

Revision: 8/10/2011

Chemical Engineering Required Textbook List

Chemical Engineering Undergraduate Courses (CHEN)							
CHEN	Course	Author	Title	Ed	Year	ISBN	Publisher
2AA0	Progress Assessment I	NCEES	NCEES Fundamentals of Engineering Handbook	8e	2008	9781932613599	NCEES
2100	Principles of Chemical Engineering	Felder	Elementary Principles of Chemical Engineering	3e	2005	9780471720638	Wiley
2610	Transport I	Cengel	Fluid Mechanics	2e	2010	9780073529264	McGraw-Hill
3AA0	Progress Assessment II	No Text	No Text				
3090	Pulp and Paper Technology	Smook	Handbook for Pulp and Paper Technologists	3e	2003	9780969462859	Angus Wilde
3370*	Phase and Reaction Equilibria <small>*Instructor may use either book</small>	Elliott	Introductory Chemical Engineering Thermodynamics	1e	1999	0130113867	Prentice-Hall
3370*	Phase and Reaction Equilibria <small>*Instructor may use either book</small>	Smith	Introduction to Chemical Engineering Thermodynamics	7e	2004	9780073104454	McGraw-Hill
3410	Creativity and Critical Thinking in Engineering	Ruggiero	The Art of Thinking	9e	2008	9780205668335	Addison-Wesley
		Fogler	Strategies for Creative Problem Solving	2e	2007	9780130082794	Prentice-Hall
3600	Computer-Aided Chemical Engineering	Palm	Introduction to MATLAB for Engineering	3e	2011	9780073534879	McGraw-Hill
3620	Transport II	Geankoplis	Transport Processes and Separation Process Principles	4e	2003	9780131013674	Prentice-Hall
3650	Chemical Engineering Analysis (Su2011 ONLY)	Seborg	Process Dynamics & Control	3e	2010	9780470128671	Wiley
3650	Chemical Engineering Analysis	Cameron	Process Modelling and Model Analysis (Process Systems Engineering, vol 4)	1e	2001	9780121569310	Academic Press
		Cutlip	Problem Solving in Chemical and Biochemical Engineering with POLYMATH, Excel, and MATLAB	2e	2007	9780131482043	Prentice Hall
3660	Chemical Engineering Separations	Seader	Separation Process Principles	3e	2010	9780470481837	Wiley
3700	Chemical Reaction Engineering	Fogler	Elements of Chemical Reaction Engineering	4e	2006	9780130473943	Prentice-Hall
3820	Chemical Engineering Lab I	Geankoplis	Transport Processes and Separation Process Principles	4e	2003	9780131013674	Prentice-Hall
		Taylor	An Introduction to Error Analysis	2e	1997	9780935702750	Univ Science Books
4100	Pulp and Paper Processing Laboratory	No text	No text				
4160	Process Dynamics and Control	No text	No text				
4170	Digital Process Control	Seborg	Process Dynamics & Control	3e	2010	9780470128671	Wiley
4180	Advanced Digital Process Control	No text	No text				
4450	Process Economics and Safety	Peters	Plant Design & Economics for Chemical Engineers	3e	2003	9780072392661	McGraw-Hill
		Crowl	Chemical Process Safety: Fundamentals with Applications	2e	2001	9780130181763	Prentice-Hall
4460	Process Design Practice	Seider	Product and Process Design Principles: Synthesis, Analysis, and Evaluation	3e	2008	9780470048955	Wiley

4470	Process Design Practice	Seider	Product and Process Design Principles: Synthesis, Analysis, and Evaluation	3e	2008	9780470048955	Wiley
4560	Pulp and Paper Process Simulation	No text	No text				
4570	Pulp and Paper Process Design	No text	No text				
4630	Introductory Transport Phenomena	No text	No text				
4860	Chemical Engineering Laboratory II	Geankoplis	Transport Processes and Separation Process Principles	4e	2003	9780131013674	Prentice-Hall
		Taylor	An Introduction to Error Analysis	2e	1997	9780935702750	Univ Science Books
		Anderson	DOE Simplified w/CD	2e	1997	1563273446	Taylor & Francis
4880	Pulp and Paper Engineering Laboratory	No text	No text				
4930	Directed Studies	No text	No text				
4970	Special Topics in Chemical Engineering		Faculty selected text				
4980	Undergraduate Research	No text	No text				
4997	Honors Thesis	No text	No text				
5110	Pulp and Paper Engineering	Biermann	Handbook of Pulping and Papermaking	2e	1996	9780120973620	Academic Press
5120	Surface and Colloid Science of Papermaking	Scott	Principles of Wet End Chemistry	1e	1996	0898522862	TAPPI Press
		Shaw	Introduction to Colloid and Surface Chemistry	4e	1992	0750611820	Butterworth-Heinemann
5400	Molecular Engineering	No text	No text				
5410	Macromolecular Engineering	Rodriguez	Principles of Polymer Systems	5e	2003	9781560329398	Taylor & Francis
5420	Polymer Chemical Engineering	Ebewele	Polymer Science and Technology	1e	2000	0849389399	CRC Press
5430	Business Aspect of Chemical Engineering	No text	No text				
5440	Electrochemical Engineering	Newman	Electrochemical Systems	3e	2004	9780471477563	Prentice-Hall
5650	Hazardous Materials Management and Engineering	Carson	Hazardous Materials Management	5e	1995	9994901079*	Inst. of Haz. Mat. Mngt
5670	Pollution Prevention Engineering	No text	No text				
5700	Advanced Separation Processes	King	Separation Processes	2e	1980		McGraw Hill
5800	Biochemical Engineering	Shuler	Bioprocess Engineering: Basic Concepts	2e	2002	0780130819086	Prentice Hall
5810	Biomedical Engineering	Fournier	Basic Transport Phenomena in Biomedical Engineering	2e	2006	9781591690269	CRC Press/ Taylor & Francis
5820	Advanced Topics in Environmental Biotechnology	No text	No text				
5970	Special Topics in Chemical Engineering		Faculty selected text				
5970	Cell and Tissue Engineering	Blitterswijk	Tissue Engineering	1e	2008	9780123708694	Academic Press

Service Courses (Engineering) Offered By Chemical Engineering (ENGR)

ENGR	Course	Author	Title	Ed	Year	ISBN	Publisher
1110	Introduction to Engineering	Kosky	Exploring Engineering	2e	2010	9780123747235	Academic Press
2010	Thermodynamics	Moran	Fundamentals of Engineering Thermodynamics	6e	2007	9780471787358	Wiley
2200	Introduction to Thermodynamics, Fluids and Heat	Cengel	Fundamentals of Thermal-Fluid Sciences	3e	2007	0073327484	McGraw-Hill

Chemical Engineering Graduate Courses (CHEN)

