

Industrial Engineering Course Schedule – Spring 2008

Course #	Course Title	Instructor	Cr.	Days	Time	Room	SLN
IND E 250A	Fund. Engr. Economics	Miyata	4	MTWF	12:30-1:20	MEB 238	13899
<i>Basics of industrial cost analysis and accounting. Application of interest computations to engineering decision making. Analysis of engineering alternatives based on use of interest computations, valuations, depreciation, and cost estimates in process and product manufacturing.</i>							
IND E 315A	Probability/Stats. for Engr.	Kapur	3	MWF	1:30-2:20	KNE 220	13900
<i>Application of probability theory and statistics to engineering problems, distribution theory and discussion of particular distributions of interest in engineering, statistical estimation and data analysis. Prerequisite: either MATH 136 or MATH 307.</i>							
IND E 351	Human Factors	Johnson	4	MW	2:30-4:20	MEB 242	13901
<i>Engineering considerations of the abilities and limitations of the human aspect in the design of operational systems and components. Functional, psychological, physiological, and environmental</i>							
IND E 426A	Reliability & System Safety	Kapur	4	MW	10:30-12:20	MEB 246	13902
<i>Reliability and system safety measures. Life distributions and their applications in reliability. System reliability models. Design by reliability and probabilistic design. Reliability and safety analysis through FMECA and FTA. Reliability estimation and measurement by testing for binomial, exponential, and Weibull distributions. Prerequisite: IND E 315.</i>							
IND E 495A	Senior Design	Storch	4	F	1:30-5:20	MEB 242	13903
<i>Capstone senior design project involving identification and synthesis of industrial engineering skills. Students apply their knowledge of industrial engineering to actual industrial problems. Prerequisite: IND E 494.</i>							
IND E 499A	Special Projects in IE		2-5	by arrangement			13905
IND E 499H	Honors – Special Projects		2-5	by arrangement			13906
IND E 544	Virtual World Development	Berkley	3	MW	4:30-5:50	MGH 074	18717
<i>Software implementation, physiological and cognitive constraints, and the mathematics and philosophy of inclusion. Development of software tools, editing and interaction techniques, disposition of virtual world entities, nature of space, situated knowledge, divergent models for multiple participants, experiential mathematics, cyberspace. Cultural, legal, moral, ethical issues. Prerequisite: IND E 543 or permission of instructor.</i>							
IND E 545	User-Centered Design	Zachry	4	MW	2:30-4:20	MEB 248	13909
<i>Explores the user-centered design paradigm from a broad perspective, emphasizing how user research and prototype assessment can be integrated into different phases of the design process. Students learn to think like a user-centered designer and carry out activities that are key to user-centered design. Offered: jointly with TC 518.</i>							
IND E 593A	IE Graduate Seminar	Mastrangelo/ Furness	1	T	1:30-2:20	LOW 101	13912
IND E 599A	Special Topics in IE (Graded)		1-5	by arrangement			13913
IND E 599C	Stochastic Processes	Ghate	3	TTh	10:30-11:50	MEB 235	13915
<i>A non-measure theoretic, yet rigorous introduction to stochastic processes for graduate students in engineering. Topics will include conditional expectation, poisson processes, renewal processes, Markov and semi-Markov processes, Brownian motion etc.</i>							
IND E 600A	Independent Study/Research (C/NC)		1-10	by arrangement			13917
IND E 700A	Master's Thesis		1-10	by arrangement			13918
IND E 800A	Doctoral Dissertation		1-10	by arrangement			13919