CYPRESS FAIRBANKS
INDEPENDENT SCHOOL DISTRICT

High School

Course Offerings and Descriptions

2026-2027

High Schools

Cy-Fair High School
22602 Hempstead Hwy.
Houston, TX 77429
281.897.4600

Bridgeland High School
10707 Mason Road
Cypress, TX 77433
832.349.7600

Cypress Creek High School
9815 Grant Rd.
Houston, TX 77070
281.897.4200

Cypress Falls High School
9811 Huffmeister Rd.
Houston, TX 77095
281.856.1000

Cypress Lakes High School
5750 Greenhouse Rd.
Katy, TX 77449
281.856.3800

Cypress Park High School
7425 Westgreen Blvd.
Cypress, TX 77433
346.227.6000

Cypress Ranch High School
10700 Fry Rd.
Cypress, TX 77433
281.807.8000

Cypress Ridge High School
7900 N. Eldridge Parkway
Houston, TX 77041
281.807.8000

Cypress Springs High School
7909 Fry Rd.
Cypress, TX 77433
281.345.3000

Cypress Woods High School
13550 Woods Spillane Blvd.
Cypress, TX 77429
281.213.1800

Jersey Village High School
7600 Solomon St.
Houston, TX 77040
713.896.3400

Langham Creek High School
17610 F.M. Rd. 529
Houston, TX 77095
281.463.5400

General Registration Information

High schools in Cypress-Fairbanks operate on a semester system (seven classes per day). One year's work will provide one Carnegie credit in each course or a maximum total of seven credits per regular school year. Additional credits may be earned in summer school, correspondence, credit-by-exam, Virtual Pathways or college courses taken for dual credit.

New Students

A senior high school student new to the school district should upload or report to the registrar's office with the following documents.

1. A copy of the student's birth certificate or any other document that establishes age and identity.
2. Immunization records as follows:

    A validated document of immunization, which has been issued by a public health clinic or one signed by a licensed physician*, must include the following.

Polio	3 doses with one dose on or after the 4th birthday
DTP/DtaP	For 6th - 12th grades: 3 doses with 1 dose on or after the 4th birthday.
TDAP booster	1 dose for 7th-12th graders; booster needed every 10 years
MMR (Measles, Mumps, Rubella)	2 doses; 1st dose on or after the 1st birthday
Hepatitis B	3 doses
Varicella (chicken Pox)	2 doses; with 1st dose on or after the 1st birthday or parent/physician statement of chicken pox illness
Quadrivalent Meningococcal	For 7th-12th grades; 1 dose on or after 11th birthday
Hepatitis A	6th-12th grades; 2 doses, 1st dose on or after 1st birthday

Proof of DT booster vaccine must be presented to the school nurse at the beginning of the semester in which it is due. Parents and students will be notified when vaccines are due.

*Immunization records from a previous school are also acceptable.

Please note: Immunization requirements differ for younger children. Parents of elementary school-age children should consult with the elementary school nurse.

*Parents can check for immunization updates at: http://www.dshs.texas.gov/immunizations/school

3. Social Security card, if available
4. Proof of residency in the district. Please visit the link, https://www.cfisd.net/Page/1944, to see the requirements.
5. For proof of residency (POR), we ask that parents/guardians submit one item from Line A and one item from Line B:
    *   Line A: (Lessee) Verification in the form of your current lease/(Homeowner) Verification in the form of HCAD records, a mortgage Statement, or closing documents
    *   Line B: Verification in the form of your current gas, water, or light bill
6. A copy of his/her STAAR Confidential Student Report for the most recent test administration (students enrolling from another Texas school), if available.
7. Parents should provide copies of academic documents from previous years beginning with 7th grade. High school credit toward graduation may be earned beginning in 7th grade for certain courses, if available.
8. Newly Enrolled Students
    *   Students Newly Enrolled from Accredited Private Schools - Credit for courses transfered from an accredited private school are awarded based on the official transcript.
    *   Students Newly Enrolled from Unaccredited Private Schools
        Middle school course placement shall be determined through a review of course descriptions, student work products, or through the administration of a credit-by-exam or comparable assessment.
        High school course credit: Credit for a high school credit course shall be determined through a credit-by-exam. The passing standard on a credit-by-exam for a course shall be determined through a review of course descriptions, and/or through student work products.
    *   Students Newly Enrolled from Home Schools - According to the Texas Commissioner of Education, students transferring from home school should be afforded the same treatment as students transferring from unaccredited private schools. Please reference the information above for unaccredited private schools.

Returning Students

Students who have already registered but must have a schedule change due to the situations listed below must call the counselors' office no later than August 1 to make an appointment to discuss a change due to

*   attendance in summer school;
*   completion of a correspondence course; or
*   failure to complete the prerequisites for a new course.

Course Offerings

This publication lists the high school course offerings with grade placement, credit(s), prerequisites, and some brief information on each course. It serves as an overview of students' requirements for graduation including course descriptions. This bulletin also outlines procedures for changing courses and possible consequences of changes.

Career and Technical skills preparation courses are offered to junior and senior students who are at least 16 years old. These courses are two to three hours daily with all or part of the instruction given on campus. Students participating in courses which involve off-campus instruction (practicums) must provide their own transportation.

Special Education

Students experiencing difficulties in school may be referred for services in special education. Before a student can receive special education and/or related services for the first time, an initial evaluation must be conducted. Decisions regarding the provision of special education services are made by an Individual Education Plan (IEP) committee. If a student is determined to be eligible for services in accordance with the Texas Education Agency guidelines, an individualized education plan is developed. Instruction that is designed to meet a student's unique educational needs may be provided in a variety of settings. Instructional settings may include (a) general education classroom with accommodations, (b) general education classroom with support, (c) resource classroom, (d) self-contained classroom, or (e) a separate campus. Related services necessary for the student to benefit from special education may also be provided.

Grade Classification Standards
Class of 2015 and Beyond

Grade	Criteria for Students Entering 9th Grade Beginning 2011-12
9th	Promotion from middle school
10th	1 year of attendance and 5 credits, including English I and Algebra I
11th	2 years of attendance and 11 credits
12th	3 years of attendance and 17 credits or early graduation plan

Course Selection and Request for Changes

Students will select courses for the next school year during the spring semester. A decision of this nature should be considered with parental aid. Factors to be considered in selecting courses are the
- requirements for graduation;
- significance of the course to the student's overall program and educational/career goals;
- purpose of the course; or
- possible prerequisite(s) for other courses.

All requests for changes must be submitted in writing by the last day of April.
The following guidelines will be used in honoring changes/requests made after that date.

1. Changes will be made during the first two weeks of a semester for the following reasons. The student
   - does not meet prerequisite(s) for the course;
   - does not meet grade placement requirement of the course;
   - already has credit in the course;
   - is placed in an inappropriate level; or
   - has not met requirement for K-level, Academic Advanced, AP, or HORIZONS placement.

2. After consultation with the teacher, students may withdraw from band, dance, JROTC, or athletics at any time, but in each case, they will be assigned to a regular physical education class.

3. No course changes are allowed after the second week of each semester.

Note: Schedule changes after the second week of either semester will be according to EDD-local policy (i.e. they are primarily AP to K-level or Academic Advanced or K- or Academic Advanced to L-level changes). No other course changes are allowed; course changes may raise eligibility issues.

"K" (Accelerated) and Advanced Placement Courses

K-level (Academic Advanced) courses are offered in English, mathematics, science, foreign language, social studies, gifted/talented education, and computer science. Advanced Placement (AP) courses, which prepare students to take College Board exams to earn college credit, are available for students who desire to participate in a rigorous, challenging curriculum. To encourage enrollment in upper-level courses, the district allows students in some third and fourth courses in a sequence to elect to take the course on a pass/fail basis.

HORIZONS is the name of the program for students identified as gifted/talented. The courses are designed to meet the unique needs of gifted students in CFISD. Parents may refer their children to be screened for the gifted program annually through the Open Referral Period beginning October 1 and ending the last school day in November by accessing the online acknowledgement in the 'Gifted and Talented' link located in the CFISD Parent Portal. If you need more information about gifted students and the gifted program, please visit the HORIZONS website. Parents who feel that their child is demonstrating characteristics of gifted behavior would need to contact the director of instruction at the campus during the Open Referral Period to refer students for testing.

