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CAREER and TECHNICAL

EDUCATION

(CTE)

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# CAREER and TECHNICAL EDUCATION (CTE)

**Career and Technical Education (CTE):** CTE programs are dedicated to preparing young people to manage the dual roles of family member and wage earner. CTE programs enable students to become certified or licensed in a particular skill; gain entry-level employment in a high-skill, high-wage career; and/or continue their education in post-secondary institutions. For more information about CTE in TISD, visit our website at: [www.tylerisd.org](http://www.tylerisd.org) (click "About" click "Departments" click "Career and Technical Education")

**Achieve Texas:** Achieve Texas ([www.achievetexas.org](http://www.achievetexas.org)) is an education initiative designed to prepare students for a lifetime of success. It allows students to achieve excellence by preparing them for secondary and postsecondary opportunities, career preparation and advancement, meaningful work, and active citizenship. It is based on the belief that the 21st century should combine rigorous academics with relevant career education. Achieve Texas facilitates a seamless transition from secondary to postsecondary opportunities; it uses federally defined Career Clusters of the States' Career Clusters initiative: [www.careerclusters.org](http://www.careerclusters.org)

**Career Cluster:** a grouping of broad industries based on commonalities. Each Career Cluster contains CTE courses that relate to these industries. A student who takes a sequence of CTE courses in preparation for a particular occupation is following a Program of Study (POS). All POS have post-secondary options for advanced training. Tyler ISD offers various Career Clusters and various programs of study within each Career Cluster.

**Programs of Study (POS):** When students follow a Program of Study (POS) within a career cluster, they are taking a sequence of electives that prepare them for certification, licensure, post-secondary education, and/or a career. The CTE POS contained in this catalog are just few of the options that are available to students. There are many more possibilities; consider creating your own!

## Career Cluster icons:



**Career Exploration:** Tyler ISD supports students in their quest to find college and career information. We make numerous resources available to assist in this process.

**College Credit for CTE Courses:** Tyler ISD's CTE students have the opportunity to earn college credit and/or continuing education credit.

**Career and Technical Student Organizations (CTSO):** CTE offers abundant opportunities for student involvement in CTSO's. Consider joining one of several student organizations in CTE; it's a great way to learn while having fun and making new friends!

- **BPA:** Business Education, Business Professionals of America: <http://www.texasbpa.com>
- **DECA:** Marketing Education, Texas DECA Association: <http://www.texasdeca.org>
- **FBLA:** Business Education, Future Business Leaders of America: <http://www.txfbla.org>
- **FCCLA:** Family and Consumer Sciences Education: <http://texasfccla.org>
- **FFA:** Agricultural Science and Technology Education, Texas FFA Association: <http://www.texasffa.org>
- **HOSA:** Health Science Technology Education, Health Occupations Students of America: <http://www.texashte.com/html/hosa.htm>
- **SkillsUSA:** Trade and Industrial Education: <http://www.txskillsusa.org>
- **TAFE:** Texas Association of Future Educators: <http://www.tafeonline.org>
- **TSA:** Technology Education, Texas Technology Students Association: <http://www.texastsa.org>

**National Technical Honor Society (NTHS):** NTHS is an honor society specifically for CTE students. In order to be a member, you must be enrolled in a minimum of one CTE course. Please visit with your counselor or the campus NTHS sponsor for more details. You may also visit the NTHS website at: [www.nths.org](http://www.nths.org) Scholarship opportunities are available!

**Skill Attainment:** Numerous upper level CTE classes will have the opportunity for skill attainment testing. Funding for skill attainment tests will be determined by the district administration on an annual basis depending upon available funds.

**Course Fees:** There are some courses that require certain fees to be paid by the student in order to participate. The list of fees is as follows:

- **Certified Nurse Aide:** Drug Testing\*
- **Pharmacy Tech:** Drug Testing\*; Fingerprinting\*; PTCB Registration\*
- **Health Science & Medical Terminology:** Drug Testing\*
- **Medical Billing and Coding:** Drug Testing\*

\*Students who are members of HOSA may be eligible for assistance from HOSA in paying above course fees

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It is the policy of Tyler Independent School District not to discriminate on the basis of race, color, national origin, sex, or handicap in its vocational programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.

La póliza del distrito escolar independiente de Tyler no discrimina por razones de raza, color, sexo, origen nacional o impedimento en programas vocacionales, servicios o actividades según como lo requiere Título VI del Acto de Derechos Civiles del 1964, enmendado; Título IX de Enmendado Educativo del 1972; y sección 504 del Acto de Rehabilitación del 1973, enmendado.

*Tyler ISD's Career and Technical Education mission is to provide rigorous and relevant technical education programs to prepare students for high skill, high wage, or high demand careers.*



## Agriculture, Food and Natural Resources

### **Agricultural Facilities Design and Fabrication (AGFDFAB) (13002300)**

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Agricultural Mechanics & Metal Technologies, Agricultural Power Systems, pass most recent Math TAKS
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** Electrocutation, dismemberment, toxic chemicals
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** To be prepared for careers in mechanized agriculture and technical systems, students attain knowledge and skills related to agricultural facilities design and fabrication. Students explore career opportunities, entry requirements, and industry expectations. To prepare for success, students reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.

**Teacher Comments about this Course:** This course is more than a welding course. The course also covers all structures, power equipment, and repairs that might occur on a modern farm.

### **Agricultural Mechanics and Metal Technologies (AGMECHMT) (13002200)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisites:** Principles of Agriculture, Food and Natural Resources
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** chemicals, fire, explosives, sharp blades, etc.
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** To be prepared for careers in agricultural power, structural, and technical systems, students need to attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the industry; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings. This course is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metal working techniques.

**Teacher Comments about this Course:** This course offers a hands-on approach to shop skills in agriculture. It covers all topics related to the modern farm, not just welding.

