

- 479: Practica/Internship/Cooperative Education in Human Ecology.** 1-6 hours credit (9). (Pass/Fail). On site, supervised, structured work experiences located beyond a 201-mile radius of Ruston. Application and program fee required.
- 504: Methodology in Human Ecology Research.** 0-3-3. Techniques and principles of design for experimental and educational research.
- 505: Family, Consumer Sciences, and Early Childhood Education Supervision.** 0-3-3. The value of supervision with emphasis on responsibilities and techniques desirable for effective working relationships with student teachers.
- 506: Special Problems in Human Ecology.** 1-3 hours credit (12). Multi-quarter project Preq. or Coreq., HEC 504 or Statistics. Directed study of adviser approved topics. May be repeated for credit with Dean's permission.
- 507: Graduate Seminar.** 0-1-1 (3). Seminar designed to increase effectiveness of professional written and oral communications, as well as increase knowledge of research.
- 515: Applied and Natural Sciences Teaching Practicum.** 10-1-3. Principles and techniques in teaching a specific area of applied and natural sciences at the post secondary level. Students work with faculty and undergraduate courses in area of specialty. Application required.
- 546: Microcomputer Applications in Professional Practice.** 0-3-3. Preq., one graduate-level statistics course, and M&CS 246 or satisfactory score on computer competency exam. Use of software programs in professional and research settings.
- 551: Research and Thesis.** 3 hours credit or multiples thereof. Maximum credit is 6 hours. Preq. or Coreq., HEC 504 and Statistics.
- 567: Advanced Practice in Human Ecology.** 15-0-3. Preq., graduate student in Human Ecology. Advanced practice experiences enabling students to apply theory in practice settings.

#### INDEPENDENT STUDY (ISTY)

- 498: Readings and Research.** 1-3 (6) hours credit. Preq., admission to Independent Study program. Departmental course for independent research and reading. Offered by each department in the College of Liberal Arts.
- 499: Readings and Research.** 1-3 (6) hours credit. Preq., admission to Independent Study program. Departmental course for independent research and reading. Offered by each department in the College of Liberal Arts.

