TECHNOLOGY, GENERAL (TEC)

TEC 102. Technology and Society. (3 Credits)
I, II. The role of technology in society. Characteristics of a technologically literate citizen. Perspectives, theories, issues, concerns, and facts to support the recognition of the forces and consequences of technological change. Evolution and current trends of diverse technologies.

TEC 141. Elementary Woodworking. (3 Credits)
I, II. Basic instruction in the use of common hand tools, basic machine operations, problems in furniture construction, related technical information, and finishing materials and methods. Not open to students majoring in a program within the department. 2 Lec/2 Lab.

TEC 161. Computer Applications in Technology. (3 Credits)
I, II. A survey of computer systems and software applications including word processing, document formatting, spreadsheets, presentations, databases, project planning, and selected computing/simulation tools currently used in technology related fields. 2 Lec/2 Lab .

TEC 190. Technical Graphics. (3 Credits)
I, II. Shape and size description of objects using conventional projection techniques¿multiview, axonometric, oblique, and perspective. Emphasis is placed on sketching with paper and pencil and with computers. 2 Lec/2 Lab.

TEC 255. Web Publishing. (3 Credits)
I. A basic course in using current Web standards to prepare content for the World Wide Web that includes HTML, XHML and Cascading Style Sheets. 2 Lec/2 Lab.

TEC 303. Problem Solving and Engineering. (3 Credits)
A. Prerequisites: TEC 190 or departmental approval. Application of the principles of engineering design related to various media; emphasis on experimentation and problem solving in development and construction of engineering design solutions. 2 Lec/2 Lab.

TEC 305. Creative Problem Solving. (3 Credits)
(3) I. Prerequisite: CRE 101 or departmental approval. A review and analysis of basic and applied research in the development of creative behavior with emphasis on its application to methods and techniques used in creative problem solving in personal/professional settings.

TEC 313. Digital Photography. (3 Credits)
A. A study of current technology used to digitize photographic images for use in computer application programs. This includes the acquisition of images from scanners and digital cameras. 2 Lec/2 Lab.

TEC 314. Engineering in Classroom Context. (3 Credits)
I, II. Introduction of engineering and technology to promote problem solving skills, tool use, materials processing, design capabilities, and product completion. Applications for K-8 classrooms are emphasized.

TEC 315. Photography. (3 Credits)
A. Emphasis on black and white film photography including use and care of equipment, exposure calculations and techniques and finishing. A 35mm camera with adjustable lens and shutter control is required. 2 Lec/2 Lab.

TEC 322. Crafts for Children. (3 Credits)
I, II. Introduction to various craft media and their application in recreational elementary crafts programs. Emphasis on activities appropriate for children and the use of inexpensive and readily available materials. 2 Lec/3 Lab.

TEC 331. Casework Detailing. (3 Credits)
I. Prerequisites: DES 222 and INT 195. The planning and production requirements of architectural millwork and the drawings needed to describe its construction. The production of a complete set of working drawings for a casework piece will be required. 2 Lec/2 Lab.

TEC 332. Product Design. (3 Credits)
I, II. Prerequisite: TEC 391. Elements of product design as it relates to materials, such as woods, metals, and plastics. Emphasis placed on experimentation and problem solving in developing design solutions, detailed drawings, and illustrations and the presentation of design ideas. 2 Lec/2 Lab.

TEC 333. Special Problems in Technology. (1-6 Credits)
I, II. An independent study course for exceptional undergraduate students. A study proposal will be developed by the student and approved by the faculty supervisor and department chair prior to enrollment. May be retaken provided the topic of study is different.

TEC 349. Applied Learning in Technology. (0.5-8 Credits)
I, II. Prerequisite: departmental approval. Work under faculty and field supervisors in placements related to academic studies. One to eight hours credit per semester or summer. Total hours: eight, associate; sixteen, baccalaureate. A minimum of 80 hours work required for each academic credit.

TEC 349J. Coop Study in Technology. (0.5-8 Credits)
Work under faculty and field supervisors in placements related to academic studies.

TEC 355. Web Animation. (3 Credits)
II. Prerequisite: TEC 255. Web animation with advanced Web programming. 2 Lec/2 Lab.

TEC 368. Workshop in Technology. (1-4 Credits)
A. Presentation of technology topics of a timely or specialized nature in a workshop format. May be retaken provided the topics are different.

TEC 404. Princ. of Engr. and Tech.. (3 Credits)
A. Prerequisite: CTE 361 or departmental approval. To familiarize students with important principles of engineering and technology, including electrical, civil, mechanical and other engineering and technology areas. 2 Lec/2 Lab.

TEC 801. Special Problems in Technology. (2-6 Credits)
I, II. An independent study course for graduate students. Student must have the independent study proposal form approved by faculty supervisor and department chair prior to enrollment. May be retaken if the topic of study is different.

TEC 830. Creative Problem Solving. (3 Credits)
A. A review and analysis of basic and applied research in the development of creative behavior with emphasis on its application to teaching/training and industrial problem solving. Students will be expected to complete a term project showing their creative abilities.

TEC 831. Applied Problem Solving. (3 Credits)
A. Prerequisite: TEC 830. Students will strengthen problem solving through the completion of an independent project. Students will propose a process and produce a finished project. Documentation of the process will be used as a foundation for evaluation.

TEC 833. Workshop in Technology. (1-4 Credits)
A. Presentation of technology topics of a timely or specialized nature in a workshop format. May be retaken if the topics are different.

TEC 860. Research in Technology. (3 Credits)
(3) A. A study of research methods as they apply in technological fields. Involves the development of a review of literature, a research proposal, and the use of descriptive and inferential statistics.

TEC 867. Independent Study in Tech:____. (3 Credits)
A. Independent research in technology supervised by the graduate advisor and other staff members. Topic must be approved before registration. May be retaken to a maximum of six hours.