Advanced High School Courses Offered in CFISD High Schools

Mathematics	Geometry K, Advanced or HORIZONS
	Algebra II K or HORIZONS
	College Algebra K or HORIZONS
	Precalculus AP or HORIZONS
	Calculus AP AB or HORIZONS
	Calculus AP BC or HORIZONS
	Robotics II K
	Accounting II K
	Engineering Math K
	Statistics AP or HORIZONS
	Advanced Quantitative Reasoning K
Social Studies	World History K, Advanced, AP, or HORIZONS
	World Geography K, Advanced, or HORIZONS
	World Area Studies K or Advanced
	Psychology AP or HORIZONS
	United States History K, AP, or HORIZONS
	European History AP or HORIZONS
	Human Geography AP or HORIZONS
	Government K, AP, or HORIZONS
	Economics Free Enterprise K or HORIZONS
	Macro Economics AP or HORIZONS
Science	Biology Advanced or HORIZONS
	Biology AP or HORIZONS
	Chemistry K or HORIZONS
	Chemistry AP or HORIZONS
	Physics K or HORIZONS
	Physics AP I or HORIZONS
	Physics AP II or HORIZONS
	Physics AP C or HORIZONS
	Environmental Science AP or HORIZONS
	Anatomy and Physiology K
	Astronomy K or Horizons
	Earth Systems Science K or HORIZONS
	Engineering Design & Problem Solving K
	Food Science K
	Forensics K
	Scientific Research and Design K
	Advanced Animal Science K
	Advanced Plant and Soil K
	Pathophysiology K

English	English I Advanced or HORIZONS
	English II K or HORIZONS
	English III K, AP, or HORIZONS
	English IV K, AP, or HORIZONS
Languages Other Than English	Spanish III K/Advanced
	Spanish IV-V K or AP
	Spanish VI K
	Spanish for Native Speakers III K
	Spanish for Native Speakers IV AP
	French III K/Advanced
	French IV -V K or AP
	French VI K
	German III K
	German IV –V K or AP
	German VI K
	Latin III K
	Latin IV-V K or AP
	Latin VI K
	ASL III K
	ASL IV K
Computer Science	Computer Science Principles AP
	Computer Science I K or Advanced
	Computer Science II K
	Computer Science III K
	Computer Science IV K
Fine Arts	AP Art – Drawing
	AP Art – 2D
	AP Art – 3D
	AP Art – Photography
	AP Art – Digital Art and Media
	AP Art History
	AP Music Theory

Dual Credit Courses
Lone Star College–CyFair and Cypress-Fairbanks ISD
Subject to change per the Lone Star College and the Texas Higher Education Coordinating Board policies

2026 - 2027 Academic Courses

College Course *2nd digit of course # indicates # of college credit hours*	Credit Hours	Contact Hours	High School Credit Course Taken on High School Campus	Course Grade Level
ENGLISH				
ENGL 1301 (Comp and Rhet. 1)	3	48	English III K A (fall)	11
ENGL 1302 (Comp and Rhet. 2)	3	48	English III K B (spring)	11
ENGL 1301 (Comp and Rhet. 1)	3	48	English IV K A (fall)	12
ENGL 1302 (Comp and Rhet. 2)	3	48	English IV K B (spring)	12
ENGL 2322 (Survey of British Lit.)	3	48	AP English IV A (fall)	12
ENGL 2323 (Survey of British Lit.)	3	48	AP English IV B (spring)	12
SPEECH				
SPCH 1311 (Intro to Communication)	3	48	Communication Applications (fall or spring)	11 & 12
MATHEMATICS				
MATH 1314 (College Algebra)	3	48	Independent Study in Math (College Algebra K) (full year) 37-week	11 & 12
MATH 1342 (Statistics)	3	48	AP Statistics (full year) 37-week	11 & 12
MATH 1316 (Trigonometry)	3	48	Precalculus K A (fall) 21-week	11 & 12
MATH 2412 (Pre-Calculus)	4	80	Precalculus K B (spring)	11 & 12
MATH 2413 (Calculus I)	4	80	AP Calculus AB (full year) 37-week	11 & 12
MATH 2413 (Calculus I)	4	80	AP Calculus BC A (fall)	11 & 12
MATH 2414 (Calculus II)	4	80	AP Calculus BC B (spring)	11 & 12
SCIENCE				
BIOL 1406 (Biology I)	4	96	AP Biology II (fall) hybrid (WL)	11 & 12
BIOL 1407 (Biology II)	4	96	AP Biology II (spring) hybrid (WL)	11 & 12
CHEM 1411 (Chemistry I)	4	96	AP Chemistry (full year) 37-week	11 & 12
CHEM 1411 (Chemistry I)	4	96	AP Chemistry (fall) hybrid (WL)	11 & 12
CHEM 1412 (Chemistry II)	4	96	AP Chemistry (spring) hybrid (WL)	11 & 12
ENGR 1201 (Introduction to Engineering)	2	32	Engineering Design and Problem Solving K (full year) 37-week	12
ENVR 1401 (Environmental Science I)	4	96	AP Environmental Science (fall)	10-12
ENVR 1402 (Environmental Science II)	4	96	AP Environmental Science (spring)	10-12
PHYS 1401 (General Physics I)	4	96	AP Physics I (full year) 37-week	11 & 12
PHYS 1402 (General Physics II)	4	96	AP Physics II (full year) 37-week	12

Students should contact their prospective postsecondary institutions regarding the transferability of these courses toward their selected degree or program of study.

Note: The State of Texas has made Dual Credit available to all grade levels. Students must continue to meet high school and college prerequisites to access Dual Credit courses.

College Course *2nd digit of course # indicates # of college credit hours*	Credit Hours	Contact Hours	High School Credit Course Taken on High School Campus	Course Grade Level
FINE ARTS				
ARTS 1303 (Art History: Prehistoric to Gothic)	3	48	AP Art History (fall or spring)	11 & 12
ARTS 1304 (Art History: Renaissance to Modern)	3	48	AP Art History (fall or spring)	11 & 12
FOREIGN LANGUAGE				
SPAN 2311 (Int. Spanish I)	3	48	AP Spanish IV (spring)	9-12
SPAN 2312 (Int. Spanish II)	3	48	AP Spanish V (spring)	9-12
FREN 2311 (Int. French I)	3	48	AP French IV (spring)	9-12
FREN 2312 (Int. French II)	3	48	AP French V (spring)	9-12
SOCIAL STUDIES				
ECON 2301 (Macroeconomics)	3	48	AP Macroeconomics (fall or spring)	12
GOVT 2305 (Government)	3	48	AP Government (fall or spring)	12
GOVT 2306 (Government)	3	48	Special Topics in Social Studies K (SPTSS) (fall or spring)	12
HIST 1301 (US History)	3	48	AP United States History A (fall)	11
HIST 1302 (US History)	3	48	AP United States History B (spring)	11
PSYC 2301 (Psychology)	3	48	AP Psychology (fall or spring)	11 & 12
SOCI 1301 (Principles of Sociology)	3	48	Sociology K (fall or spring)	11 & 12

Students should contact their prospective postsecondary institutions regarding the transferability of these courses toward their selected degree or program of study.

Note: The State of Texas has made Dual Credit available to all grade levels. Students must continue to meet high school and college prerequisites to access Dual Credit courses.

