INDUSTRIAL TECHNOLOGY (INT) INACTIVE

INT 101: Engineer Draft I
Fundamentals in blueprint reading. ANSI standards, symbolic canons, dimensioning rubrics and shape description techniques including: orthographic projection, auxiliary views, sectional views, and pictorial projection.
Credit Hours: 3
Contact Hours: 3

INT 102: Engineer Draft II
Intermediate concepts of working drawings. Includes advanced sections, auxiliaries, threads and fasteners, tolerancing, and geometric dimensioning. Specialized equipment used in duplication methods and blueprint reading.
Prerequisite: INT 101 or consent of instructor
Credit Hours: 3
Contact Hours: 3

INT 104: Descriptive Geometry
Specific problems involving points, lines, planes, curved surfaces, intersections, and development problems. Emphasis directed toward auxiliary views, points and lines, revolutions, and development of surfaces.
Credit Hours: 3
Contact Hours: 3

INT 124: Basic Electricity DC/AC
Principles and measurement of direct current, voltage, resistance; alternating current, capacitance, inductance, impedance; and mathematical analysis of basic electricity covering Kirchoff, Thevenin, and Norton theorems.
Credit Hours: 3
Contact Hours: 3

INT 125: Residential Wiring
A study of the National Electrical Code relative to residential wiring local codes. Experience is gained through wiring circuits found in the modern house.
Credit Hours: 3
Contact Hours: 3

INT 126: Motors/Controls
Study of basic controls used today for AC motors. Ladder diagrams and practical circuits are drawn and wired.
Credit Hours: 3
Contact Hours: 3

INT 128: Solid State Devices
A study of the characteristics and application of solid/state devices, diodes, transistors, rectifier circuits, voltage regulators, and wave/form interpretations. Single and multistate small signal amplifiers are tested.
Credit Hours: 3
Contact Hours: 3

INT 129: Large Scale Integ Circ
Analysis of large scale integrated circuits. (Lecture two hour; laboratory two hours)
Prerequisite: INT 130
Credit Hours: 3
Contact Hours: 4

INT 130: Digital Logic Circuits
A survey of logic circuits using Boolean Algebra, truth tables, and binary numbering systems.
Credit Hours: 3
Contact Hours: 3

INT 136: Comp Hardware: Manage./Maint
The focus of this course involves emphasis on computer hardware that consumers of microcomputer systems might encounter. This course will guide students through the actual construction of a microcomputer system with in-depth discussions of each component and the various upgrade options. The use of peripheral devises such as fax, modem, printers, and scanners is also covered. The instructional methods employed in this class include lecture, class discussion, demonstration, and hands-on laboratory experience.
Credit Hours: 3
Contact Hours: 3

INT 137: Comp Op Sys Manage & Maint
This course is designed as a survey of operating system software. Students will study the basic concepts and procedures for installing and troubleshooting operating system software. An emphasis on extensive laboratory experience will ensure students practical expertise in addition to operating systems theory with DOS, Windows 9x; Windows NT, 2000, and XP; UNIX; Linux; OS/2; and Mac OS. The objectives of this course coincide with those needed in preparation for A+ software certification.
Credit Hours: 3
Contact Hours: 3

INT 202: Technical Illustration
Explores ways of converting orthographic projections into perspective and pictorial expressions. Emphasizes oblique, isometric, dimetric, trimetric, exploded view, and rendering of projections for publications.
Credit Hours: 3
Contact Hours: 3

INT 203: Civil Drafting
Study of special drafting processes including map drawing. Emphasis in planning earth and concrete retaining structures, projecting locations, profile line and grade, and surveying instruments.
Credit Hours: 3
Contact Hours: 3

INT 208: Comp Aid Draft I
Familiarization with contemporary CAD systems, covering basic theory and applications, including industry's conversion to CAD. Prior computer experience is beneficial but not required.
Prerequisite: INT 101 or consent of instructor
Credit Hours: 3
Contact Hours: 3

INT 210: Comp Aid Draft II
Advanced training in CAD systems, covering the use of attributes, databases, Data Exchange Files, and the customizing of menus for increased efficiency of application.
Prerequisite: INT 208 or consent of instructor
Credit Hours: 3
Contact Hours: 3

INT 212: CAD 3D
Designed to provide CAD users understanding of 3D concepts, technique, strategy, and rendering features, engineering analysis and parametrics. Appropriate to those desiring to learn process of accurately producing three dimensional images for broad- based applications.
Prerequisite: INT 208 or consent of instructor
Credit Hours: 3
Contact Hours: 3

INT 215: Modeling & Animation I
3/D modeling and animation designed to bring new power, versatility, speed, and value to the graphics professional who needs to create professional images and animations.
Credit Hours: 3
Contact Hours: 3

