

INDUSTRIAL STUDIES (INDUSTDY)

INDUSTDY 5930 Teaching Technology Education 3 Credits

Teaching methodology, delivery styles, and curriculum development for technology education. Unit planning, lesson planning, and aligning curriculum to standards are emphasized in an interactive teaching/learning environment. (Fall, Spring) P. TEACHING 1230.

Components: Class

INDUSTDY 5950 Industrial Design for Production 3 Credits

Study of design principles, production methods and simultaneous manufacturing techniques. Emphasis is on understanding and application of the design process. Laboratory activities focus on the design and production of a product. (Fall) P. INDUSTDY 1030 and INDUSTDY 1230.

Components: Class

INDUSTDY 6640 Curriculum and Facility Planning 3 Credits

Curriculum development through design of a program of study. Procedures for identifying and organizing content are examined. Laboratory design and layout are correlated with curriculum through examination of building codes, safety requirements, and equipment specifications. (Fall, Spring) P. TEACHING 1230.

Components: Class

INDUSTDY 6950 Production Planning and Control 3 Credits

An investigation and study of the integrated approach of effective management practices associated with production planning, scheduling, and control. Operation strategy, quality of work life, global competition, lean manufacturing, forecasting methods, supply chain management practices, scheduling and plant facilities layout are stressed. (Fall, Spring) P. INDUSTDY 1030.

Components: Class

INDUSTDY 6990 Industrial Studies Internship 2-8 Credits

An on-the-job assignment commensurate with the instruction program and approved by the industrial internship coordinator. May be repeated for up to eight credits, but must be progressively more advanced. (Fall, Spring, Summer) P. See department program notes.

Components: Field Studies

INDUSTDY 7000 Research Methodology 3 Credits

Introduction and background to the scientific method of inquiry, types of research, problem clarification, data gathering techniques, research data analysis, and proposal and research paper writing.

Components: Class

INDUSTDY 7920 Seminar Paper Research 2 Credits

The seminar paper or educational project need not be a report of original and independent research. It must demonstrate, however, the student's ability to survey a field of knowledge and assemble, organize, evaluate, interpret, and present evidence in a logical and intelligent manner. Although the seminar paper or educational project may originate from work done in connection with one of the student's graduate courses and be based upon a term paper or course project, it must be more comprehensive and complete in coverage and treatment. In consultation with the program advisor, the student proposes a seminar paper or educational project and a seminar paper or educational project advisor. An approved seminar paper or educational project proposal must be submitted and approved prior to registration. There is a website with useful links to guide the graduate student in grammar, style, evaluating web resources, and formats. The seminar paper or educational project advisor will provide guidance regarding the site. The site may be accessed through the University's Karrmann Library.

Components: Seminar

INDUSTDY 7980 Independent Study in Industrial Studies 1-4 Credits

The amount of graduate credit allowed for independent study may not exceed a total of four credits except with the special permission of the student's advisor and the graduate dean. Approval must be secured from the department faculty member before independent study courses are begun by completing a form secured from the department. This form must include a description of the subject to be covered and must be submitted before registration will be approved. Signatures of the advisor and the instructor are necessary. Independent study may not be used for collecting information for the seminar paper.

Components: Independent Study

INDUSTDY 7990 Thesis Research 3-6 Credits

The thesis may be an outgrowth of a research course (e.g. TEACHING 7000 Research Procedures) or may be developed independently within the program area. The thesis will report the results of original and independent student research on a given problem or topic, by systematic and impartial methods, and will demonstrate the student's ability to use techniques customarily employed in the particular field of investigation. Although a thesis for the master's degree may not always be expected to make a significant contribution to existing knowledge, it should be a scholarly document that is accurate, verifiable, objective, and impartial. In consultation with the program advisor, the student proposes a committee of three faculty members. The committee normally includes the thesis advisor, one additional major department member, and one faculty member from another department. In some instances, a student may prefer a thesis advisor who is different from the program advisor assigned at the time of admission. An approved thesis proposal must be submitted and approved prior to registration. There is a website with useful links to guide the graduate student in grammar, style, evaluating web resources, and formats. (Thesis students will find the Texas A and M link useful for formatting procedures and other technical assistance.) The thesis advisor will provide guidance regarding the site. The site may be accessed through the University's Karrmann Library.

Components: Thesis Research