Workforce Dual Credit Courses
Lone Star College - Cy-Fair and Cypress-Fairbanks ISD
Subject to change per the Lone Star College and the Texas Higher Education Coordinating Board policies

2026-2027 Workforce Dual Credit Courses

College Course *2nd digit of course # indicates # of college credit hours*	Credit Hours	Contact Hours	High School Credit Course Taken on High School Campus	Course Grade Level
ARCHITECTURE AND CONSTRUCTION (See the ARCHITECTURAL DRAFTING & DESIGN program of study for additional course requirements)				
DFTG 2331 (Advanced Technologies in Architectural Design and Drafting) *	3	80	Practicum of Architectural Design I (fall) (2-pd Block)	11 & 12
DFTG 1317 (Architectural Dratfing Residential) *	3	80	Practicum of Architectural Design I (spring) (2-pd Block)	11 & 12
CNBT 1342 (Building Codes and Inspections) *	3	96	Practicum of Architectural Design II (yearlong) (Hybrid)	**12**
ARCE 1352 (Structural Drafting) *	3	96	Practicum of Architectural Design II (fall) (2-pd Block)	**12**
DFTG 2340 (Solid Modeling/Design) *	3	96	Practicum of Architectural Design II (spring) (2-pd Block)	**12**
MANUFACTURING (See the WELDING program of study for additional course requirements)				
WLDG 1421 (Welding Fundamentals)*	4	96	Welding I (fall) (LSC Cypress Center)	10 - 12
WLDG 1417 (Introduction to Layout and Fabrication) *	4	96	Welding I (spring) (LSC Cypress Center)	10 - 12
WLDG 1428 (Introduction to Shielded Metal Arc Welding (SMAW)) *	4	96	Welding II (fall) (LSC Cypress Center)	11 & 12
WLDG 1457 (Intermediate Shielded Metal Arc Welding (SMAW)) *	4	96	Welding II (spring) (LSC Cypress Center)	11 & 12
INFORMATION TECHNOLOGY (See the NETWORKING and/or CYBERSECURITY programs of study for additional course requirements)				
ITCC 1314 (CCNA 1: Introduction to Networks)*	3	80	Internetworking Technologies I (fall) (LSC CyFair Campus)	10 - 12
ITCC 1344 (CCNA 2: Switching, Routing, and Wireless Essentials)*	3	80	Internetworking Technologies I (spring) (LSC CyFair Campus)	10 - 12
ITCC 2320 (CCNA 3: Enterprise Networking, Security and Automation)*	3	80	Internetworking Technologies II (fall) (LSC CyFair Campus)	11 & 12
ITCC 1330 (DevNet Associate) *	4	80	Internetworking Technologies II (spring) (LSC CyFair Campus)	11 & 12

*** Not for academic transfer; not awarded advanced grade points.**

Note: The State of Texas has made Dual Credit available to all grade levels. Students must continue to meet high school and college prerequisites to access Dual Credit courses.

Workforce Dual Credit Courses
Lone Star College - Cy-Fair and Cypress-Fairbanks ISD
Subject to change per the Lone Star College and the Texas Higher Education Coordinating Board policies

2026-2027 Workforce Dual Credit Courses

College Course *2nd digit of course # indicates # of college credit hours*	Credit Hours	Contact Hours	High School Credit Course Taken on High School Campus	Course Grade Level
ARTS, A/V TECH & COMMUNICATION (See the DIGITAL COMMUNICATIONS programs of study for additional course requirements)				
ARTV 1351 (Digital Video) *	3	96	Audio Video Production I (fall) (2-pd Block) (LSC CyFair Campus)	10 - 12
IMED 1301 (Introduction to Digital Media) *	3	96	Audio Video Production I (spring) (2-pd Block) (LSC CyFair Campus)	10 - 12
FLMC 1300 (Production Management) *	3	64	Audio Video Production II (fall) (2-pd Block) (LSC CyFair Campus)	11 & 12
FLMC 1304 (Lighting for Film or Video) *	3	96	Audio Video Production II (spring) (2-pd Block) (LSC CyFair Campus)	11 & 12
ARTV 1343 (Digital Sound) *	3	96	Practicum in Audio Video Production (fall) (2-pd Block) (LSC CyFair Campus)	12
ARTV 2341 (Advanced Digital Video) *	3	96	Practicum in Audio Video Production (spring) (2-pd Block) (LSC CyFair Campus)	12
BUSINESS, MARKETING, & FINANCE (See the BUSINESS MANAGEMENT program of study for additional course requirements)				
BCIS 1305 (Business Computer Applications)*	3	80	Business Information Management II (yearlong) (LSC CyFair Campus)	10 - 12
BUSI 1301 (Business Principles) *	3	48	Business Management (fall) (LSC CyFair Campus)	11 & 12
BGMT 1327 (Principles of Mgmt) *	3	48	Business Management (spring) (LSC CyFair Campus)	11 & 12
HRPO 1311 (Human Relations) *	3	48	Human Resource Management (fall or spring) (LSC CyFair Campus)	11 & 12
BMGT 1309 (Information and Project Mgmt) *	3	48	Practicum in Business Management (fall) (2-pd Block) (LSC Cyfair Campus)	11 & 12
BMGT 2303 (Problem Solving and Decision Making) *	3	48	Practicum in Business Management (spring) (2-pd Block) (LSC Cyfair Campus)	11 & 12

*** Not for academic transfer; not awarded advanced grade points.**

Note: The State of Texas has made Dual Credit available to all grade levels. Students must continue to meet high school and college prerequisites to access Dual Credit courses.

Workforce/Academic Dual Credit Courses

Lone Star College - Cy-Fair and Cypress-Fairbanks ISD

Subject to change per the Lone Star College and the Texas Higher Education Coordinating Board policies

2026-2027 Workforce/Academic Dual Credit Courses

College Course *2nd digit of course # indicates # of college credit hours*	Credit Hours	Contact Hours	High School Credit Course Taken on High School Campus	Course Grade Level
EDUCATION AND TRAINING (See the TEACHING AND TRAINING program of study for additional course requirements)				
EDUC 1301 (Introduction to the Teaching Profession)	3	48	Teacher Prep II (fall) (2-pd Block) (LSC CyFair Campus)	12
EDUC 2301 (Introduction – Special Populations)	3	48	Teacher Prep II (spring) (2-pd Block) (LSC CyFair Campus)	12
INFORMATION TECHNOLOGY (See the PROGRAMMING & SOFTWARE DEVELOPMENT, NETWORKING, and/or CYBERSECURITY programs of study for additional course requirements)				
COSC 1301 (Introduction to Computers)	3	48	Computer Science I K (fall) *Meets LOTE requiremetns for HS diploma* (LSC CyFair Campus)	10 - 12
COSC 1315 (Introduction to Computer Programming)	3	48	Computer Science I K (spring) *Meets LOTE requiremetns for HS diploma* (LSC CyFair Campus)	10 - 12
COSC 1436 (Programming Fundamentals I)	4	80	Computer Science II K (fall) *Meets LOTE requirements for HS diploma* (LSC CyFair Campus)	10 - 12
COSC 1437 (Programming Fundamentals II)	4	80	Computer Science II K (spring) *Meets LOTE requirements for HS diploma* (LSC CyFair Campus)	10 - 12

* Students should contact their prospective postsecondary institutions regarding the transferability of these courses toward their selected degree or program of study.

Note: The State of Texas has made Dual Credit available to all grade levels. Students must continue to meet high school and college prerequisites to access Dual Credit courses.

Advanced Classes Entry/Exit Criteria

K/Academic Advanced and AP classes have a more rigorous and in-depth content focus than On-level classes. Classes often move at a faster pace, include different types of assignments, and require additional outside reading. K-level or Academic Advanced classes are designed to extend student learning at grade-level and prepare them for success in future advanced coursework. AP classes challenge students beyond grade-level and can lead to college credit. Students may require additional encouragement and support from both family and campus staff to be successful in advanced classes. Students enrolled in advanced classes in English, math, science, or social studies should have an interest in and an aptitude for the subject.

Advanced Classes Entry/Exit Criteria*

Eligibility for Entry into K-level/Academic Advanced or Advanced Placement (AP) Classes

Students who were scheduled in K-level/Academic Advanced courses the previous year will be able to continue in the K-level/ Academic Advanced course sequence if they maintained a 75+ average for the <u>second semester.</u>

Students are eligible for first-time entry into a K-level/Academic Advanced or Advanced Placement (AP) class if

1. the student earns a grade of 85+ <u>yearly</u> average in the previous On-level class in the same subject or;

2. the student earns *Masters Grade Level* on STAAR (9th graders) or *Masters Grade Level* on the End-of-Course exam (10th-12th graders) for the corresponding subject (see chart); and

3. the student has parent permission to take the K-level/Academic Advanced or AP class.