### **Agricultural Power Systems (AGPOWSYS) (13002400)**

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Agricultural Mechanics & Metal Technologies
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** Potential for chemicals, fire, explosives, sharp blades, etc.
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** To be prepared for careers in agricultural power, structural, and technical systems, students should attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the workplace; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations. To prepare for success, students should have opportunities to learn, reinforce, apply, and transfer their knowledge and technical skills in a variety of settings. This course is designed to develop an understanding of power and control systems as related to energy sources, small and large power systems, and agricultural machinery.

**Teacher Comments about this Course:** This course offers a more in-depth development of shop skills in agriculture, welding and metal trades.

### **Equine Science (EQUINSCI) (13000500)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Principles of Agriculture, Food and Natural Resources
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** In order for students to be prepared for careers in the field of animal science, students need to enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. Suggested animals which may be included in the course of study include, but are not limited to, horses, donkeys, and mules.

**Teacher Comments about this Course:** This course will cover breeds, anatomy, conformation, temperament, coloring and markings of horses. The subject of judging horses will also be discussed.

### **Horticulture Science (HORTISCI) (13002000)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** Water, soil, scissors, rooting hormones; tables in tight facility – no room for playing
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** To be prepared for careers in horticultural systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and

transfer knowledge and skills in a variety of settings. This course is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production.

**Teacher Comments about this Course:** As much as is practical, emphasis in this course should be placed on organic methods so as to promote healthier nutrition and protection of our fragile environment.

### **Landscape Design and Turf Grass Management (LNDTGMGT) (13001900)**

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Horticulture Science
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** To be prepared for careers in horticultural systems, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills and technologies in a variety of settings. This course is designed to develop an understanding of landscape and turf grass management techniques and practices.

**Teacher Comments about this Course:** None

### **Principles of Agriculture, Food, and Natural Resources (PRINAFNR) (13000200)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** Potential moving parts, chemicals, fire
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** To be prepared for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce experience, apply, and transfer their knowledge and skills in a variety of settings.

**Teacher Comments about this Course:** Students will explore all areas of Agriculture including leadership, the animal industry, plants and mechanization.

### **Small Animal Management (SMANIMGT) (13000400)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s) (please list):** Principles of AFNR
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** To be prepared for careers in the field of animal science, students need to enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and

develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. Suggested small animals which may be included in the course of study include, but are not limited to, small mammals, amphibians, reptiles, avian, dogs, and cats.

**Teacher Comments about this Course:** None

### **Veterinary Medical Applications (VETMEDAP) (13000600)**

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Small Animal Management & Equine Science; pass most recent Science and Math TAKS
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** None
- **Personal Transportation Required:** Helpful, but not required
- **Employment Required:** No, but is a benefit toward certification

**Course Description:** To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings. Topics covered in this course include, but are not limited to, veterinary practices as they relate to both large and small animal species.

**Teacher Comments about this Course:** This course covers current topics in Veterinary medicine, animal rights/welfare demand, clients and animals, veterinary terminology, veterinary math, infectious diseases, parasites, instrument identification. Student needs the ability to read on a 10<sup>th</sup> grade level.



## **Architecture and Construction**

### **Architectural Design (ARCHDSN) (13004600)**

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Engineering Design & Presentation; Algebra I; Geometry; Principles of Architecture and Construction
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No
- **Course Description:** In Architectural Design, students gain knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a

postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. Architectural design includes the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

**Teacher Comments about this Course:** The students go through the design process to develop a complete set of house plans. They begin with a project notebook and a hand-drawn floor plan, and then they advance to completing computer-generated drawings of their house. Each student should complete his or her set of house plans by the end of the school year. The plans are plotted and burned to a CD.

### **Advanced Architectural Design (ADVARCH) (13004700)**

- **Grade:** 12
- **Credit:** 2
- **Prerequisite(s):** Architectural Design, Engineering Design and Presentation
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** In Advanced Architectural Design, students gain advanced knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. Advanced Architectural design includes the advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

**Teacher Comments about this Course:** After the students go through the Architectural Design course, they have the knowledge and skills to draw a much larger and more complicated set of computer-generated house plans. The students can design any style or size of house they desire. A complete set of house plans are developed by the end of the school year. A model can be constructed if time permits.

### **Advanced Construction Technology (ADVCONST) (13005200)**

- **Grade:** 11 - 12
- **Credit:** 2
- **Prerequisite(s):** Construction Technology
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** Electrocution, dismemberment, toxic chemicals
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** In Advanced Construction Technology, students gain advanced knowledge and skills specific to those needed to enter the work force as carpenters, building maintenance technicians, or supervisors or prepare for a postsecondary degree in construction management, architecture, or engineering. Students build on the knowledge base from Construction Technology and are introduced to exterior and interior finish out skills.

**Teacher Comments about this Course:** None

### **Advanced Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology (ADVHVAC) ( 13005900)**

- **Grade:** 12
- **Credit:** 2
- **Prerequisite(s):** Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology

- **College Credit Opportunity:** Yes – Advanced Technical Credit plus Dual Credit with TJC
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** Electrocutation, toxic chemicals
- **Personal Transportation Required:** No – transportation provided
- **Employment Required:** No
- **TJC Course:** HART 1401, 1407 (dual credit)

**Course Description:** In Advanced Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology, students gain advanced knowledge and skills specific to those needed to enter the industry as HVAC and refrigeration technicians or building maintenance technicians or supervisors or prepare for a postsecondary degree. Students acquire knowledge and skills in safety, electrical theory, tools, codes, installation of commercial HVAC equipment, heat pumps, trouble-shooting techniques, various duct systems, and maintenance practices.

**Teacher Comments about this Course:** None

### **Advanced Interior Design (ADVINDSN) (13004400)**

- **Grade:** 11-12
- **Credit:** 2
- **Prerequisite(s):** Geometry, Interior Design, or Architectural Design
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** Upholstery needles, staples, scissors, hot glue
- **Personal Transportation Required:** Yes
- **Employment Required:** Yes

**Course Description:** Advanced Interior Design is a technical laboratory course that includes the knowledge of the employability characteristics, principles, processes, technologies, communication, tools, equipment, and materials related to interior spatial design.

**Teacher Comments about this Course:** Students will need to have their own drafting supplies to work on projects at home.

