SECURITY	“Security in Computing”, 5th edition, by Charles Pfleeger, Shari Lawrence Pfleeger, and Jonathan Margulies, Chapter 3-9	Dr. Wu
G4	FOUNDATIONS OF CYBERSECURITY	Set-UID Programs, Buffer Overflow Attack and Format String Vulnerability. “Computer Security- A Hands-on Approach”, Wenliang Du, 1 st Edition, Chapters 1, 4 and 6 E. A. Lee and S. A. Seshia, Introduction to Embedded Systems - A Cyber-Physical Systems Approach, Second Edition, by, MIT Press, 2017.	Dr. Shetty
G5	SECURITY AND PRIVACY OF EMBEDDED SYSTEMS	Link to download pdf: https://ptolemy.berkeley.edu/books/leeseshia/	