Removal from K-level/Academic Advanced or AP Class

1. Students who receive an average of 74 or lower for the semester will be removed from the K-level/Academic Advanced class and placed in an appropriate On-level class for the following semester, if an On-level class is available. Students who receive an average of 74 or lower for the semester will be removed from the AP class and placed in the appropriate On-level class for the following semester, if an On-level class is available. An average of 74 or lower does not meet the entry criteria for a K-level/ Academic Advanced class. No grade adjustments are made to semester averages.

2. If a student makes a 69 or lower for any grading period, he/she will be placed in an appropriate On-level class for the remainder of the school year, if an On-level class is available.

3. A student making below an <u>80</u> average at the end of the third week, the sixth week, or the grading period in a K-level or Academic Advanced class may, upon his/her request and parent approval, be placed in an appropriate On-level class for the remainder of the school year. A student making below an 80 average at the end of the third week, the sixth week, or the grading period in an AP class may, upon his/her request and parent approval, be placed in either a K-level, Academic Advanced or On-level for the remainder of the school year. The student must meet entry requirements to qualify for placement in K-level (75+ average). No grade adjustments are made when a student drops from an AP class to a K-level or Academic Advanced class.

4. A student may, upon his/her request and with parent approval, transfer from a K-level, Academic Advanced or AP class to an appropriate On-level, K-level, or Academic Advanced class at the end of any grading period.

*The K-level/Academic Advanced entry/exit criteria apply to all HORIZONS students in HORIZONS/K-level/Academic Advanced cluster classes.

Grade Adjustments

When a student changes from a K-level/Academic Advanced to an On-level course, grade adjustment points will be added to the student's current three-week average (during any grading period) or final average in the first and third grading periods only. No adjustment will be made in grades earned in previous grading periods nor will adjustments be made in semester averages. Adjustments will not be made to a failing grade that would make that grade higher than 69.

Please note: Grade adjustments will not be made to grades of "B" or higher.

First Time K-level Eligibility through STAAR/EOC Scores

If the student earns *Masters Grade Level* on:	Then the student qualifies for:	If the student earns *Masters Grade Level* on:	Then the student qualifies for:	If the student earns *Masters Grade Level* on:	Then the student qualifies for:
8th grade Science STAAR	Biology Advanced	English I EOC	K-level English II	English II EOC	K-level /AP English III
8th grade STAAR RLA	English I Advanced	Biology EOC	K-level Chemistry*	US History	K-level/AP Government and Economics
8th grade Social Studies STAAR	K-level, Advanced or AP World History or K-level, Advanced World Geography/AP Human Geography (in either 9th or 10 grade)	Algebra EOC	K-level Geometry or Geometry Advanced		

*This course has a math prerequisite that students must meet in order to be eligible.

Other Learning Opportunities

High school counselors can provide information, answer questions, and in some instances, help students enroll in courses outside the regular school day. The following options are available to Cypress-Fairbanks ISD students.

Credit-by-Exam without Prior Instruction (Original Credit)

In accordance with the Texas Education Code, Cypress-Fairbanks I.S.D. will administer examinations for specified courses to eligible students. Credit-by-exam will serve primarily as the vehicle for students to be given credit for a course they have not yet taken formally. The passing standard is a grade of 80+. The passing grade and credit earned (on level) on the credit-by-exam will be placed on the student's transcript and used in GPA and class rank calculations. Students wishing to exercise this option should see their counselor for an application. The exams are scheduled periodically throughout the school year.

Credit-by-Exam with Prior Instruction

Students who have engaged in study in a curriculum that cannot be matched exactly with required TEKS of a course may consider credit-by-exam. These students may have studied in a foreign country, a non-accredited school, home school, or want credit for summer enrichment courses both in and out of state. The passing standard is a grade of 70+. The passing grade and credit earned (on level) on the credit-by-exam will be placed on the student's transcript and used in GPA and class rank calculations. A fee is charged for each credit-by-exam with prior instruction. For more information, see your counselor. Students may not take credit-by-exam during the semester they are enrolled in the same course.

Articulation Agreements

The Cypress-Fairbanks Independent School District and area community colleges, including the Lone Star College System and the Houston Community College System, have entered into agreements to award credit for specified course work in high school. Students who successfully complete designated high school courses, meet certain college requirements, including grade average, and subsequently enroll in a specified program, may receive college hours or advanced standing. This allows students the opportunity to take higher-level courses on the college level. A current list of approved courses is available on the Lone Star College website.

Summer School

Original credit and make-up credit courses are offered each summer. Students meeting certain criteria may take some courses for original credit prior to the year that the course is required. Courses are offered in English, math, science, social studies, physical education, health, and art. All summer school courses, whether taken in or out-of-district, will earn on level grade points only. (See summer school brochure for more information.)

On-line Courses / Texas Virtual School Network

The Texas Virtual School Network (TxVSN) offers on-line courses for students in grades 9-12. Online courses selected by a CFISD student must be consistent with the student's high school graduation plan and must meet standards that are of equivalent rigor as the district's standards for the same course provided in a traditional classroom setting.
Students taking courses through TxVSN must be aware of the following:
- Fees may vary by the course and the providing district and are the responsibility of the student.
- All courses taken through TxVSN will appear on the transcript and will count in the GPA.
- Students may take one TxVSN course per semester.
- Students interested in participating in a TxVSN course should contact his/her counselor.
- The high school counselor registers and approves all TxVSN course enrollments.
- More information is available about Texas Virtual program at www.txvsn.org or at EHDE (board policy)

CFISD Virtual Pathways

CFISD will begin offering online courses for students in **grades 4-5 and 9-12 in the 2026-27** school year through the Virtual Pathways program. This program is CFISD-built and CFISD-run, with the majority of courses following the same CFISD curriculum and rigor as those taught in-person, adapted for an online setting. The program will launch with courses available for students entering their Freshman through Senior year in 2026-27 and will expand to include more grade levels and courses in future years.

Students may choose from the following three **Virtual Pathways**, designed to provide students with flexible learning options:

CFISD Virtual Academy (Fully Online Program)

- Primarily asynchronous to allow students flexibility to set their own pacing and the order they complete coursework
- Some set synchronous activities for each class each week where students get live instruction online with their class and/or have small group sessions with their teacher for individualized support
- Functions as a program within CFISD high schools (students remain a student at their CFISD high school and graduate with their high school diploma)
- Purpose: Provides a complete online option for students seeking a non-traditional, online learning environment
- **Available to 4th-5th and 9th-12th grade students in 2026-27**

CFISD Flex Learning (Hybrid Scheduling Option)

- Students spend the majority of their day at their brick-and-mortar CFISD home campus
- Students complete 1–2 classes online asynchronously
- Students can arrive late or leave early from their high school campus and complete their online course(s) at the time of their choosing
  - Students could choose to stay on campus for their online course and attend a supervised study hall on campus to complete their online course
  - Campus staff supervising study hall would provide course navigation and/or technology support; online teachers would provide all instruction/assignment support
- Purpose: Offers flexibility for students balancing extracurriculars, jobs, or advanced coursework
- **Available to 11th and 12th grade students in 2026-27**

CFISD Supplemental Courses (Tuition-Based, Outside of the School Day)

- Students attend a brick-and-mortar school the entire school day and take one or two courses online outside of the regular school day.
- Supplemental courses are tuition-based, similar to summer school, as these are courses students are choosing to take outside the school day.
- Purpose: accelerate graduation, make room for an additional elective at school, or earn credit recovery for a previously failed course
- **Available to 9th-12th grade students in 2026-27**

CFISD Virtual Pathways courses selected by a student must be consistent with the student's high school graduation plan. All courses taken through CFISD Virtual Pathways will appear on the student's transcript and will count in their GPA.

