

[NOTE: Please feel free to use the most recent edition of textbooks referenced in this list](#)

### **17-Comp-A1 Electronics**

Sedra & Smith, Microelectronic Circuits, seventh edition

### **17-Comp-A2 Digital Systems Design**

Roth, Fundamentals of Logic Design, 7th edition

Thorne, Computer Organization and Assembler Language Programming for the IBM PC and Compatibles, Addison-Wesley.

### **17-Comp-A3 Computer Architecture**

William Stallings, Computer Organization and Architecture, 10th Edition, Pearson

Hayes, Computer Architecture and Organization, 2nd Edition, McGraw-Hill

Hennessy & Patterson, Computer Architecture: A Quantitative Approach, 2nd Edition

### **17-Comp-A4 Program Design and Data Structures**

Carrano and Henry, Data Abstraction and Problem Solving with C++, seventh edition

Deitel & Deitel, C++: How to Program, tenth edition

Weiss, Data Structures and Algorithm Analysis in C++, fourth ed.

Addison-Wesley Hanley, Essential C++ for Engineers and Scientists

Wiley Wunder & Roberts, Developing Java Software

### **17-Comp-A5 Operating Systems**

Suberschatz & Galvin, Operating System Concepts, 9th Edition

Addison-Wesley Tanenbaum, Modern Operating Systems

Stallings, Operating Systems Internals and Design Principles, 8th ed.

### **17-Comp-A6 Software Engineering**

Sommerville, Software Engineering, 10th Edition

Pressman, Software Engineering: A Practitioners Approach, 8thEdition, McGraw-Hill

### **17-Comp-B1 Advanced Computer Architecture**

Hennessy and Patterson, Computer Architecture: A Quantitative Approach, 5th ed, Morgan Kaufmann

### **17-Comp-B2 Principles of VLSI**

Chen, CMOS Devices and Technology for VLSI

Rabaey & Chandrakasan, Digital Integrated Circuits, 2ED, Pearson

Glasser & Dobberpuhl, The Design and Analysis of VLSI Circuits Jack

& Denyer, Introduction to MOS LSI Design

### **17-Comp-B3 Data Bases and File Systems**

Elmasri & Navathe, Fundamentals of Database Systems, 7th Edition

Connolly and Begg, Database Systems: A Practical Approach to Design, Implementation and Management, 4th edition, Addison-Wesley

Date, An Introduction to Data Base Systems, 6th Edition

**17-Comp-B4 Computer Graphics**

Foley, van Dam, Feiner & Hughes, Computer Graphics: Principles and Practice, 2nd Edition, Addison-Wesley

**17-Comp-B5 Computer Communications**

Stallings, W., Data and Computer Communications, 10th Edition, Pearson

Wiley Comer, Internetworking with TCP/IP Volume I: Principles, Protocols, and Architecture

Kurose & Ross, Computer Networking: A Top-Down Approach, 7th ed, Pearson

Saadawi, Amman & El Hakeem, Fundamentals of Telecommunication Networks, Prentice-Hall

**17-Comp-B6 Computer Control and Robotics** Moudgalya,

Digital Control, Wiley-Interscience

**17-Comp-B7 Digital Signal Processing**

Blandford and Parr, Introduction to Digital Signal Processing, Pearson

Strum & Kirk, First Principles of Discrete Systems and Digital Signal Processing

**17-Comp-B8 Computer Integrated Manufacturing**

Rehg & Kraebber, Computer Integrated Manufacturing, 3rd ed, Pearson

**17-Comp-B9 Artificial Intelligence and Expert Systems**

Winston, Artificial Intelligence

**17-Comp-B10 Distributed Systems**

Tanenbaum & Van Steen, Distributed Systems: Principles and Paradigms, Pearson

Shuey, R.L., Spooner, D.L., and Frider, O., The Architecture of Distributed Computer Systems, Addison-Wesley

Mullender, S. (Editor), Distributed Systems, 2nd Edition, Addison-Wesley

**17-Comp-B11 Advanced Software Design**

Dasgupta & Dimitriou, Algorithms, McGraw-Hill

**17-Comp-B12 Computer Security**

Bishop, Introduction to Computer Security, Addison-Wesley

Easttom, Computer Security Fundamentals, third edition

Anderson, Security Engineering, second ed, <https://www.cl.cam.ac.uk/~rja14/book.html> **17-**

**Comp-B13 Mechatronic Design**

Carryer et al, Introduction to Mechatronic Design, Pearson