

Recommended Text/Reference Book
2001/2002 Session

FOURTH YEAR - SCHEDULE 7

IE 4290 INTRODUCTION TO OPERATIONS RESEARCH (replace EE4003)

Please refer to IVLE website

EE4101 RADIO-FREQUENCY COMMUNICATIONS

by Prof PS Kooi & A/P TS Yeo

1. Microwave Engineering
 - DM Pozar
 - Addison-Wesley, 1990
- *2. *Antenna theory - analysis and design*
 - CA Balanis
 - John Wiley & Sons, 1982
- *3. *Foundations for Microwave Engineering*
 - RE Collin
 - 2nd Edition, McGraw-Hill, 1992
- *4. *Microwave Engineering: Passive, Active and Non-Reciprocal Circuits*
 - J Helszajn
 - McGraw-Hill, 1992
- *5. *Microwave Circuit Analysis and Amplifier Design*
 - SY Liao
 - Prentice-Hall, 1987
- *6. *Radio Wave Propagation and Antennas: An Introduction*
 - J Griffiths
 - Prentice-Hall, 1987
- *7. *Electromagnetic Wave Propagation, Radiation and Scattering*
 - A Ishimaru
 - Prentice-Hall, 1991

EE4102 DIGITAL COMMUNICATIONS

by Dr A Nallanathan

1. Digital Communications
 - S Haykin
 - Wiley International, 1988
- *2. *Introduction to Digital Communications*
 - Rodger E. Ziemer, Roger L. Peterson
 - Prentice Hall International, Inc., 2001
- *3. *Digital Communications*
 - JG Proakis
 - McGraw-Hill International, 2001

- *4. *Digital Communications (Fundamentals and Applications)*
- B Sklar
- Prentice Hall International, Inc., 2001

EE4103 CODING THEORY & APPLICATIONS

by A/P Victor Krachkovsky & A/P HK Garg

- *1. *Error Control Coding, Fundamentals and Applications*
- S. Lin and D. J. Costello
- Prentice Hall, 1983
- *2. *Digital Transmission of Information*
- RE Blahut
- Addison-Wesley Publishing Co., 1990
- *3. *Principles and Practice of Information Theory*
- RE Blahut
- Addison-Wesley Publishing Co., 1988
- *4. *Digital Modulation and Coding*
- SE Wilson
- Prentice Hall, 1996
- *5. *Error Control Systems for Digital Communication and Storage*
- SB Wicker
- Prentice Hall, 1995
- *6. *Codes for Mass Data Storage Systems*
- KAS Immink
- Shannon Foundation Publishers, 1999
- *7. *Principles of Digital Communication and Coding*
- AJ Viterbi and JK Omura
- McGraw-Hill Book Co., 1979
- *8. *Digital Coding of Waveforms, Principles and Applications to Speech and Video*
- N.S. Jayant and P. Noll
- Prentice Hall, 1984
- *9. *Digital Communications*
- J.G.Proakis
- 3rd Edition, Mc-Graw Hill, Inc., 1995
- *10. *Digital Signal Processing*
- J.G.Proakis & D.G.Manolakis
- 3rd Edition, Prentice Hall, Inc., 1996

EE4204 COMPUTER NETWORKS

By Dr LJ Ian Thng

1. *Data and Computer Communications*
- W Stallings
- 5th Edition, Prentice-Hall, 1996.

- *2. *Computer Networks*
- AS Tanenbaum
- 2nd Edition, Prentice-Hall, 1989.
- *3. *Data Networks*
- D Bertsekas and R Gallager
- 2nd Edition, Prentice-Hall, 1992.
- *4. *Internetworking with TCP/IP Vol I: Principles, Protocols and Architecture*
- D Comer
- Prentice-Hall, 1988.