VIRTUAL PATHWAYS

2026-27 VIRTUAL COURSE OFFERINGS: 9TH-12TH GRADE

Subject	Course Offerings	
English	**English I*** **English I Academic Advanced/H*** **English II*** **English II K/H***	English III English III K/H English III K/DC English III AP English IV English IV K/H English IV K/DC English IV AP
Social Studies	World Geography World Geography Academic Advanced/K/H Human Geography AP/H World History World History Academic Advanced/K/H World History AP/H Psychology .5 Psychology AP/H .5 Sociology .5 World Area Studies K .5 or 1	**US History*** **US History K*** **US History AP/H*** **US History DC*** Govt .5 Govt K .5 Gov AP/H .5 Gov DC .5 PFL + Eco .5 Eco K .5 Macro Econ AP/H Macro Econ DC .5
Math	**Algebra I*** Geometry Geometry Academic Advanced/K/H Algebra II Algebra II K/H PreCal PreCal AP PreCal K/H	Calculus AB AP/H Algebraic Reasoning Statistics L Statistics AP/H Advanced Algebra IndStudy in Math - College Algebra K Ind Study in Math - College Algebra - DC/H

Science	**Biology*** **Biology Academic Advanced/H*** Chemistry Chemistry K/H Chemistry AP/H Biology AP/H Earth Systems Earth Systems K/H	Integrated Physics and Chemistry Environmental Systems Physics Physics K/H Physics 1 - AP/H Environmental Science AP/DC Environmental Science AP/H
Fine Arts	Art I Drawing and Painting	AP Art History
PE	Lifetime Fitness & Wellness	Health .5 (through Class of 2028)
Languages Other Than English	Spanish I Spanish II Spanish III Spanish III K/Advanced	Spanish IV K Spanish IV AP ASL Level I ASL Level II
Other Virtual Course Offerings	PACE .5 PACE Plus (1) SAT/ACT Prep Strategies .5 Leadworthy .5 Photojournalism .5 Professional Communications .5	Computer Science Principles AP Computer Science I K Computer Science II K Computer Science III K **Can qualify for LOTE or CTE program of study Creative Writing

CTE Programs of Study	<u>Engineering Program of Study</u>
	Principles of Applied Engineering
	Engineering Design I
	Engineering Design II (2 cr)
	   - IBC - Inventor Certification
		<u>Architecture Program of Study</u>
		Principles of Architecture
		Architecture Design I
		Architecture Design II (2 cr)
		   - IBC - Revit Certification

- All Virtual Pathways courses are subject to availability
- ***Courses** are only available in the CFISD Virtual Academy - not available for Flex or Supplemental
- 95 unique courses
- IBC = Industry-Based Certification - one way to earn CCMR

<u>Endorsements Available to Fully Virtual Students in 2026-27</u>
- <u>Multidisciplinary Studies:</u> **4x4** - take 4 of the 4 core subjects throughout high school
- <u>STEM - Option 1:</u> **Computer Science**: Take 4 Computer Science Courses
- <u>STEM - Option 2: CTE:</u> Take all courses listed in the **Engineering** program of study
- <u>STEM - Option 3:</u> **Math**
- <u>Business & Industry - Option 1:</u> Take all courses listed in the **Architecture** program of study
- <u>Arts & Humanities- Option 1:</u> One additional **Social Studies** for 5 total Social Studies
- <u>Arts & Humanities - Option 2:</u> 4 total **Spanish** courses or 2 Spanish and 2 of a different language)

Dual High School/College Credit

Cypress-Fairbanks I.S.D. and Lone Star College-CyFair have entered into an agreement allowing students who meet specified criteria to earn dual credit toward high school graduation and college credit through successful completion of **approved high school and college courses**. A student will be awarded credit toward graduation only if he/she obtains prior approval from the appropriate district and/or campus personnel.

Dual credit classes have a rigorous and in-depth content focus and often move at a faster pace. Courses may include different types of assignments and/or require additional outside reading. These classes are designed to challenge students beyond grade-level academic courses. **All dual credit courses require access to the Lone Star College learning management system (D2L).**

A student who meets the following criteria is eligible to apply for the opportunity to earn high school credit through college courses if they meet **ONE** of the following criteria:

1. The student earns a grade of 85+ <u>yearly average</u> in the previous on-level/L-level class in the same subject or general subject area of the college-level course;

2. The student earns a grade of 75+ **second semester average** in the previous K-level course in the same subject or general subject area of the college-level course;

   *Note: For Workforce Dual Credit courses, the student must have an overall average of at least **80 for all courses taken** or an average of at least **80 in the last course taken** in the general subject-area of the college-level course.*

3. The student earns Masters Grade Level on STAAR or Masters Grade Level on the End-of-Course exam;

4. The student must successfully complete prerequisite requirements as identified by district and college guidelines.

5. The student must meet required scores on placement exams.

6. The student must complete an application for enrollment through the exceptional admissions process and receive prior approval from Lone Star College-CyFair.

7. The student must complete the registration paperwork and receive approval from the campus Dual Credit team.

Specific requirements and procedures are available from the campus Dual Credit team.

College requirements are subject to change.

Note:

- *Lone Star College may waive all or part of tuition and required fees for Texas high school students enrolled in dual credit courses.*

- *Students are responsible for required fees.*

- *Students who wish to enroll in more than 6 courses (18 credit hours) in a regular semester term must meet the requirements to request a course overload from Lone Star College-CyFair.*

- *Students enrolling in dual credit courses in the summer after their sophomore year must complete the grade 11 dual credit course as a prerequisite to enrolling in the subsequent grade 12 dual credit course.*

  Note: To enroll in Dual Credit English III, students must have passed the English II End of Course (EOC) assessment. Students enrolling in Dual Credit US History will take the US History End of Course (EOC) assessment the next December.

- *Students enrolled in dual credit courses in the summer are responsible for the cost of textbooks and any additional fees or charges and must satisfy bacterial meningitis requirements if necessary.*

- *8-week and mini-mester courses offered at Lone Star College throughout the school year are <u>NOT</u> an appproved dual credit course option.*

Advanced Courses on a Pass/Fail Basis

Students in grades eleven and twelve are eligible to earn up to two credits on a pass/fail basis, one as a junior and one as a senior. Any student who wishes to take courses in addition to the 26 required for graduation with the Foundation + Endorsement High School Program or the 22 credits required to accomplish the Foundation High School Program may take such courses on a pass/fail basis. Only certain courses, as designated by district policy, can be taken as pass/fail. The student must declare intent to take such a course on a pass/fail basis within the first two weeks of each semester. Students who have a grade average of 70 or above in such courses shall be awarded credit. Rather than a numerical grade, a "P" will be recorded on the transcript. Conversely, an "F" will be recorded on the transcripts of students who earn a numerical average of less than 70. These courses shall be excluded in the computation of grade point averages. The purpose of the option is to encourage students to take advanced courses in addition to the total number of credits required for graduation.

Students must meet eligibility requirements, including grade level and grades earned in previous courses, and receive approval from parents, counselor, and instructor. Because requirements and courses approved for pass/fail may change from year to year, students should consult with their counselor and/or content-area teacher prior to registration to determine their eligibility to participate in the pass/fail program. Students who take a course under the pass/fail option must complete all assigned work and take the TEKS/benchmark exam and final exam for the course unless they are exempt from the final exam due to the current exemption policy. The numerical grades earned in a pass/fail course will be used to determine eligibility for participation in all UIL or school sponsored activities. In addition, numerical grades will also be used to determine honor roll each grading period; academic awards eligibility, including admission to organizations such as National Honor Society; criteria used in selection of students for various positions such as drill team officers, class officers; exam exemptions; entrance and exit in Academic Advanced/K-level courses, etc. The student's academic performance in a pass/fail course will affect his/her eligibility to participate in extracurricular activities.

Correspondence Learning

A high school student may earn two credits toward graduation through courses/correspondence learning. A student will be awarded credit toward graduation only if he obtains approval from the grade-level counselor prior to course enrollment. All grades earned will be entered on the transcript and included in the grade point average.

