

QE Required Courses in Each Group and Reference Books (SEP 2023)

Group	Courses	Reference Books
Electronics	Semiconductor Devices	S.M.Sze:Semiconductor Devices Physics and Technology
Control	Control Systems	B.C.Kuo:Automatic Control Systems.
AI & Network	Discrete Mathematics	Grimaldi:Discrete & Combinatorial Mathematics An Applied Introduction *Auth.rd.*
Power	Power Engineering	1. Electric Machinery : B. S. Guru and H. R. Hiziroglu, Electric Machinery and Transformers,3 rd Edition, Oxford University Press,New York, NY,2001. 2. Power Electronics : N. Mohan, T. M. Undeland, and W. P. Robbins Power Electronics: Converters, Applications and Design John Willey & Sons,1989. 3. Power System : Hadi Saadat Power System Analysis McGraw-Hill,1999.
EM Wave	Electromagnetics	D.K.Cheng : Field & Wave Electromagnetics , 2 nd ed.Chap.7-11 , 1989
SOC	Digital Logic	S.Brown and Z.Vranesic:Fundamental of Digital Logic(2003 or later)
Biomedical Signal Processing & Instrumentation	Signals and Systems	A. Oppenheim and A. Willsky, Signals & Systems 2nd ed., Prentice Hall 1996, USA
Communications	Digital Signal Processing	Oppenheim and Schafer:Digital Signal Processing
Communications	Communication Theory	John G. Proakis, Digital Communications, Fourth Edition, McGRAW-HILL.
Communications	Random Processes	A. Papoulis and S. U. Pillai, Probability, Random Variables and Stochastic Processes, McGraw Hill, 2002