EE4304/ME4245 ROBOTICS

by Dr V Prahlad & Dr. Etienne Burdet (MPE Dept)

- 1. Introduction to Robotics: Mechanics and Control
- JJ Craig
- 2nd Edition, Addison-Wesley, 1989
- *2. *Modeling and Control of Robot Manipulators*
- L Sciavicco and B Siciliano
- McGraw Hill, 1996
- *3. *Robotics: Control, Sensing, Vision, and Intelligence*
- KS Fu, RC Gonzalez and CSG Lee
- McGraw-Hill, 1987
- *4. *Robot Dynamics and Control*
- MW Spong and M Vidyasagar
- Wiley, 1989
- *5. *Robot Manipulators: Mathematics, Programming and Control: The Computer Control of Robot Manipulators*
- RP Paul
- MIT Press, Cambridge, Mass., 1981
- *6. *Robot Analysis and Control*
- Asada, H., and Slotine, J. -J.E.
- John Wiley and Sons, 1986

EE4305/ME4247 INTRODUCTION TO FUZZY/NEURAL SYSTEMS

by Dr KC Tan & Dr CM Chew (MPE Dept)

- 1. Fuzzy sets, uncertainty, and information
- GJ Klir and TA Folger
- Prentice-Hall, 1992
- 2. An introduction to fuzzy control
- D Driankov, H Hellendoorn, M Reinfrank
- Springer-Verlag, 1993
- *3. *Fuzzy Sets and Fuzzy Logic - Theory and Applications*
- GJ Klir and B Yuan
- Prentice-Hall, 1995

- *4. *Neural Networks: A comprehensive Foundation*
- Simon Haykin
- Prentice-Hall, 1994

IE4291 QUALITY ENGINEERING (replace EE4405)

Dr LC Tang (ISE Dept) & Dr Xie Min (ISE Dept)

Please refer to IVLE Course Website

EE4409 PRINCIPLES AND PRACTICE OF OPTICAL DATA STORAGE

by Dr KL Teo & A/P TC Chong

1. Principles of Optical Disc Systems
- G Bouwhuis, J Braat, A Huijser, J Pasman, G Van Rosmalen, and K Schouhamer Immink
- Adam Hilger, 1986
2. The Physical Principles of Magneto-optical Recording
- M Mansuripur
- Cambridge, 1995
3. Compact Disc Technology
- H Nakajima and H Ogawa
- Ohmsha ; Distributed by IOS Press, c1992

EE4410 CMOS VLSI SYSTEMS DESIGN PROJECT

by A/P YP Xu

- *1. *Digital Integrated Circuits – A Design Perspective*
- JM Rabaey
- Prentice Hall, 1996
- *2. *Basic VLSI Design*
- DA Pucknell and K Eshraghian
- 3rd Edition, Prentice Hall, 1994
- *3. *Principles of CMOS VLSI Design – A System Perspective*
- NHE Weste, and K Eshraghian
- 2nd Edition, Addison-Wesley, 1993
- *4. *Analog Integrated Circuit Design*
- D Johns and K Martin
- John Wiley & Sons, 1997
- *5. *Design of Analog Integrated Circuits and Systems*
- KR Laker and WMC Sansen
- McGraw-Hill, 1994
- *6. *Design of Analog CMOS Integrated Circuits*
- Behzad Razavi
- McGraw-Hill, 2000
- *7. *VLSI Testing – Digital and Mixed Analogue/Digital Techniques*
- SL Hurst
- IEE, London, 1998

EE4501 POWER SYSTEMS ANALYSIS AND PROTECTION

by A/P S Elangovan

- *1. *Power System Analysis*
- JJ Grainger and WD Stevenson Jr
- McGraw-Hill, 1994
- *2. *Electric Power Systems*
- BM Weedy
- 3rd Edition, Wiley, 1988
- *3. *Modern Power System Analysis*
- T Gonen
- Wiley, 1988
- *4. *Power System Analysis*
- CA Gross
- Wiley, 1980

EE4502 ELECTRIC DRIVES AND CONTROL

by A/P SK Panda

- 1. *Electric Drives – An Integrative Approach*
- Ned Mohan
- MNPERE, Minneapolis, USA, 2001
- *2. *Electric Motor Drives: Modeling, Analysis & Control*
- R Krishnan
- Prentice Hall, 2001
- *3. *Fundamentals of Electrical Drives*
- GK Dubey
- Toppan Company (s) Pte Ltd, 1995

EE4506 MAGNETIC RECORDING SYSTEMS

by A/P MA Jabbar & Dr A Mamun

- 1. *Magnetic Information Storage Technology*
- SX Wang and AM Taratorin
- Academic Press, 1999
- *2. *Digital Magnetic Recording*
- AS Hoagland and JE Monson
- 2nd Edition, Wiley, 1991
- *3. *Magnetic Disk Drive Technology*
- Kanu G. Asher
- IEEE Press, 1997