The student's eligibility for enrollment in a correspondence learning course is based upon the following criteria:

1. The student must have successfully completed one semester in the ninth grade.
2. The student must have an overall average for all courses taken in high school of at least 75.
3. The student must have at least a 75 average in a previous similar course.
4. The student must have successfully completed prerequisite courses as identified by district guidelines.
5. The student must not be enrolled in another correspondence learning course.
6. All coursework and the final examination must be completed and the grade reported to the counselor before the sixteenth week of the fall semester of the senior year in order for the grade to be posted for graduation purposes.
7. The Texas Education Agency only recognizes courses from the University of Texas at Austin and Texas Tech University (TEA only recognizes UT/TTU).

Correspondence learning course grades must be received by the counselor or registrar before the beginning of the sixteenth week of the fall semester of a student's senior year, or the student shall be enrolled in the course for the spring at the high school the student is attending or in night school. If the senior is enrolled in a correspondence learning course in the fall semester and does not complete it before the sixteenth week, the course will be recorded on the student's transcript as a "WD."

If a student does not complete a correspondence learning course by the designated deadline, the course shall be recorded on the student's transcript as a "WD" –a course attempted-withdrawn/dropped. That is, the course shall count as one attempted with no credit earned and zero grade points allowed. This course shall also be calculated in the grade point average and shall negatively affect class rank.

Students planning to participate in graduation in the summer must sign up for a correspondence learning course no later than March 1 and must have received all correspondence learning grades no later than July 1.

Early Graduation

Students may graduate early, subject to the following conditions.

1. Students must complete a Declaration of Intent to Graduate Early form, a document signed by the parent and submitted to the counselor no later than the semester before the intended graduation date. The counselor will review the plan, sign, and forward the plan to the high school registrar.
2. Early graduation options include the following:
    — the June of the third complete year of high school (36 consecutive months)
    — the summer after the third complete year of high school (38 consecutive months)
    — the December of the fourth complete year of high school (43 consecutive months); students choosing this option may participate in the spring graduation ceremony.

Grade point averages for these mid-term graduates will be treated in the same manner as spring graduates in so far as class rank and class honors are concerned.

Class Ranking

Beginning with courses taken between the eighth and ninth grade, all high school courses, including correspondence, night school, college courses taken for dual credit, credit-by-exam, and summer school, are averaged in the class rank with the exception of student assistant, local credit, and courses taken under the pass/fail option. High school courses taken by seventh or eighth-grade students and completed by the end of the eighth-grade year will not count in class rank with the exceptions of Geometry, Biology, Art I and the third or higher levels of a foreign language. Rank will be determined by grade point averages (GPA) of the students. GPA and class rank are calculated in the summer after students complete the ninth and tenth grades. Estimated class rankings are determined at the end of the junior year and the first semester of the senior year for the express purpose of college entrance requirements. Another ranking is performed at the end of the third grading period to identify summa cum laude, magna cum laude, and cum laude graduates.

Note: New students to CFISD will be awarded credit for all transcripted high school courses. However, these courses will be included/excluded from GPA and class rank calculation in alignment with CFISD's GPA and class rank structures.

Honor Graduate Designation

At graduation ceremonies, graduates will be recognized in the following categories: summa cum laude (6.5 GPA), magna cum laude (6.25 GPA), and cum laude (6.0 GPA). A final calculation of GPA and class rank is determined at the end of the senior year and will be reflected on the final transcript which is sent to colleges.

Grading Scale

CFISD uses a weighted 6.0 grading scale. Grade points are allocated for a course of study based on the designation of the course as indicated in the chart below.

Grading Scale for Students Graduating through the Class of 2029

GRADE	LEVEL OR COURSE			
	K, AP, and HORIZONS Levels	L-Level (on-level)	Below Level Adaptive Behavior, ICS-M, NAC, Resource	L.I.F.E. Skills
A (90-100)	7 grade points	6 grade points	5 grade points	4 grade points
B (80-89)	6 grade points	5 grade points	4 grade points	3 grade points
C (75-79)	5 grade points	4 grade points	3 grade points	2 grade points
C- (70-74)	4 grade points	3 grade points	2 grade points	1 grade point
F (below 70)	0 grade points	0 grade points	0 grade points	0 grade points

Grading Scale for Students Graduating in the Class of 2030 and Beyond

GRADE	LEVEL OR COURSE				
	AP, and HORIZONS Levels	Advanced	L-Level (on-level)	Below Level Adaptive Behavior, ICS-M, NAC, Resource	L.I.F.E. Skills
A (90-100)	7 grade points	6.5 grade points	6 grade points	5 grade points	4 grade points
B (80-89)	6 grade points	5.5 grade points	5 grade points	4 grade points	3 grade points
C (75-79)	5 grade points	4.5 grade points	4 grade points	3 grade points	2 grade points
C- (70-74)	4 grade points	3.5 grade points	3 grade points	2 grade points	1 grade point
F (below 70)	0 grade points	0 grade points	0 grade points	0 grade points	0 grade points

Class Ranking (continued)

The semester grades are computed by allocating a weight of 3/7 for each grading period average and 1/7 for a semester exam. A student will receive credit for each semester passed. If the course is a two-semester sequence and the student passes the second semester after having failed the first, he/she may receive the credit for both semesters if the yearly average is passing (70+).

Four mathematics and four science courses will be included in a student's GPA calculation. If a student takes Algebra I in 8th-grade and takes four math courses in grades 9-12, the four math courses taken in high school will be included in the student's GPA. But, if a student takes Algebra I in 8th-grade and only takes three math courses in grades 9-12, the Algebra I course will be included in the student's GPA calculation. Algebra I taken at any time will carry on level grade points.

Participation in Commencement

To be eligible to participate in commencement exercises, a student must meet state graduation requirements by earning a minimum of 22 credits in designated courses and pass all required state assessments.

Honor Roll

SENIOR HIGH SCHOOL

1.   Distinguished honor roll: Students who earn grades of 90 or above in all courses.

2.   Regular honor roll: Students who earn a majority of grades of 90 or above, with the remaining grades in the range of 80-89.

3.   Students qualifying for the honor roll must not earn less than an S in conduct.

Graduation Requirements for the Classes of 2018 Through 2028

Students who enter the ninth grade in the fall of 2014 and thereafter must enroll in courses necessary to complete the *Foundation High School Program with an endorsement*. Students may also earn *Distinguished Level of Achievement* by including and successfully completing Algebra II in their selected coursework. Students should study the table below which outlines requirements for 22 credits for the *Foundation High School Program* plus the 4 additional credits required for an endorsement. Counselors at each high school will furnish details associated with endorsements and other information necessary for students to complete registration.

Course	Foundation	+Endorsement	Notes
English	4		
PACE (Personal, Academic, & Career Exploration) or PACE Plus	1/2 or 1		• One-half credit is required in grade 9. • One credit is required for 9th-grade students who did not pass all 8th grade core academic classes (language arts, reading, math, and science) and who have not met the state standards on any 8th grade STAAR assessment. • *The state required speech TEKS are embedded in PACE and PACE Plus.*
Mathematics	3 Algebra I, Geometry, <u>and</u> an additional math course	+ 1 additional advanced math course	• Algebra II must be taken to earn the Distinguished Level of Achievement. NOTE: State graduation requirements do not mandate that a student complete Algebra II to graduate under the Foundation High School Program. If a student does not complete an Algebra II course, the student will not be eligible for automatic college admission or certain financial aid including the TEXAS Grant Program and the Texas Educational Opportunity Grant Program.
Science	3 Biology and IPC, Chemistry, <u>or</u> Physics, <u>and</u> an additional science course	+1 additional advanced science course	• Biology is required for all students.
Social Studies	3 World Geography <u>or</u> World History, U.S. History, Government (1/2) & Economics (1/2)		• Students may substitute AP Human Geography for World Geography. • Students <u>may not </u>substitute the Personal Financial Literacy Elective for Personal Financial Literacy Plus Economics.
Languages other than English (Foreign Language)	2		• Students take and earn two credits in the same language.
Health	1/2		• Health may be taken in any grade or through correspondence, summer school, or credit-by-exam. • Completion of Principles of Health Science satisfies the Health requirement. • *CPR - The State required instruction in cardiopulmonary resuscitation (CPR) is instructed in Health.*