### **Construction Technology (CONSTECH) (13005100)**

- **Grade:** 10 - 12
- **Credit:** 2
- **Prerequisite(s):** Principles of Architecture and Construction
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** Electrocutation, dismemberment, toxic chemicals
- **Personal Transportation Required:** No
- **Employment Required:** No
- **Course Description:** In Construction Technology, students gain knowledge and skills specific to those needed to enter the work force as carpenters or building maintenance supervisors or prepare for a postsecondary degree in construction management, architecture, or engineering. Students acquire knowledge and skills in safety, tool usage, building materials, codes, and framing.

**Teacher Comments about this Course:** None

### **Engineering Design and Presentation (ENGDSPR) (13036500)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None, but helps to have Principles of Architecture and Construction
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes

- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students enrolled in this course will demonstrate knowledge and skills of the process of design as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas.

**Teacher Comments about this Course:** Students learn the basics of the design process. They start with sketching sheets, lettering sheets, reading the scale and using the equipment in their drafting kits. They will advance to doing multi-view drawings, pictorials, dimensioning and auxiliary views. At mid-term the students will begin using AutoCAD software, and all drawings will be done on the computer the remainder of the year. The last six weeks the students will draw the plans for a small house. All drawings are plotted and returned to the students to make a portfolio.

### **Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology (HVACREF) (13005800)**

- **Grade:** 11-12
- **Credit:** 2
- **Prerequisite(s):** Principles of Architecture and Construction or Construction Technology
- **College Credit Opportunity:** Yes – Dual Credit with TJC
- **Licensure or Certification Opportunity:** No
- **Hazards:** Electrocution, toxic chemicals
- **Personal Transportation Required:** No – transportation provided
- **Employment Required:** No
- **TJC Course:** HART 1300, 1310 (dual credit)

**Course Description:** In Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology, students gain knowledge and skills specific to those needed to enter the industry as technicians in the HVAC and refrigeration industry or building maintenance technician or supervisor or prepare for a postsecondary degree. Students acquire knowledge and skills in safety, principles of HVAC theory, tools, codes, and installation of HVAC and refrigeration equipment.

**Teacher Comments about this Course:** None

### **Interior Design (INTERDSN) (13004300)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Algebra I, Principles of Architecture and Construction
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** Scissors, needles, staplers, hot glue, nails, hammers
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Interior Design is a technical course that addresses psychological, physiological, and sociological needs of individuals by enhancing the environments in which they live and work. Individuals use knowledge and skills related to interior and exterior environments, construction, and furnishings to make wise consumer decisions, increase productivity, and compete in industry.

**Teacher Comments about this Course:** None

## Principles of Architecture and Construction (PRINARCH) (13004200)

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite:** pass most recent Math TAKS
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** Power equipment used in wood working
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Principles of Architecture and Construction provides an overview to the various fields of architecture, interior design, construction science, and construction technology. Achieving proficiency in decision making and problem solving is an essential skill for career planning and lifelong learning. Students will receive an introduction to hand tools, power tools, basic rigging, and reading technical drawings.

**Teacher Comments about this Course:** This class will focus on learning the parts of a house, designing a house, and then building a model house. Strong math skills are needed for this course.



## Arts, A/V Technology and Communications

### Advanced Fashion Design (ADVFASHD) (13009400)

- **Grade:** 11 – 12
- **Credit:** 2
- **Prerequisite(s):** Fashion Design
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** Sharp scissors, needles, pins, rotary blade cutters
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced understanding of fashion, with emphasis on design and production.

**Teacher Comments about this Course:** None

### Fashion Design (FASHDSN) (13009300)

- **Grade:** 10 – 12
- **Credit:** 1
- **Prerequisite(s):** Algebra I or Geometry; Business Information Management I
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:**

- **Hazards:** Sharp scissors, needles, pins, rotary blade cutters
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Careers in Fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, A/V Technology and Communications career cluster, students will be expected to develop an understanding of fashion and the textile and apparel industries.

**Teacher Comments about this Course:** None



## Business Management and Administration

### Business Information Management I (BUSIM1) (13011400)

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** Touch Systems Data Entry (TSDATAE) or passage of a Keyboarding Proficiency Test
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** electricity; outlets/power cords
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

**Teacher Comments about this Course:** All course work is to be completed in class. Software applications include Microsoft Office Word, Excel, Access and PowerPoint. In addition supplemental web-based programs are utilized. Successful completion of Touch Systems Data Entry prior to BUSIM1 is required.

### Business Information Management II (BUSIM2) (13011500)

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Business Information Management I
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** electricity, outlets, power cords
- **Personal Transportation Required:** No

- **Employment Required:** No

**Course Description:** Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.

**Teacher Comments about this Course:** Expanding upon the applications skills learned in BUSIM1, this course is designed to help students move from classroom setting to workplace environment application.

### **Business Law (BUSLAW) (13011700)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** electricity; outlets/power cords
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students analyze the social responsibility of business and industry regarding the significant issues relating to the legal environment, business ethics, torts, contracts, negotiable financial instruments, personal property, sales, warranties, business organizations, concept of agency and employment, and real property. Students apply technical skills to address business applications of contemporary legal issues. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

**Teacher Comments about this Course:** None

### **Business Management (BUSMGT) (13012100)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students recognize, evaluate, and prepare for a rapidly evolving global business environment that requires flexibility and adaptability. Students analyze the primary functions of management and leadership, which are planning, organizing, staffing, directing or leading, and controlling. Topics will incorporate social responsibility of business and industry. Students develop a foundation in the economical, financial, technological, international, social, and ethical aspects of business to become competent managers, employees, and entrepreneurs. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate management decisions.

**Teacher Comments about this Course:** None

### **Principles of Business, Marketing, and Finance (PRINBMF) (13011200)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None

- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

**Teacher Comments about this Course:** This is an introductory business class.

### **Touch System Data Entry (TSDATAE) (13011300)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students apply technical skills to address business applications of emerging technologies. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students will need to apply touch system data entry for production of business documents.

