

Recommended References

Qualifying Examination for ECE Doctoral Candidates

Controls

EEC 440, Control Systems

- R. Dorf and R. Bishop, Modern Control Systems, 12th Edition, Prentice Hall, 2010
- C. Rohrs, J. Melsa, and D. Schultz, Linear Control Systems, McGraw-Hill, 1992
- N. Nise, Control Systems Engineering, 6th Edition, John Wiley & Sons, 2010

EEC 510, Linear Systems

- C. Chen, Linear System Theory and Design, Oxford University Press, 3rd edition, 1998
- P. Antsaklis and A. Michel, Linear Systems, McGraw-Hill, 1997
- J. Bay, Linear State Space Systems, McGraw-Hill, 1998

Communications

EEC 512, Probability and Stochastic Processes

- A. Papoulis, Probability, Random Variables and Stochastic Processes, 4th Edition, McGraw-Hill, 2002
- A. Leon-Garcia, Probability and Random Processes for Electrical Engineering, 3rd Edition, Prentice Hall, 2008

EEC 651, Digital Communications

- B. Sklar, Digital Communication, Fundamentals and Applications, 2nd Edition, Prentice Hall, 2001
- S. Haykin, Digital Communications, John Wiley & Sons, 1988
- J. Proakis and M. Salehi, Digital Communications, 5th Edition, McGraw-Hill, 2007
- H. Van Trees, Detection, Estimation and Modulation Theory, Part I, John Wiley & Sons, 2001

Computer

EEC 483, Computer Organization / EEC 581, Computer Architecture

- J. Hennessy and D. Patterson, Computer Architecture: A Quantitative Approach, 5th Edition, Morgan Kaufmann, 2011
- D. Patterson and J. Hennessy, Computer Organization and Design: The Hardware / Software Interface, 4th Edition, Morgan Kaufmann, 2011

EEC 584, Computer Networks

- J. Kurose and K. Ross, Computer Networking: A Top-Down Approach, 5th Edition, Addison-Wesley, 2009
- A. Tanenbaum, Computer Networks, 5th Edition, Prentice Hall, 2010

Power

EEC 470, Power Electronics I

- M. Mohan, T. Undeland and W. Robbins, Power Electronics: Converters, Applications and Design, 3rd Edition, McGraw-Hill, 2002

EEC 473/571, Power Systems

- J. Glover, M. Sarma, and T. Overbye, Power Systems Analysis and Design, 4th Edition, CL Engineering, 2007

Software

EEC 421/521, Software Engineering

- I. Somerville, Software Engineering, 9th edition, Addison-Wesley, 2010

CIS 430, Database Concepts

- R. Elmasri and S. Navathe, Fundamentals of Database Systems, 6th Edition, Addison-Wesley, 2010

Nanobiotechnology

EEC 514, Nanotechnology

- M. Di Ventra, S. Evoy, and J. Heflin (Eds.), Introduction to Nanoscale Science and Technology, Springer, 2004
- G. Hornyak, H. Tibbals, J. Dutta, and J. Moore, Introduction to Nanoscience and Nanotechnology, CRC Press, 2009

EEC 515, Biosensors, Bioelectronics and BioMEMS

- J. Cooper and T. Cass, Biosensors, Oxford University Press, 2004
- A. Cunningham, Introduction to Bioanalytical Sensors, John-Wiley & Sons, 1998