Graduation Requirements for the Classes of 2018 Through 2028

Course	Foundation	+Endorsement	Notes
Physical Education	1		• Beginning in the fall of 2022, students may earn a maximum of two (2) credits in PE toward graduation. • Students may meet the PE requirement through after school participation in the fall semester of marching band or cheerleading, and both semesters of drill team. Students may also meet the PE requirement if they participate in a district-approved Olympic caliber off-campus training program, athletics, or AFROTC. • Students may earn up to four (4) credits of PE through off-campus PE, athletics, or AFROTC. • PE credit may be earned through approved correspondence courses.
Fine Arts	1		• Approved fine arts courses include art, music, dance, theatre courses, and floral design. • Students must take 2 sequential semesters of the same course to meet the Fine Arts credit requirement.
Electives	4	+ 2 additional electives	
Total Credits Required	**22**	**26**	

Financial Aid Application for High School Graduation
Completing a free application for federal student aid (FAFSA) is a graduation requirement. FAFSA and/or TAFSA must be completed before a student can receive a high school diploma. A parent or legal guardian may provide written notice to opt out their child. Students who are at least 18 years old may opt themselves out of the requirement.

Graduation Requirements for the Class of 2029

Students who enter the ninth grade in the **fall of 2025 and thereafter** must enroll in courses necessary to complete the *Foundation High School Program with an endorsement*. Students may also earn *Distinguished Level of Achievement* by including and successfully completing Algebra II in their selected coursework. Students should study the table below which outlines requirements for 22 credits for the *Foundation High School Program* plus the 4 additional credits required for an endorsement. Counselors at each high school will furnish details associated with endorsements and other information necessary for students to complete registration.

Course	Foundation	+ Endorsement	Notes
English	4		
PACE (Personal, Academic, & Career Exploration) or PACE Plus	1/2 or 1		• One-half credit is required in grade 9. • One credit is required for 9th-grade students who did not pass all 8th grade core academic classes (language arts, reading, math, and science) and who have not met the state standards on any 8th grade STAAR assessment. • *CPR - The State required instruction in cardiopulmonary resuscitation (CPR) is instructed in PACE.* • *The state required speech TEKS are embedded in PACE and PACE Plus.*
Mathematics	3 Algebra I, Geometry, <u>and</u> an additional math course	+ 1 additional advanced math course	• Algebra II must be taken to earn the Distinguished Level of Achievement. • NOTE: State graduation requirements do not mandate that a student complete Algebra II to graduate under the Foundation High School Program. If a student does not complete an Algebra II course, the student will not be eligible for automatic college admission or certain financial aid, including the TEXAS Grant Program and the Texas Educational Opportunity Grant Program.
Science	3 Biology and IPC, Chemistry, <u>or</u> Physics, <u>and</u> an additional science course	+1 additional advanced science course	• Biology is required for all students.
Social Studies	3 World Geography <u>or</u> World History, U.S. History, Government (1/2) & Economics (1/2)		• Students may substitute AP Human Geography for World Geography. • Students <u>may not</u> substitute the Personal Financial Literacy Elective for Personal Financial Literacy Plus Economics.
Languages other than English (Foreign Language)	2		• Students take and earn two credits in the same language.
Physical Education	1		• Students may meet the PE requirement through after school participation in the fall semester of marching band or cheerleading, and both semesters of drill team, athletics, and AFJROTC. Students may also meet the PE requirement if they participate in a district-approved Olympic caliber off-campus training program. • PE credit may be earned through approved correspondence courses.
Fine Arts	1		• Approved fine arts courses include art, music, dance, theatre courses and floral design. • Students must take 2 sequential semesters of the same course to meet the Fine Arts credit requirement.
Electives	4.5	+ 2 additional electives	
Total Credits Required	**22**	**26**	

Financial Aid Application for High School Graduation
Completing a free application for federal student aid (FAFSA) is a graduation requirement. FAFSA and/or TAFSA must be completed before a student can receive a high school diploma. A parent or legal guardian may provide written notice to opt out their child. Students who are at least 18 years old may opt themselves out of the requirement.

Graduation Requirements for the Classes of 2030 and Beyond

Students who enter the ninth grade in the fall of **2026 and thereafter** must enroll in courses necessary to complete the *Foundation High School Program with an endorsement*. Students may also earn *Distinguished Level of Achievement* by including and successfully completing Algebra II in their selected coursework. Students should study the table below which outlines requirements for 22 credits for the *Foundation High School Program* plus the 4 additional credits required for an endorsement. Counselors at each high school will furnish details associated with endorsements and other information necessary for students to complete registration.

Course	Foundation	+ Endorsement	Notes
English	4		
PACE (Personal, Academic, & Career Exploration) or PACE Plus	1/2 or 1		• One-half credit is required in grade 9. • One credit is required for 9th-grade students who did not pass all 8th grade core academic classes (language arts, reading, math, and science) and who have not met the state standards on any 8th grade STAAR assessment. • *CPR - The State required instruction in cardiopulmonary resuscitation (CPR) is instructed in PACE.* • *The state required speech TEKS are embedded in PACE and PACE Plus.*
Mathematics	3 Algebra I, Geometry, <u>and</u> an additional math course	+ 1 additional advanced math course	• Algebra II must be taken to earn the Distinguished Level of Achievement. • NOTE: State graduation requirements do not mandate that a student complete Algebra II to graduate under the Foundation High School Program. If a student does not complete an Algebra II course, the student will not be eligible for automatic college admission or certain financial aid, including the TEXAS Grant Program and the Texas Educational Opportunity Grant Program.
Science	3 Biology and IPC, Chemistry, <u>or</u> Physics, <u>and</u> an additional science course	+1 additional advanced science course	• Biology is required for all students.
Social Studies	3 World Geography, World History, or Economics, U.S. History, Government (½), & Personal Financial Literacy (½)		• Students may substitute AP Human Geography for World Geography. • AP Economics may substitute for Personal Financial Literacy.
Languages other than English (Foreign Language)	2		• Students take and earn two credits in the same language.
Physical Education	1		• Students may meet the PE requirement through after school participation in the fall semester of marching band or cheerleading, and both semesters of drill team, athletics, and AFJROTC. Students may also meet the PE requirement if they participate in a district-approved Olympic caliber off-campus training program. • PE credit may be earned through approved correspondence courses.
Fine Arts	1		• Approved fine arts courses include art, music, dance, theatre courses and floral design. • Students must take 2 sequential semesters of the same course to meet the Fine Arts credit requirement.
Electives	4.5	+ 2 additional electives	
Total Credits Required	**22**	**26**	

Financial Aid Application for High School Graduation
Completing a free application for federal student aid (FAFSA) is a graduation requirement. FAFSA and/or TAFSA must be completed before a student can receive a high school diploma. A parent or legal guardian may provide written notice to opt out their child. Students who are at least 18 years old may opt themselves out of the requirement.

Cypress-Fairbanks ISD - The Endorsements

A student must complete the Foundation High School Program (22 credits), one additional math credit, one additional science credit, and two additional elective credits while completing the specific requirements of his/her selected endorsement.

STEM
Science, Technology, Engineering, & Math

Students may earn a STEM endorsement by selecting and completing the requirements from among these **5** options.

Note: Algebra II, Chemistry, and Physics are required for the STEM endorsement regardless of the option the student selects from below.

Option 1: Computer Science (Technology)
Students take 4 computer science courses.

- Computer Science I K or Advanced
- AP Computer Science Principles
- Computer Science II K or Advanced
- Computer Science III K or Advanced
- Computer Science IV K or Advanced

Option 2: CTE (Engineering)
Students earn four (4) CTE credits by taking at least two (2) courses in the same cluster that lead to a final course in the STEM cluster.
At least one (1) of the courses must be an advanced CTE course (3rd year or higher course in a sequence).

OR *

*Students earn four (4) or more credits by taking at least three (3) courses in a TEA- approved program of study with at least one (1) advanced course (3rd year or higher in the sequence).