**Teacher Comments about this Course:** In this course, the student develops psychomotor skills in operating the keyboard as well as **achieving acceptable speed and accuracy levels** while using proper key stroking technique. It also gives students the chance to apply keyboarding skills in real-life situations. The course includes skill development in proofreading, spelling, word division, punctuation, and correction techniques. In order to be successful, students need to be able to read.



## **Career Development**

### **Career Preparation I (CAREERP1) (12701300)**

- **Grade:** 11-12
- **Credit:** 3
- **Prerequisite(s):** appropriate coursework in the area of study
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** Work related
- **Personal Transportation Required:** Yes

- **Employment Required:** Yes

**Course Description:** Career Preparation I provide opportunities for students to participate in a learning experience that combines classroom instruction with paid business and industry employment experiences and supports strong partnerships among school, business, and community stakeholders. The goal is to prepare students with a variety of skills for a fast-changing workplace. This instructional arrangement should be an advanced component of a student's individual program of study. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations and portfolio development. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

**Teacher Comments about this Course:** Student must have a training station (job) secured and approved by the teacher/coordinator before the start of the school year. Fifteen (15) hours of work will be required per week with ten (10) of those hours taking place Monday – Friday. The remaining five (5) hours may be worked on the weekend.

### **Career Preparation II (CAREERP2) (12701400)**

- **Grade:** 12
- **Credit:** 3
- **Prerequisite(s):** Career Preparation I
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** Work related
- **Personal Transportation Required:** Yes
- **Employment Required:** Yes

**Course Description:** Career Preparation II develops essential knowledge and skills through classroom technical instruction and on-the-job training in an approved business and industry training area. Students will develop skills for lifelong learning, employability, leadership, management, work ethics, safety, and communication as a group; however, each student will have an individual training plan that will address job-specific knowledge and skills. Approved training sponsors will provide paid occupational training for a student. The training sponsor will assist the teacher in providing the necessary knowledge and skills for the student's specific career preparation.

**Teacher Comments about this Course:** Student must have a training station (job) secured and approved by the teacher/coordinator before the start of the school year. Fifteen (15) hours of works will be required per week with ten (10) of those hours taking place Monday – Friday. The remaining five (5) hours may be worked on the weekend.



## **Education and Training**

### **Human Growth and Development (HUGRDEV) (13014300)**

- **Grade:** 10-12
- **Credit:** 1

- **Prerequisite(s):** Business Information Management I
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Human Growth and Development is an examination of human development across the lifespan with emphasis upon research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers material that is generally taught in a postsecondary, one-semester introductory course in developmental psychology or human development.

**Teacher Comments about this Course:** None

### **Instructional Practices in Education and Training (INPREDTR) (13014400)**

- **Grade:** 11-12
- **Credit:** 2
- **Prerequisite(s):** Human Growth and Development
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** Scissors and large paper cutter
- **Personal Transportation Required:** No – students travel by bus to the field site campuses.
- **Employment Required:** No
- **DAEP (Discipline Alternative Education Program):** Discretionary DAEP assignment may result in removal from this course. Mandatory DAEP assignment will result in removal from this course.

**Course Description:** Instructional Practices in Education and Training is a field-based internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel.

**Teacher Comments about this Course:** This course is an on-site training experience for future teachers. Since the course instructor is unable to monitor all students at all times, the students must be able to effectively self-discipline and manage their time. Students must be willing to be involved in the Texas Association of Future Educators (TAFE) organization.

### **Practicum in Education and Training (PRACEDTR) (13014500)**

- **Grade:** 12
- **Credit:** 2
- **Prerequisite(s):** Instructional Practices in Education and Training
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** Scissors and large paper cutter
- **Personal Transportation Required:** No – students are taken by bus to the field site campuses.
- **Employment Required:** No
- **DAEP (Discipline Alternative Education Program):** Discretionary DAEP assignment may result in removal from this course. Mandatory DAEP assignment will result in removal from this course.

**Course Description:** Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist

with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.

**Teacher Comments about this Course:** This course is an on-site training experience for future teachers. Since the course instructor is unable to monitor all students at all times, the students must be able to effectively self-discipline and manage their time. Students must have a valid driver's license and personal transportation. Students must be willing to be involved in the Texas Association of Future Educators (TAFE) organization.



## Finance

### Accounting I (ACCOUNT1) (13016600)

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Recommended – Principles of Business, Marketing and Finance or Business Information Management I
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students investigate the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students reflect on this knowledge as they engage in the process of recording, classifying, summarizing, analyzing, and communicating accounting information. Students formulate and interpret financial information for use in management decision making.

**Teacher Comments about this Course:** Students interested in exploring a career in an office setting, running their own business and/or those considering business as a college major are strongly encouraged to explore accounting in high school. For students successful in this class, this course earns college credit at Texas community colleges.

### Accounting II (ACCOUNT2) (13016700)

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Accounting I
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No
- **Course Description:** Students continue the investigation of the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students reflect on this knowledge as they engage in various managerial

and cost accounting activities. Students formulate and interpret financial information for use in management decision making.

**Teacher Comments about this Course:** Students continue expanding their knowledge in the field of accounting by completing this class. Those considering business, as a college major, may earn college credit upon completing this class.

### **Financial Analysis (FINANAL) (13016800)**

- **Grade:** 12
- **Credit:** 1
- **Prerequisite(s):** Accounting I and II
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students apply technical skills to develop knowledge and skills in the economical, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students develop analytical skills by actively evaluating financial results of multiple businesses, interpreting results for stakeholders, and presenting strategic recommendations for performance improvement.

**Teacher Comments about this Course:** None

### **Principles of Business, Marketing, and Finance (PRINBMF) (13011200)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

**Teacher Comments about this Course:** This is an introductory business course.



## **Health Science**

### **Health Science (HLTHSCI) (13020400)**

- **Grade:** 10-12

- **Credit:** 1
- **Prerequisite(s):** Recommended - Principles of Health Science
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** The Health Science course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will have hands-on experiences for continued knowledge and skill development. The course may be taught by different methodologies such as clinical rotation and career preparation learning.