#### INDUSTRIAL ENGINEERING (INEN)

- 100: Introduction to Industrial Engineering.** 3-0-1. Survey of topics to introduce the student to the profession, the program, and the curriculum.
- 101: Computers in Engineering.** 0-3-3. Functional characteristics of computers and the Internet; overview of programming languages and systems; HTML and JAVA applications; analysis and solution of engineering problems.
- 201: Industrial and Systems Engineering.** 0-3-3. Preq., sophomore standing. An overview of the application of engineering analysis and design principles to industrial and human activity systems.
- 300: Engineering Economics.** 0-2-2. Economic analysis of engineering design alternatives; present, annual, and future worth; internal rate of return and benefit/cost analysis; depreciation and tax consequences; equipment replacement.
- 301: Industrial Cost Analysis.** 0-2-2. Accounting, budgeting, and control of manufacturing costs.
- 400: Engineering Statistics I.** 0-3-3. Preq., MATH 242. Application of probability and distribution theory to various branches of engineering. Confidence intervals, hypothesis testing.
- 401: Engineering Statistics II.** 0-3-3. Preq., INEN 400. Regression analysis, analysis of variances, quality control.
- 402: Introduction to Operations Research.** 0-3-3. Coreq. INEN 400. Linear programming, dynamic programming, project scheduling, network flow, inventory control.
- 404: Operations Research.** 0-3-3. Preq., INEN 400, 402. Industrial engineering applications of queuing theory, critical path methods, project evaluation review technique (PERT), game theory, and inventory systems.
- 405: Industrial Scheduling.** 0-3-3. Techniques for scheduling machines, jobs, personnel, and material in industrial environment.
- 406: Computer Applications in Production Systems.** 0-3-3. Preq., INEN 402. The planning, analysis, and control of production systems. Emphasis is upon high volume discrete production and flexible manufacturing systems.
- 407: Simulation.** 0-3-3. Preq., INEN 400, 404. Discrete simulation methodology, emphasizing statistical basis for simulation modeling and modeling experimentation. Use of simulation modeling language to illustrate model architecture, inference, and optimization.
- 408: Manufacturing Facilities Planning.** 0-3-3. Preq., MEEN 321. Detail planning for facilities location, product development, equipment and manpower requirements, production line analysis, assembly line balancing.
- 409: Work Design.** 3-2-3. Preq., MEEN 321, INEN 400. Methods engineering, work measurement, production standards, workplace analysis and design, ergonomics.
- 410: Manufacturing Systems Management.** 0-3-3. Preq., INEN 400. Operations planning and productivity enhancement techniques for efficient management of manufacturing systems. This course will emphasize capacity planning, materials management, inventory control and warehousing.
- 411: Industrial Engineering Design I.** 0-2-2. Preq., INEN 405, 407, 408, 409, 410, or consent of program chair. Open-ended design problem using industrial engineering skills including work measurement, human factors, quality control, facilities planning, plant layout, operations research, etc.
- 412: Industrial Engineering Design II.** 0-2-2. Preq., INEN 411. Continuation of INEN 411.
- 413: Industrial Robotics and Automated Manufacturing.** 3-2-3. Background, structure, drive systems, effectors and the applications of robots in industrial systems.
- 424: Seminar.** 0-1-1. Instruction and practice in conference-type discussions of technical and professional matters of interest to industrial engineers.
- 425: Industrial Safety.** 0-3-3. Principles of domestic and industrial safety.
- 450: Special Problems.** 1-3 hours credit. Selected topics of current interest in Industrial Engineering not covered in other courses.
- 490: Applications of Artificial Intelligence and Expert Systems in Mechanical and Industrial Engineering.** 3-2-3. Introduction to artificial intelligence, expert systems and their applications in industrial, mechanical and manufacturing engineering systems. (G)
- 499: Technical Enrichment Course.** 3-0-1. Pass/Fail. Varying new technologies. Does not count towards graduation in Industrial Engineering. Contact the program chair for more information.
- 502: Operations Research.** 0-3-3. Applications of linear programming to industrial systems, such as production and inventory control. Sensitivity analysis. Transportation and transshipment algorithms. Parametric linear programming. Convex and integer programming.
- 504: Systems Simulation.** 0-3-3. The use of digital computer programs to simulate the operating characteristics of complex systems. Statistical considerations in sampling from a simulated process.
- 506: Dynamic Programming.** 0-3-3. The principles of optimality. One- and two-dimensional processes Markovian decision processes. Lagrange multiplier technique.
- 507: Engineering Administration.** 0-3-3. Organization of the engineering function. Measurement and evaluation of engineering activities. Project management and control. Development of engineering managers.
- 508: Human Factors in Engineering Systems.** 3-2-3. Testing and instrumentation of human response to environmental conditions. Designing equipment, work place and work environment for economy and effectiveness of human work systems.
- 509: Advanced Engineering Economy.** 0-3-3. Effect of income tax on decision making. Retirement and replacement analysis. Capital management. Elements of economic measurement, analysis and forecasting in the face of uncertainty.
- 510: Advanced Work Measurement.** 3-2-3. Advanced methods improvement and work measurement techniques. Design of complex work systems. Work sampling, construction of standard data and mathematical models of work systems.
- 512: Reliability Engineering.** 0-3-3. Application of statistical theory in engineering design. Testing methods for determining reliability. Design of components and assemblies for reliability.
- 513: Inventory Control.** 0-3-3. Analytical methods of determining reorder size and minimum points of various inventory system. Mathematical models with restrictions and quantity discount. Forecasting techniques and production smoothing.
- 514: Industrial Statistics.** 0-3-3. Application of statistical techniques to industrial problems, relationships between experimental measurements using regression, correlation theories and analysis of variance models.

