

INDUSTRIAL TECHNOLOGY (ITEC)

ITEC 531 Post Hs Tech Ed (3 Credits)

Post High School Technical Education (3) Study of curricular, social, economic training needs and other changes responsible for the development of post-secondary education, with emphasis on Texas.

College/School: Col of Science, Engr & Tech

Department: Dept of Industrial Tech

ITEC 540 Occupational & Career Educ (3 Credits)

Occupational and Career Education (3) Basic philosophy of career oriented education, including ideas and strategies for developing careerrelated continuing education programs.

College/School: Col of Science, Engr & Tech

Department: Dept of Industrial Tech

ITEC 620 Stat Process Control (3 Credits)

Statistical Process Control (3) Overview of statistical techniques and signals used for improvement of industrial processes, differentiation of detection and prevention models for quality control; problem solving applications.

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ITEC 625 Operations Res Tech (3 Credits)

Operations Research for Technologists (3) Analytic tools for addressing complex industrial problems, including linear programming, network analysis, inventory, decision analysis, queuing and simulation models.

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Department: Dept of Industrial Tech

ITEC 633 Labor-Mgmt Relations (3 Credits)

Industrial Labor-Management Relations (3) Evolution of labor-management relationships in the U.S. and impact of technological changes; comparison with other industrialized nations and implications for global competition.

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ITEC 634 Human Resources Development (3 Credits)

Human Resource Development (3) Examination of the human resource in industrial operations with emphasis on planning, development and evaluation for technical manpower.

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ITEC 635 Tech & Environ (3 Credits)

Technology and the Environment (3) A study of ecological problems created by advanced technology and the utilization and application of technology to preserve the environment.

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Department: Dept of Industrial Tech

ITEC 637 Facil Plan Sys Anal Tech (3 Credits)

Facilities Planning & Systems Analysis for technical Programs (3) Innovations in planning to include space, equipment, industrial supplies, and educational specifications.

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ITEC 638 Ind Safety & Ergonomics (3 Credits)

Industrial Safety & Ergonomics (3) Concepts and techniques of safety management, industrial hygiene and ergonomics with applications

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ITEC 640 Computer Applications (3 Credits)

Computer Applications in Industrial Technology (3) Review of microcomputer hardware and software; survey of computer applications in industrial operations, including manufacturing, construction, distribution and information systems.

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Department: Dept of Industrial Tech

ITEC 642 Computer Integrated Mfg (3 Credits)

Computer Integrated Manufacturing (3) Evolution, scope and development of CIM concepts and associated technologies, including numerical control, CNC, CAD/CAM, and automation; applications and benefits of CIM. Prerequisite: ITEC 640

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Department: Dept of Industrial Tech

ITEC 644 Production Sys Control (3 Credits)

Production Systems Control (3) Overview of control methodologies for production systems, including production, capacity and materials requirements planning, scheduling, inventory, and productivity analysis. Prerequisite(s) ITEC 625, 640

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ITEC 650 Project Analysis & Management (3 Credits)

Project Analysis & Management (3) Methods of analysis and scheduling of industrial projects, including cost estimating, economic analysis, selection and implementation; applications in manufacturing, construction and service industries. Prerequisite(s) ITEC 625, 640.

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Department: Dept of Industrial Tech

ITEC 664 Materials Handlg Sys (3 Credits)

Materials Handling Systems (3) Basic criteria for the selection and justification of material handling equipment; manual, mechanized and automated warehousing and storage/retrieval systems; robotics and flexible manufacturing systems.

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Department: Dept of Industrial Tech

ITEC 668 Modern Mfg Tech (3 Credits)

Modern Manufacturing Technologies (3) Examination of the evolution and economics of current and emerging manufacturing technologies for industrial applications, including automation, CIM, FMS, JIT, etc.

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Department: Dept of Industrial Tech

ITEC 680 Energy Systems (3 Credits)

Energy Generation Systems (3) Overview of fuel-based and alternative energy sources, comparative economic analyses and societal impact of alternatives, and implications for technology.

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ITEC 690 Graduate Seminar (1 Credits)

Graduate Seminar (1) Recent developments and issues in technology; technology trends and social impacts. Majors must take course in each semester enrolled for a minimum of 3 credits.

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Department: Dept of Industrial Tech

ITEC 692 Special Problems (3 Credits)

Special Problems in Technology (3) Individual study, which may be laboratory or field based, of a special technical problem of interest. A written report is required. Prerequisite: Completion of core curriculum and approval of program coordinator.

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ITEC 695 Tech Internship (3 Credits)

ITEC 695 – Technical Internship (3) Minimum of 3 months (FTE) approved work in non-academic setting under supervision of a senior or management level technologist; work must be documented in technical report. Prerequisite: Completion of core curriculum and approval of program coordinator.

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Department: Dept of Industrial Tech

ITEC 699 Thesis (3 Credits)

Thesis Research (3) Direct investigation of special problems in technology; research to be reported in a thesis showing substantive depth and clear organization and presentation. Prerequisite: Completion of core curriculum and approval of program coordinator.

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