**Teacher Comments about this Course:** This course will involve field trips to hospitals and other medical facilities to provide students with more in-depth knowledge of the health care field.

### **Medical Terminology (MEDTERM) (13020300)**

- **Grade:** 11-12
- **Credit:** this course is taken in conjunction with Practicum in Health Science
- **Prerequisite(s):** Health Science; concurrent with Practicum in Health Science; Recommended – Principles of Health Science
- **College Credit Opportunity:** Yes – Advanced Technical Credit is given if this course is taken in addition to Principles of Health Science or Health Science. Dual credit with TJC (see your counselor for details)
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

**Teacher Comments about this Course:** None

### **Practicum in Health Science (PRACHLSC) (13020500)**

- **Grade:** 11-12
- **Credit:** 2
- **Prerequisite(s):**
  - Health Science and Biology
  - Pass most recent TAKS tests
  - Must be 16 years old by Sept. 1
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** routine hospital exposure
- **Personal Transportation Required:** No – transportation will be provided
- **Employment Required:** No
- **DAEP (Discipline Alternative Education Program):** Discretionary DAEP assignment may result in removal from this course. Mandatory DAEP assignment will result in removal from this course.

**Course Fees:** Yes. This is a clinical rotation class. Hospitals, clinics, and pharmacies require participating students to have drug testing and fingerprinting prior to beginning rotations. These expenses will be covered by the student.

**Course Description:** The Practicum is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

**Teacher Comments about this Course:** This is an overview practicum course that will provide rotation opportunities in a variety of settings in the following specializations: Certified Nurse Aide, Pharmacy Technician, EMT-B, and Insurance Coding Specialist.

### Practicum in Health Science II (PRACHLS2) (13020510)

- **Grade:** 12
- **Credit:** 2
- **Practicum Specializations:**
  - Certified Nurse Aide
  - Pharmacy Technician
  - Insurance Coding Specialist
  - Emergency Medical Technician-B
- **College Credit Opportunity:** Yes
- **Licensure or Certification Opportunity:** Yes, for all specializations
- **Employment Required for Practicums:** No
- **DAEP (Discipline Alternative Education Program):** Discretionary DAEP assignment may result in removal from this course. Mandatory DAEP assignment will result in removal from this course.

**Course Description:** The following practicums, listed below, are designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

**Teacher Comments about the Practicum Courses listed below:** These practicum courses will provide direct hands-on experience in the specific certification being pursued.

#### Certified Nurse Aide Practicum

- **Prerequisites:** pass most recent TAKS tests, Practicum in Health Science, and Biology
- **Hazards:** Routine exposure to illnesses in the hospital
- **Personal Transportation Required:** No, transportation will be provided
- **Course Fee:** Yes. The hospitals require participating students to complete drug testing and fingerprinting prior to hospital admittance; these expenses are the responsibility of the student.

#### Pharmacy Technician Practicum

- **Prerequisites:** pass most recent TAKS tests, Practicum in Health Science, and Biology
- **Hazards:** Routine exposure to illnesses
- **Personal Transportation Required:** Yes
- **Course Fee:** Yes. The pharmacies require participating students to complete drug testing and fingerprinting prior to pharmacy admittance; these expenses are the responsibility of the student.

#### Insurance Coding Specialist Practicum

- **Prerequisites:** pass most recent TAKS tests, Practicum in Health Science, Biology, and preferred to have Anatomy & Physiology
- **Hazards:** None
- **Personal Transportation Required:** No
- **Course Fee:** No

#### Emergency Medical Technician-B Practicum

**Prerequisites:** pass ELA TAKS; must be 18 by April 1 to ride in ambulance; pass TB test

**Hazards:** Routine exposure to illnesses and communicable diseases, inclement weather conditions, traffic congestion during wreck scenes, possible needle sticks, hazardous material exposure, encounter mentally/emotionally challenged patients, moving/lifting patients.

**Personal Transportation Required:** Yes (for ambulance practicum)

**College Credit Opportunity:** Yes - Dual Credit with TJC

**Course Fee:** No

## Principles of Health Science (PRINHLSC) (13020200)

- **Grade:** 9
- **Credit:** 1
- **Prerequisite(s):** none
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes (CPR and/or First Aid)
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** The Principles of Health Science provides an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.

**Teacher Comments about this Course:** This course provides an overview of the medical field for students to determine if they are interested in pursuing a career in the medical field.



## Hospitality & Tourism

### Culinary Arts (CULARTS) (13022600)

- **Grade:** 11-12
- **Credit:** 2
- **Prerequisite(s):** Lifetime Nutrition and Wellness and either Restaurant Management or Principles of Hospitality and Tourism
- **College Credit Opportunity:** Yes – Advanced Technical Credit (if student obtains Serv-Safe certification and lab hours)
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** Use of knives, slicers, food choppers, chemicals, live steam, hot pans, hot serving tables. Slippage in wet areas. Hazardous chemicals.
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification, a Texas culinary specialist certification, or any other appropriate industry certification. This course may be offered as a laboratory-based or internship course. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

**Teacher Comments about this Course:** Lifting, use of sharp tools and heavy equipment are part of this real world lab. Preparing food and serving teachers and/or guests simulates all areas of the restaurant experience. This is a professional level, quantitative cooking course which means emphasis is placed on preparing meals for 50 or more people.

### **Practicum in Culinary Arts (PRACCUL) (13022700)**

- **Grade:** 12
- **Credit:** 2
- **Prerequisite(s):** Culinary Arts
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** Use of knives, slicers, food choppers, hazardous chemicals, live steam, hot pans, hot serving tables. Potential slips in wet areas.
- **Personal Transportation Required:** Yes
- **Employment Required:** No

**Course Description:** This course is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace.

**Teacher Comments about this Course:** The practicum is designed for students who are seriously considering a career in the culinary or hospitality industry. It will help them decide if they want to make the investment in a culinary program after graduation. Students are encouraged to secure their ServSafe Certification and the Food Handlers Card from Culinary Arts I.