INT 225: Regulaors, Osc, Lin Devices
Study, through theory and application, of regulators, oscillators, thyristors, DA's, Op Amps, and linear devices.
Credit Hours: 3
Contact Hours: 3

INT 226: Microprocessor Architecture
A study of the architecture and interconnecting functional units of the CPU, ALU, and control units with memory, input/output devices and communications between subsystems. (Lecture two hours, laboratory two hours)
Prerequisite: INT 129
Credit Hours: 3
Contact Hours: 4

INT 227: Elec Logic Microproc
Involves numbers, logic and circuits using integrated circuit chips. Includes implementation of logic functions in modern electronic devices, and integrated circuit chips in the small computer, using basic machine language.
Credit Hours: 3
Contact Hours: 3

INT 229: Programmable Logic Control
Study of the use and application of PLC's in industry, their operation, logic concepts, hardware components, the input/output system, programming, editing, and documentation.
Credit Hours: 3
Contact Hours: 3

INT 230: Data Communications Tech.
A study of data communications hard-ware including synchronous and asynchronous communications.
Prerequisite: INT 226
Credit Hours: 3
Contact Hours: 3

INT 231: Peripheral Control Structures
An analysis of the digital logic structures of peripheral control devices and how they interface with microprocessor based systems. Use of the Intel Series Development System to develop, edit, assemble, debug and test system routines.
Prerequisite: INT 226
Credit Hours: 3
Contact Hours: 3

INT 232: Intro to Net./Operat Systems
This course involves the installation, configuration, management, and trouble-shooting of network operating systems, accounts, data storage, remote access, and security.
Prerequisite: INT 230
Credit Hours: 3
Contact Hours: 3

INT 235: Modeling & Animation II
Topics covered include: advanced lofting including fit deformation, scaling, inverse kinematics, animated combustions and explosions, compound and appearing/disappearing materials, mirror and refractive materials, character animation, space warps, ripple effects, and higher-level animation track editing.
Prerequisite: INT 215 or consent of instructor
Credit Hours: 3
Contact Hours: 3

INT 240: Ind Elec/Robotics I
A survey of DC/AC motors and controls, power distribution systems, programmable logic control, and non-servo systems.
Prerequisite: INT 128
Credit Hours: 3
Contact Hours: 3

INT 245: Biomedical Techn. Equip I
The purpose of this course is to introduce the student to basic principles and clinical applications of biomedical equipment including, but not limited to, patient monitoring defibrillation computer network electro surgery machines, radiology and nuclear medicine equipment, dialysis and infusion pumps.
Prerequisite: BIO 107
Credit Hours: 3
Contact Hours: 3

INT 246: Biomedical Techn. Equip II
This course introduces the student to electrical and electronic design and application issues related to biomedical equipment such as isolation, measurement errors, low level signal amplification, CMMR, patient data telemetry and electrical safety in the medical environment.
Prerequisite: INT 245
Credit Hours: 3
Contact Hours: 3

INT 248: Robotics I
Survey of automated manufacturing with emphasis on involvement of robots, including history, development, and socio/economic implications. Introduction to robot operations and applications.
Credit Hours: 3
Contact Hours: 3

INT 250: Robotics II
Includes the online/offline programming of servo robots, the interfacing of robots with peripheral devices/equipment, computer control, computer assisted manufacturing and system integration.
Prerequisite: INT 124 and 208, INT 240 or consent of instructor
Credit Hours: 3
Contact Hours: 3

INT 255: Multimedia Production
Course addresses the educational needs of anyone wishing to work in the multimedia environment. Concepts, tools and techniques of multimedia production are among a few of comprehensive sets of topics included. Students will become familiar with how a major production develops and become capable of producing professional quality multimedia productions.
Prerequisite: INT 212 and 235 or consent of instructor
Credit Hours: 3
Contact Hours: 3

INT 280: Internet Develop Technologies
This course involves the in-depth study of Web development concept and techniques, the latest versions of the most commonly used languages and technologies on the market, exploration of the advancement of Web design, in addition to problem-solving and critical thinking skills.
Prerequisite: COS 100 or consent of instructor
Credit Hours: 3
Contact Hours: 3

INT 290: Industrial Technology Capstone
Students participate on a design team working on a realistic problem; design education process is guided by the design method approach. Students are encouraged to integrate diverse elements of course work into a coherent conception of their major.
Prerequisite: Students to be enrolled in their last semester of course work or consent of instructor
Credit Hours: 3
Contact Hours: 3

INT 299: Industrial Tech Internship
Designed to provide students a means to integrate academic theories and principles to practical job experience, thereby reinforcing and expanding classroom learning while preparing them for activities related to their major. (Hours to be arranged.)
Prerequisite: Student to be enrolled in their last semester of course work or consent of instructor
Credit Hours: 3
Contact Hours: 3