

08-Nuc-A1 Introduction to Nuclear Physics and Nuclear Engineering

LaMarsh, J.R. and Baralta, "Introduction to Nuclear Engineering", 3rd Edition", Prentice-Hall

08-Nuc-A3 Nuclear Reactor Design

El Wakil, M.M., Nuclear Energy Conversion, American Nuclear Society, 1992, Third Printing- Chapters 1 to 12, ISBN: 0-89448-015-4

J.R. Lamarsh and A.J. Baratta, Introduction to Nuclear Engineering, Third Edition, Prentice Hall, 2001, Chapter 8, ISBN_ 0-201-82498-1

Donald R. Olander, Fundamental Aspects of Nuclear Reactor Fuel Elements, US Department of Energy, Washington DC, 1976, TID-26711-P1 (Out of Print, possibly available at Georgia Tech Bookstore)

For reactor materials: J.T.A. Roberts, Structural Materials in Nuclear Power Systems, Plenum Press, N.Y. (1981)

Glasstone and Sesonke, Nuclear Reactor Engineering, 4th Edition, Chapman & Hall, 1994

Tong and Weisman, Thermal Analysis of Pressurized Water Reactors, American Nuclear Society, 1979

Lahey and Moody, The Thermal-Hydraulics of a Boiling Water Nuclear Reactor, American Nuclear Society, 1977

Todreas and Kazimi, Nuclear Systems, Vol. 1, Hemisphere Publishing, 1990

08-Nuc-A5 Nuclear Detection and Instrumentation

J. P. Holman, Experimental Methods for Engineers, 8th Edition, ISBN-10: 0073529303
ISBN-13: 978-0073529301

Also, foundation books about NPP systems, detectors, instruments will help.

08-Nuc-A6 Nuclear Power Plant Systems and Operation

Bereznai, G.T. in the form of a course pack that contains interactive CD, text and simulation. It is available from the McMaster and the UOIT Book stores under the title "Nuclear Power Plant Systems and Operation".

08-Nuc-A7 Process Dynamics and Control

D.E. Seborg, T.F. Edgar, D.A. Mellichamp, Process Dynamics and Control. John Wiley, second edition, 2003.

T. Marlin, Process Control, Designing Processes and Control Systems for Dynamic Performance, second edition. McGraw-Hill, 2000.

B.W. Bequette, Process Control: Modeling, Design and Simulation. Prentice Hall, 2003.

C.A. Smith, A.B. Corripio, Principles and Practice of Automatic Process Control, John Wiley, second edition, 1997.

08-Nuc-B2. Radiation Protection

Essentials of Radiation Biology and protection. ISBN 0766813304 latest edition.

08-Nuc-B8 Applied Thermodynamics and Heat Transfer

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.

08-Nuc-B9 Energy Conversion and Power Generation

Weston, K.C., Energy Conversion, West Publishing Co., 1992. (available as an online ebook at <http://onlinebooks.library.upenn.edu/webbin/book/lookupid?key=olbp33597>)

Khartchenko, Nikolai, Advanced Energy Systems, Crc Press Llc, 1998. ISBN #1560326115.

08-Nuc-B10 Advanced Fluid Mechanics

White, F.M., Fluid Mechanics, 6th Edition. McGraw-Hill, 2006.

08-Nuc-B11 Power Systems and Machines

Chapman, Stephen, Electric Machinery and Power System Fundamentals, McGraw Hill, 2001.

Wildi, Theodore, Electrical Machines, Drives, and Power Systems, 6th Edition, Prentice Hall, 2005.

08-Nuc-B12 Power Systems Engineering

Glover, J. Duncan, and Mulukutla Sarma, Power System Analysis and Design, 3rd Edition. Thomson Learning, 2002.

Grainger, John and William Stevenson Jr., Power System Analysis, McGraw Hill, 1994.

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