**Scheduling Note:** lab size should be limited to 15 students.

### **Principles of Hospitality and Tourism (PRINHOSP) (13022200)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** The hospitality and tourism industry encompasses lodging; travel and tourism; recreation, amusements, attractions, and resorts; and restaurants and food beverage service. The hospitality and tourism industry maintains the largest national employment base in the private sector. Students use knowledge and skills that meet industry standards to function effectively in various positions within this multifaceted industry. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

**Teacher Comments about this Course:** If you are interested in working in the hotel, food service, recreation or tourism industry, this class will be helpful because it focuses on the various skills and requirements of all positions in these industries. Strong customer service skills are important for anyone working in any of these industries. The ability and desire to work with others is important.

### **Restaurant Management (RESTMGT) (13022400)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Principles of Hospitality and Tourism
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** This course will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

**Teacher Comments about this Course:** None



## Human Services

### Child Development (CHILDDEV) (13024700)

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Principles of Human Services
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** To participate in the Baby Simulator Program and the Real Care Baby II program, the student is required to carry additional weight around with them. Students must be in good physical condition in order to participate.
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** This technical laboratory course addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

**Teacher Comments about this Course:** None.

### Child Guidance (CHILDGUI) (13024800)

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Principles of Human Services and Child Development
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes – Child Development Associate
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** This technical laboratory course addresses the knowledge and skills related to child growth and guidance equipping students to develop positive relationships with children and effective caregiver skills. Students use these skills to promote the well-being and healthy development of children, strengthen a culturally diverse society, and pursue careers related to the care, guidance, and education of children, including those with special needs.

**Teacher Comments about this Course:** None

### **Lifetime Nutrition and Wellness (LNURTWEL) (13024500)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Principles of Human Services or Principles of Hospitality and Tourism
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** Basic cooking utensils such as knives, forks, sharps; cooking oil, gas ovens, stoves
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** This laboratory course allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences.

**Teacher Comments about this Course:** The cooking lab portion of this course requires students to practice safe handling of sharp objects (knives, blades) and safety procedures with stoves, ovens, and various other potentially dangerous kitchen objects. The major focus of this class is nutritional science; this is not a cooking class. There will be minimal cooking labs to reinforce some of the elements learned in class.

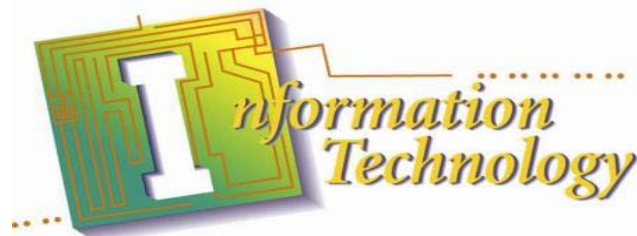
**Scheduling Note:** lab should be limited to 20 students.

### **Principles of Human Services (PRINHUSR) (13024200)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** No
- **Licensure of Certification Opportunity:** No
- **Hazards:** Basic cooking utensils (for nutrition unit), scissors
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** This course will enable students to investigate careers in the human services career cluster, including counseling and mental health, early childhood development, family and community, and personal care services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers.

**Teacher Comments about this Course:** This is a very fast-paced class, so students need to be able to change topics quickly. It is an introductory course to all the other human services courses.



## **Information Technology**

### **Advanced Computer Programming (ADVCOMPP) (13027700)**

- **Grade:** 11-12
- **Credit:** 1

- **Prerequisite(s):** Algebra I and Geometry; Computer Programming or Computer Science I AP
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** electricity, surge protectors, outlets
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students expand their knowledge and skills in structured programming techniques and concepts by addressing more complex problems and developing comprehensive programming solutions. Students analyze the social responsibility of business and industry regarding the significant issues relating to environment, ethics, health, safety, and diversity in society and in the workplace as it relates to computer programming. Students apply technical skills to address business applications of emerging technologies.

**Teacher Comments about this Course:** Students interested in 2D and 3D animation, exploring the creation and manipulation of digital graphics, applying design and layout principles to various topology genres, applying appropriate use and technique of video and audio equipment, exploring and applying ethical practices in the creation and use of digital, audio, video and web-based media as well as deploying digital media into print, web-based, and video products are encouraged to enroll in this course. Software applications include Adobe Master Collection CS4.

### **Computer Programming (COMPPROG) (13027600)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Algebra I, Geometry (can be taken concurrently), Business Information Management I
- **College Credit Opportunity:** Yes- Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** electricity, surge protectors, outlets
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students acquire knowledge of structured programming techniques and concepts appropriate to developing executable programs and creating appropriate documentation. Students analyze the social responsibility of business and industry regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and in the workplace as it relates to computer programming. Students apply technical skills to address business applications of emerging technologies.

**Teacher Comments about this Course:** Self-discipline, determination to solve problems and the ability to think abstractly are must-haves for this course.

### **Digital and Interactive Multimedia (DIMEDIA) (13027800)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s): Recommended** – Business and Information Management I
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes – Adobe Certified Expert
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Through the study of digital and interactive media and its application in information technology, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a

technology-driven society. Students enhance reading, writing, computing, communication, and critical thinking and apply them to the information technology environment.

**Teacher Comments about this Course:** Students interested in 2D and 3D animation, exploring the creation of and the manipulation of digital graphics, applying design and layout principles to various topology genres, applying appropriate use and technique of video and audio equipment, exploring and applying ethical practices in the creation and use of digital, audio, video and web-based media as well as deploying digital media into print, web-based, and video products are encouraged to enroll in this course. Software applications include Adobe Master Collection CS4.

### **Research In Information Technology Solutions (RESITSOL) (1302800)**

- **Grade:** 12
- **Credit:** 2
- **Prerequisite(s):** Minimum of two high school information technology courses
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems.

Knowledge and skills in the proper use of analytical skills and application of information technology concepts and standards are essential to prepare students for success in a technology-driven society.

Critical thinking, information technology experience, and product development may be conducted in a classroom setting with an industry mentor, as an unpaid internship, or as career preparation.