- 516: Production Planning and Sequencing.** 0-3-3. Advanced methods in production planning. Sequencing criteria and algorithms. Job shop and flow shop sequencing. Computer application and simulation.
- 521: Methods of Optimization.** 0-3-3. District elimination methods of sequential search, even-block search, Fibonacci search and golden section and odd-block search. Pattern search, gradient method and geometric programming.
- 530: Advanced Topics in Manufacturing Automation and Robotics.** 3-2-3. Advanced issues in the strategic approach to product design and manufacturing systems design. Integration of islands of automation. Product design for automation.
- 550: Special Problems.** 1-4 hour(s) credit. Advanced problems in industrial engineering.
- 551: Research and Thesis in Industrial Engineering.** Registration in any quarter may be for three semester hours credit or multiples thereof. Maximum credit allowed is six semester hours.
- 555: Practicum.** 0-3-3 (6). Preq., 12 semester hours of graduate work. Analytical and/or experimental solution of an engineering problem; technical literature survey required; development of engineering research literature.
- 557: Special Topics: Industrial Engineering.** 0-3-3 (9). The topic or topics will be selected by the instructor from the various sub-areas of industrial engineering. May be repeated as topics change.

#### INTERIOR DESIGN (IDES)

- 250: Introduction to Interior Design.** 0-2-2. Introductory examination of Interior Design with topical investigations into the process of design, design elements, lighting, color, surface treatments, and space planning.
- 352: Interior Design I.** 6-1-3. Coreq., IDES 350. Studio problems in the space planning and design of interior environments, emphasis on design methodology, materials, furnishing systems, detail drawing and presentation.
- 353: Interior Design II.** 6-1-3. Preq., IDES 352. Continuation of IDES 352. Studio problems in the space planning and design of interior environments, emphasis on design methodology, materials, furnishing systems, detail drawing and presentation.
- 354: Interior Design III.** 6-1-3. Preq., IDES 353. Continuation of IDES 353. Culmination of a three-course series. Studio problems in the space planning and design of interior environments, emphasis on design methodology, materials, furnishing systems, detail drawing and presentation.
- 355: Interior Design Theory & Issues I.** 0-1-1. Preq., Junior standing. Examination and analysis of the formal, contextual, conceptual, and/or operational issues associated with the use of textiles in residential and commercial interiors.
- 356: Interior Design Theory & Issues II.** 0-1-1. Preq., Junior standing. Examination and analysis of the formal, contextual, conceptual, and/or operational issues associated with the use of color in residential and commercial interiors.
- 357: Interior Design Theory & Issues III.** 0-1-1. Preq., Junior standing. Examination and analysis of issues associated with various specialized design practices.
- 451: Furniture Design.** 6-1-3. Original student furniture design concepts are developed through a coordinated study and analysis of function, anthropometric, structures, materials, construction, and industrial processes.
- 452: Interior Design IV.** 6-1-3. Preq., IDES 354. Examination of large scale commercial and/or residential interior projects through detailed design and development emphasizing the integration of interior environments with architectural envelopes.
- 453: Interior Design V.** 6-1-3. Preq., IDES 452. Examination of large scale commercial and/or residential interior projects through detailed design and development emphasizing the integration of interior environments with materials and systems.
- 454: Interior Design VI.** 6-1-3. Preq., IDES 453. Examination of large scale commercial and/or residential interior projects through detailed design and development emphasizing the formal and spatial articulation of interior environments.
- 456: Professional Practices.** 0-3-3. Preq., Junior standing. Preparation for entering the professional practice of interior design; includes office procedures, business ethics, contract documents, specifications, and market sources, etc.
- 457: History of Furniture I.** 0-3-3. Preq., ARCH 211, 222, and 231. History of periods of furniture design from antiquity to industrial revolution,

