

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

17-Phys-A1 Classical Mechanics

Prime Text:

Goldstein, Herbert, Charles P. Poole and John L. Safko, Classical Mechanics, 3rd Edition. Addison Wesley, 2001.

Supplementary Text:

Hibbeler, R.C., Engineering Mechanics: Dynamics, 8th edition, Prentice-Hall, Englewood Cliffs, N.J., 1998.

Taylor, John R., Classical Mechanics, University Science Books, 2004.

17-Phys-A2 Statistical Physics

Prime Text:

Charles Kittel and Herbert Kroemer, Thermal Physics, W H Freeman & Co (Sd); 2nd ed. edition (Dec 17 2012)

Supplementary Text:

Reif, F., Fundamentals of Statistical and Thermal Physics, McGraw-Hill Inc., 1965.

17-Phys-A3 Electromagnetics (16-Elec-A7)

Demarest, Engineering Electromagnetics, Prentice-Hall.

Hayt, William H. and John A. Buck, Engineering Electromagnetics, McGraw Hill, 2006. ISBN: 0073104639.

17-Phys-A4 Quantum Mechanics

Basdevant, J.-L., & J. Dalibard, Mécanique quantique, Éditions de l'École Polytechnique, Paris, 2002.

Griffiths, D.J., Introduction to Quantum Mechanics, 2nd Edition. Pearson-Prentice Hall, New Jersey, 2005.

17-Phys-A5-A Electronic Materials and Devices

Prime Text:

Streetman, B.G., Solid State Electronic Devices, 4th edition. Prentice-Hall, Englewood Cliffs, N.J, 1995.

Supplementary Text:

Sedra, Adel and Kenneth C. Smith., Microelectronic Circuits, 5th Edition. Oxford Press. 2007.

17-Phys-A5-B Analog and Digital Electronic Circuits

Sedra, Adel and Kenneth C. Smith., Microelectronic Circuits, 5th Edition. Oxford Press. 2007.

17-Phy-A6 Solid State Physics

Prime Text:

Kittel, C., Introduction to Solid State Physics, 6th edition. John Wiley and Sons, 1986.

Supplementary Text:

Ashcroft, N.W and Mermin, N.D., Solid State Physics, Saunders College, 1976.

17-Phys-A7 Optics

Hecht E. and Zajac, A., Optics, 2nd edition. Addison-Wesley, 1987.

17-Phys-B1 Radiation Physics

Camber, H., Introduction to Health Physics, 3rd edition. McGraw-Hill, NY, 1996.

17-Phys-B2 Electro-Optical Engineering (16-Elec-B10)

Yariv, Amnon, and Pochi Yeh, Photonics: Optical Electronics in Modern Communication, 6th Edition. Oxford University Press, 2006.

17-Phys-B3 Digital Systems and Computers (16-Elec-A4)

Brey, Barry, The Motorola Microprocessor Family: 68000, 68008, 68010, 68020, 68030, and 68040: Programming and Interfacing with Applications. Saunders College Publishing, 1995.

17-Phys-B4 Signals and Communications (16-Elec-A3)

Haykin, Simon & Barry Van Veen, Signals and Systems, 2005 Interactive Solutions, Edition, 2nd Edition, John Wiley & Sons Canada Ltd., 2005.

Haykin, Communication Systems, 4th Edition, John Wiley & Sons Canada Ltd., 2000.

Or

Haykin, Simon & Michael Moher, Introduction to Analog and Digital Communication Systems, 2nd Edition, John Wiley & Sons, 2006.

17-Phys-B5 Systems and Control (16-Elect-A2)

Dorf, Richard C. and Robert H. Bishop, Modern Control Systems, 10th Edition. AddisonWesley, 2004.

Nise, Norman S., Control Systems Engineering, 4th Edition, Wiley, 2003

17-Phys-B6 Applied Thermodynamics and Heat Transfer (16-Mec-A1)*Prime Text:*

Moran, M.J., H.N Shapiro, B.R. Munson and D.P. DeWitt, Introduction to Thermal Systems Engineering: Thermodynamics, Fluid Mechanics, and Heat Transfer. John Wiley and Sons. 2002.

17-Phys-B7 Structure of Materials (10-Met-A4)*Prime Text:*

Reed-Hill, R.E. and R. Abbaschian, Physical Metallurgy Principles. (3rd edition) PWS Kent Publishers, Boston, 1992. ISBN 0534921736.

Supplementary Text:

Cullity, BD and Stock, SR., Elements of X-ray Diffraction, 3rd Edition. Prentice Hall, Upper Saddle River NJ, 2001 ISBN 0-201-61091-4 Chaps 1-3.