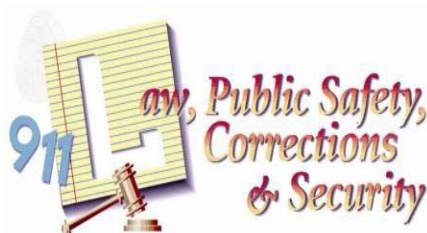
**Teacher Comments about this Course:** None

### **Web Technologies (WEBTECH) (13027900)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Business Information Management I
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Through the study of web technologies and design, students learn to make informed decisions and apply the decisions to the field of information technology. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and critical thinking and apply them to the information technology environment.

**Teacher Comments about this Course:** This course covers web design, basic structure using HTML and JavaScript. Web authoring systems are also included with CSS style sheets, developing a web page for a client and planning/implementation of a web site.



## Law, Public Safety, Corrections and Security

### Correctional Services (CORRSRVS) (13029700)

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Principles of Law, Public Safety, Corrections, and Security
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** In Correctional Services, students prepare for certification required for employment as a correctional officer. The student will learn the role and responsibilities of a correctional officer; discuss relevant rules, regulations, and laws; and discuss defensive tactics, restraint techniques, and first aid procedures as used in the correctional setting. The student will analyze rehabilitation and alternatives to institutionalization.

**Teacher Comments about this Course:** None

### Court Systems and Practices (COURTSP) (13029600)

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Law Enforcement I
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Court Systems and Practices is an overview of the federal and state court systems. The course identifies the roles of judicial officers and the trial processes from pretrial to sentencing and examines the types and rules of evidence. Emphasis is placed on constitutional laws for criminal procedures such as search and seizure, stop and frisk, and interrogation.

**Teacher Comments about this Course:** None

### Law Enforcement I (LAWENF1) (13029300)

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Principles of Law, Public Safety, Corrections, and Security
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None

- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. This course includes the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and the classification and elements of crime.

**Teacher Comments about this Course:** None

### **Law Enforcement II (LAWENF2) (13029400)**

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Law Enforcement I
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. This course includes the role of constitutional law, the United States legal system, criminal law, law enforcement terminology, and the classification and elements of crime.

**Teacher Comments about this Course:** None

### **Principles of Law, Public Safety, Corrections, and Security (PRINLPCS) (13029200)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Principles of Law, Public Safety, Corrections, and Security introduces students to professions in law enforcement, security, corrections, and fire and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, security, and corrections.

**Teacher Comments about this Course:** Through this course, students will gain an overview of the skills necessary for careers in law enforcement, the court system, fire service and corrections. The students will also understand the various roles and responsibilities for jobs in these career fields.



## **Manufacturing**

### **Advanced Welding (ADVWELD) (13032400)**

- **Grade:** 12

- **Credit:** 2
- **Prerequisite(s):** Algebra I or Geometry; Welding
- **College Credit Opportunity:** Yes - Advanced Technical Credit plus Dual Credit with TJC
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** chemicals, fire, explosives, sharp blades, etc.
- **Personal Transportation Required:** No – transportation will be provided
- **Employment Required:** No
- **TJC Course:** WLDG 1313, 1412, 1317, 1434 (dual credit)

**Course Description:** Advanced Welding builds on knowledge and skills developed in Welding. Students will develop advanced welding concepts and skills as they relate to personal and career development. This course integrates academic and technical knowledge and skills. Students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

**Teacher Comments about this Course:** None

### **Welding (WELD) (13032300)**

- **Grade:** 11-12
- **Credit:** 2
- **Prerequisite(s):** Pass most recent Reading TAKS, Algebra 1, Bennett Mechanical Test
- **College Credit Opportunity:** Yes – Dual Credit with TJC
- **Licensure or Certification Opportunity:** No
- **Hazards:** chemicals, fire, explosives, sharp blades, etc.
- **Personal Transportation Required:** No – transportation will be provided
- **Employment Required:** No
- **TJC Course:** WLDG 1421, 1428, 1430, 2443 (dual credit)

**Course Description:** Rapid advances in technology have created new career opportunities and demands in many industries. Welding provides the knowledge, skills, and technologies required for employment in metal technology systems. Students develop knowledge and skills related to this system and apply them to personal career development. This course supports integration of academic and technical knowledge and skills. Students will reinforce, apply, and transfer knowledge and skills to a variety of settings and problems. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success.

**Teacher Comments about this Course:** None



## **Marketing, Sales, & Service**

### **Principles of Business, Marketing, and Finance (PRINBMF) (13011200)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** Yes – Advanced Technical Credit
- **Licensure or Certification Opportunity:** No

- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

**Teacher Comments about this Course:** This is an introductory business course.

### **Retailing and E-Tailing (RETAILE) (13034500)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Principles of Business, Marketing, and Finance or Business Information Management
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Students will have the opportunity to develop skills that involve electronic media techniques necessary for a business to compete in a global economy. Students will coordinate online and off-line marketing. Students will demonstrate critical-thinking skills using decision-making models, case studies, various technologies, and business scenarios.

**Teacher Comments about this Course:** None



## **Science, Technology, Engineering and Mathematics (STEM)**

### **Civil Engineering & Architecture (CEA) (N1303747) (Project Lead The Way course)**

- **Grade:** 11-12
- **Credit:** 1
- **Prerequisite(s):** Principles of Engineering
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No

- **Employment Required:** No

**Course Description:** This course emphasizes the fields of Civil Engineering and Architecture, while emphasizing the interrelationship and dependence of both fields on each other. The course utilizes state of the art software to solve real world problems and communicate solutions to hands-on projects and activities. Topics covered: roles of Civil Engineers and Architects, Project Planning, Site Planning, Building Design, Project Documentation and Presentation.

**Teacher Comments about this Course:** None

### **Engineering Design & Development (EDD) (N1303749) (Project Lead The Way course)**

- **Grade:** 12
- **Credit:** 1
- **Prerequisite(s):** Civil Engineering & Architecture
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** Teams of students, guided by community mentors, work together to research, design, and construct solutions to engineering problems.