- including study of dominant influences and characteristics of historical interiors, furnishings, and ornamental design.
- 458: History of Furniture II.** 0-3-3. Preq., IDES 457. A history survey of the development of contemporary design from art Nouveau to the present, including architectural elements, furniture, lighting, wallcovering, flooring, and building materials.
- 500: Design Research Methods.** 0-3-3. Preq., Graduate standing or consent of instructor. An introduction to research methods applicable to the execution of scholarly investigations in the discipline of interior design.
- 510: Interior Design Graduate Studio.** 12-0-4 (12). Preq., Graduate standing. Guided studio projects involving exhibition, furniture, or universal design.
- 520: Interior Design Graduate Research.** 6-1-3 (9). Preq., IDES 500. Guided research projects into various aspects of interior design.
- 530: Interior Design Graduate Seminar.** 0-3-3 (9). Preq., Graduate standing. Reading and discussion of current topics associated with interior design education, research, or practice.
- 540: Graduate Interior Design Internship.** 20-0-6 (18). Preq., Graduate standing and consent of graduate program coordinator. Supervised interior design experience emphasizing application of principles in a research, manufacturing, or practice setting.
- 550: Research & Thesis in Interior Design.** 12-0-4 (12). Preq., IDES 500. Preparation, development, and execution of a well-designed thesis under the supervision of the student's graduate committee.
- 560: Research & Project in Interior Design.** 12-0-4 (8). Preq., IDES 500. Preparation, development and execution of a comprehensive design project under the supervision of the student's graduate committee.
- 570: Graduate Design Exhibition.** 12-0-4. Preq., IDES 560. Preparation and installation of an exhibition of a comprehensive design project or graduate design work.

#### JOURNALISM (JOUR)

- 101: News Writing.** 0-3-3. May be taken with ENGL 101. Beginning course in news writing. Work on "leads" and other newspaper writing basics. Typing ability required.
- 102: News Writing.** 0-3-3. Preq., JOUR 101. Involves principles of interviewing, advanced reporting and specialty writing such as police reporting, consumer reporting and coverage of public affairs.
- 222: Using the Internet for Research.** 0-3-3. Use of the Internet as a means of conducting research, with particular emphasis on the World Wide Web. Discussion and practical application of Internet-based research techniques.
- 310: Copy Editing.** 0-3-3. Preq., JOUR 101. Course dealing with methods of editing copy and the writing of headlines.
- 311: Advanced Copy Editing.** 0-3-3. Preq., JOUR 310. Techniques of newspaper makeup and layout; includes writing headlines, editing wire copy, cropping and sizing photography, principles of makeup and dummyping of pages.
- 320: Feature Writing.** 0-3-3. Preq., JOUR 101, 102. Practical instruction in gathering material for "human interest" and feature articles of various types for magazines as well as newspapers.
- 330: Editorial Writing.** 0-3-3. Preq., JOUR 101. Course in the study of fundamentals and practice in editorial writing. Course includes units on recent history and current events.
- 350: Practical Reporting.** 6-0-2 (4). Open only to journalism majors or minors. Preq., JOUR 101, 102, 310, 320. Writing of articles for the university newspaper upon assignment or consultation with faculty supervisor. May be repeated for two additional semester hours' credit.
- 353: General Newspaper Work.** 6-0-2 (4). Open only to journalism majors or minors. Preq., JOUR 101, 102, 310, 320. Practical lab work on university newspaper. May be repeated for two additional semester hours credit.
- 355: Practical Reporting.** 6-0-2. Open to majors and minors only. Preq., JOUR 101, 102, 310, 320. Practical lab work on "The Tech Talk." May be repeated for two additional semester hours credit.
- 360: Advertising.** 0-3-3. Fundamental study of advertising principles, including information on major media.
- 375: People and Events.** 0-3-3. Creative writing, as it applies to magazines and newspapers. A "how-to-get-published" primer, with oral and written critiques of work.
- 400: Media and the Law.** 0-3-3. Preq., 9 hours of JOUR. Emphasis on legal rights, responsibilities related to the media, and the public's right to know. Media court cases to be considered.