

| Course # | Course Title | Instructor | Cr. | Days | Time | Room | SLN |
|--|--------------------------------|------------|------|---------|--------------------------|--------------------|-------|
| IND E 250A | Fund. Engr. Economics | Miyata | 4 | MTWF | 12:30-1:20 | MEB 246 | 14182 |
| <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. | | 3 | MWF | 1:30-2:20 | KNE 110 | 14183 |
| <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 | THO 134 | 18991 |
| <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 412 | Integer & Dynamic Prog. | Ghate | 4 | MW F | 9:00-10:20 9:00-10:50 | EEB 003 MGH 058 | 14184 |
| <i>Modeling and optimization of problems and dynamic programming approach to optimization. Topics include: integer programming formulation techniques, linear and Lagrangian relaxation, branch-and-bound and cutting-plane methods, integer programming applications, and dynamic programming. Prerequisite: IND E 311.</i> | | | | | | | |
| IND E 426 | Reliability & System Safety | Kapur | 4 | TTH | 10:30-12:20 | MEB 242 | 14185 |
| <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 | 14186 |
| <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 | | 14187 |
| IND E 499H | Honors – Special Projects | | 2-5 | | by arrangement | | 14188 |
| IND E 516 | Apps of Optimization in Engr | Zabinsky | 3 | MW | 2:30-3:50 | SWS 036 | 18815 |
| <i>Discussion of issues arising in applications of optimization to engineering design. Emphasis on formulating problems and selecting appropriate solution techniques. Random search methods for problems otherwise computationally intractable. Individual projects in engineering optimal design. Prerequisite: AMATH/MATH/IND E 515 and MATH 328 or permission of instructor. Offered jointly with AMATH 510.</i> | | | | | | | |
| INDE 518 | Seminar in Manufacturing Mgmt. | Ramulu | 1 | Th | 3:30-4:20 | LOW 216 | 14189 |
| <i>Current topics and advances made in manufacturing and management. Topics presented by invited speakers from academia and industry. Emphasis on the multidisciplinary nature of manufacturing and management Offered: jointly with IND E 518.</i> | | | | | | | |
| IND E 549 | Human Factors | Johnson | 3 | MW | 2:30-4:20 | THO 134 | 18992 |
| <i>Engineering considerations of the abilities and limitations of the human aspect in the design of operational systems and components. Functional, psychological, and environmental. Offered jointly with ENV H 549.</i> | | | | | | | |
| IND E 593A | IE Graduate Seminar | Zabinsky | 1 | T | 1:30-2:20 | LOW 101 | 14192 |
| IND E 599A | Special Topics in IE | | 1-5 | | by arrangement | | 14193 |
| IND E 599C | Systems Architecture | Wheeler | 3 | M | 4:30-7:20 | LOW 206 | 14195 |
| IND E 600A | Independent Study/Research | | 1-10 | | by arrangement | | 14197 |
| IND E 700A | Master's Thesis | | 1-10 | | by arrangement | | 14198 |
| IND E 800A | Doctoral Dissertation | | 1-10 | | by arrangement | | 14199 |