**Teacher Comments about this Course:** None

### **Introduction to Engineering Design (IED) (N1303742) (Project Lead The Way course)**

- **Grade:** 9-12
- **Credit:** 1
- **Prerequisite(s):** None
- **College Credit Opportunity:** Yes - Advanced Technical Credit
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** This course utilizes problem-solving skills using a design development process. Models of product solutions are created, analyzed, and communicated using solid modeling computer design software.

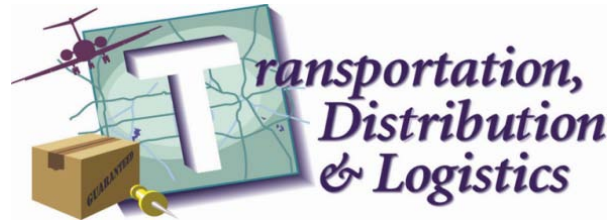
**Teacher Comments about this Course:** None

### **Principles of Engineering (POE) (N1303743) (Project Lead The Way course)**

- **Grade:** 10-12
- **Credit:** 1
- **Prerequisite(s):** Algebra I, Geometry or concurrently enrolled; Introduction to Engineering
- **College Credit Opportunity:** No
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No

**Course Description:** This course emphasizes the field of engineering and engineering technology exploration of various technology systems and manufacturing processes. This course analyzes how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people and social and political consequences of technological change.

**Teacher Comments about this Course:** None



## Transportation, Distribution & Logistics

### Advanced Automotive Technology (ADVAUTOT) (13039700)

- **Grade:** 12
- **Credit:** 2
- **Prerequisite(s):** Automotive Technology; pass Reading TAKS; pass Bennett Mechanical test
- **College Credit Opportunity:** Yes – Advanced Technical Credit plus Dual Credit with TJC
- **Licensure or Certification Opportunity:** Yes
- **Hazards:** hazardous chemicals, eye/skin irritants, asbestos, inhalants, heavy equipment, slippery surfaces
- **Personal Transportation Required:** No – transportation provided
- **Employment Required:** No
- **TJC Course:** AUMT 2215, 2317, 2231, 2334 (dual credit)

**Course Description:** Automotive services include advanced knowledge of the function of the major automotive systems and the principles of diagnosing and servicing these systems. In Advanced Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach the theory of operation of automotive vehicle systems and associated repair practices.

**Teacher Comments about this Course:** None

### Automotive Technology (AUTOTECH) (13039600)

- **Grade:** 11
- **Credit:** 2
- **Prerequisite(s):** Energy, Power, and Transportation Systems; pass Reading TAKS; pass Bennett Mechanical test
- **College Credit Opportunity:** Yes – Dual Credit with TJC
- **Licensure or Certification Opportunity:** No
- **Hazards:** hazardous chemicals, eye/skin irritants, asbestos, inhalants, heavy equipment, slippery surfaces
- **Personal Transportation Required:** No – transportation is provided
- **Employment Required:** No
- **TJC Course:** AUMT 1257, 1310, 1253, 1307 (dual credit)

**Course Description:** Automotive services include knowledge of the function of the major automotive systems and the principles of diagnosing and servicing these systems. In Automotive Technology, students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This study allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings. The focus of this course is to teach the theory of operation of automotive vehicle systems and associated repair practices.

**Teacher Comments about this Course:** None

### **Energy, Power, and Transportation Systems (EPTSYS) (13039300)**

- **Grade:** 10
- **Credit:** .5
- **Prerequisite(s):** pass Reading TAKS
- **College Credit Opportunity:** Yes – Continuing Education credit through TJC when student has also taken Principles of Transportation, Distribution and Logistics
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No
- **TJC Course:** ITSC (CE credit)

**Course Description:** The businesses and industries of the Transportation, Distribution, and Logistics cluster are rapidly expanding to provide new career opportunities. Students will need to understand the interaction between various vehicle systems, the logistics used to move goods and services to consumers, and the components of transportation infrastructure. Performance requirements will include academic and technical skills. Students prepared to meet the expectations of employers in this industry must be able to interact and relate to others and understand the technologies used in order to provide products and services in a timely manner. The increasing demand for employees will provide growth potential.

**Teacher Comments about this Course:** None

### **Principles of Transportation, Distribution, and Logistics (PRINTDL) (13039200)**

- **Grade:** 10
- **Credit:** .5
- **Prerequisite(s):** pass Reading TAKS
- **College Credit Opportunity:** Yes – Continuing Education credit through TJC when student has also taken Energy, Power and Transportation Systems
- **Licensure or Certification Opportunity:** No
- **Hazards:** None
- **Personal Transportation Required:** No
- **Employment Required:** No
- **TJC Course:** ITSC (CE credit)

**Course Description:** In Principles of Transportation, Distribution, and Logistics, students gain knowledge and skills in the safe application, design, production, and assessment of products, services, and systems. This knowledge includes the history, laws and regulations, and common practices used in the logistics of warehousing and transportation systems. Students should apply knowledge and skills in the application, design, and production of technology as it relates to the transportation, distribution, and logistics industries. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings.

**Teacher Comments about this Course:** None

**Note:** At the time of this publication, some information may have changed. This document will be updated as new information becomes available and placed on the Tyler ISD Career and Technical Education Department website:  
[http://www.tylerisd.org/DEPARTMENTS/CTE/career\\_and\\_technical\\_ed.htm](http://www.tylerisd.org/DEPARTMENTS/CTE/career_and_technical_ed.htm)

It is the policy of Tyler Independent School District not to discriminate on the basis of race, color, national origin, sex, or handicap in its vocational programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.

La póliza del distrito escolar independiente de Tyler no discrimina por razones de raza, color, sexo, origen nacional o impedimento en programas vocacionales, servicios o actividades según como lo requiere Título VI del Acto de Derechos Civiles del 1964, enmendado; Título IX de Enmendado Educativo del 1972; y sección 504 del Acto de Rehabilitación del 1973, enmendado.

***Tyler ISD's Career and Technical Education mission is to provide rigorous and relevant technical education programs to prepare students for high skill, high wage, or high demand careers.***