Business & Industry

Students may earn a Business & Industry endorsement by selecting and completing the requirements from among these **3** options.

Option 1: CTE
Students earn four (4) credits by taking at least two (2) courses in the same cluster in one of the following areas

- Agriculture, Food and Natural Resources
- Architecture and Construction
- Arts, Audio/Video Technology, and Communication
- Business, Marketing and Finance
- Hospitality and Tourism
- Information Technology
- Manufacturing
- Transportation, Distribution, and Logistics

with at least one (1) advanced course (3rd year or higher course in the sequence).

OR *

*Students earn four (4) or more credits by taking at least three (3) courses in a TEA- approved program of study with at least one (1) advanced course (3rd year or higher in the sequence).

Option 2: English
Students take four (4) English elective credits that include three levels in one of the following areas

- Advanced Journalism: Newspaper or Yearbook
- Debate

Public Services

Students may earn a Public Services endorsement by selecting and completing the requirements from among these **2** options.

Option 1: CTE
Students earn four (4) credits by taking at least two (2) courses in the same career cluster in one of the following areas

- Education and Training
- Health Science
- Human Services

With at least one (1) advanced course (3rd year or higher course in the sequence).

OR*

*Students earn four (4) or more credits by taking at least three (3) courses in a TEA- approved program of study with at least one (1) advanced course (3rd year or higher in the sequence).

Option 2: AFJROTC
Student takes four (4) AFJROTC courses for (4) credits.

Arts & Humanities

Students may earn an Arts & Humanities endorsement by selecting and completing the requirements from among these **3** options.

Option 1: Social Studies
Students earn five (5) social studies credits.

Option 2: Languages Other Than English (Foreign Language)
Students take four (4) levels of the same foreign language.

OR

Students take two (2) levels of one foreign language AND two (2) levels of a different foreign language (two levels in each of two different foreign languages for 4 credits).

Option 3: Fine Arts
Students take four (4) courses in the same fine arts area for 4 credits.

OR

Students take two (2) courses in one fine arts area AND two (2) courses in a different fine arts area (two courses in each of two different fine arts areas for 4 credits).

Multidisciplinary Studies

Students may earn a Multidisciplinary Studies endorsement by selecting and completing the requirements from among these **2** options.

Option 1: Four by Four (4 X 4)
Students take four (4) courses in each of the four core content areas.

- Four (4) English credits including English IV
- Four (4) math credits
- Four (4) science credits including biology and chemistry and/or physics
- Four (4) social studies credits

Option 2: AP / Dual
Students take four (4) Advanced Placement (AP) or four (4) Dual Credit courses for four (4) credits in English, math, science, social studies, foreign language, or fine arts.

OR

Students take a combination of Advanced Placement (AP) or Dual Credit courses for four (4) credits in English, math, science, social studies, foreign language, or fine arts.

STEM *Science, Technology, Engineering, & Math*	Business & Industry	Public Services	Arts & Humanities	Multidisciplinary Studies
Option 3: Math Students take Algebra I, Geometry, and Algebra II AND two (2) of the following courses for which Algebra II is a prerequisite: • Pre-Calculus • Calculus AB or BC • Statistics AP • AQR K or Advanced • Advanced Algebra • College Algebra K or Advanced **Option 4: Science** Students take Biology, Chemistry, and Physics, AND two (2) of the following courses: • AP Chemistry • AP Biology • Anatomy & Physiology • AP Environmental Science • AP Physics I • AP Physics II • AP Physics C • Aquatic Science • Astronomy • Earth & Space Science • Environmental Systems • Forensic Science • Engineering Design & Problem Solving • Advanced Animal Science • Advanced Plant and Soil Science • Pathophysiology **Option 5: Combination** Students take Algebra II, Chemistry, and Physics, an additional math course, an additional science course, AND three (3) additional credits from Option 1 (Computer Science) and/or Option 2 (CTE) in the STEM endorsement. If the combination plan includes a CTE course, at least one (1) course must be advanced.	**Option 3: Combination** Students take a coherent sequence of four (4) credits from Option 1 and 2. Combination plan must include one (1) advanced CTE course.			

Performance Acknowledgements

Performance Acknowledgments for Students Pursuing the Foundation/Endorsement Graduation Plan

A student may earn a performance acknowledgment for outstanding performance in the areas of
1. Dual Credit;
2. Bilingual / Bi-literacy;
3. College Board Advanced Placement (AP) exams;
4. PSAT, SAT, or ACT performance; or
5. Nationally or Internationally Recognized Business or Industry Certification or License

Dual Credit

A student may earn a performance acknowledgment by successfully completing at least 12 hours of college credit taken through dual credit enrollment, advanced technical credit courses, and locally articulated courses with a grade of A or B or earn an Associate Degree.

Bilingual / Bi-literacy

A student may earn a performance acknowledgment by completing all English requirements with a grade of 80+ AND by satisfying 1 of the 4 following additional requirements.
1. Complete 3 credits in the same foreign language with a grade of 80+.
2. Demonstrate proficiency in Level IV or higher in a foreign language with a grade of 80+.
3. Complete 3 credits in any foreign language with a grade of 80+.
4. Demonstrate proficiency in a foreign language through 1 of the 2 following methods.
    a. Earn a score of 3 or higher on a foreign language Advanced Placement (AP) exam.
    b. Earn performance on a national assessment of language proficiency in a foreign language of at least Intermediate High or equivalent.

An Emergent Bilingual (EB student) must also have participated in and met exit criteria of a bilingual or English as a Second Language (ESL) program AND scored Advanced High on the Texas English Language Proficiency Assessment System (TELPAS).

College Board Advanced Placement (AP) Exam

A student may earn a performance acknowledgment by earning a score of 3 or above on an Advanced Placement (AP) exam.

PSAT, SAT, or ACT Performance

A student may earn a performance acknowledgment by earning a qualifying score on one of the following exams.
1. Earn a score on the PSAT that qualifies the student for recognition as a commended scholar or higher by the College Board and National Merit Scholarship Corporation, as part of the National Hispanic Recognition Program or National Achievement Scholarship Program.
2. Earn a combination critical reading and mathematics score of at least 1350 on the SAT.
3. Earn a composite score on the ACT exam of 29 (excluding the writing subscore).

Nationally or Internationally Recognized Business or Industry Certification or License

Student may earn a performance acknowledgment for earning a nationally or internationally recognized business or industry certification license.

Nationally or internationally recognized business or industry certification must be endorsed by
• a national/international business, industry, or professional organization;
• a state agency or government entity, or
• a state-based industry association.
Certifications or licensures shall
• be age appropriate for high school students;
• represent a student's substantial course of study and/or end-of-program knowledge and skills;
• include an industry recognized exam, an industry validated skills test, or demonstrated proficiency through documented supervised field experience; and
• represent substantial knowledge and multiple skills needed for successful entry into a high-skill occupation.

*See the counselors' office for more details.

Testing Requirements for High School Graduation

Beginning with the Class of 2015 (ninth graders entering high school in fall 2011 and beyond), state law requires that students pass five STAAR End-of-Course (EOC) assessments in English, math, science, and social studies, along with meeting their course requirements, to receive a diploma from a Texas public high school. Courses with an EOC assessment are listed in the chart below.

English	Mathematics	Science	Social Studies
English I English II	Algebra I	Biology	U.S. History

The STAAR testing program requires that students take the five EOC assessments during the school year in which they are enrolled in the courses. Students who are taking any of these five high school courses in middle school will also take the required EOC assessment. Students may not retake an EOC assessment that they have passed. EOC assessment scores are not included in students' course grades.

GRADUATION REQUIREMENTS FOR STUDENTS IN SPECIAL EDUCATION

Chapter 89: Adaptations for Special Populations
Subchapter AA: Commissioner's Rules Concerning Special Education Services
RULE §89.1070: Graduation Requirements. (Students Entering High School Starting in 2014-15)

(a) Graduation with a regular high school diploma under subsections (b)(1), (b)(2)(D), (g)(1), (g)(2), (g)(3), or (g)(4)(D) of this section terminates a student's eligibility for special education services under this subchapter and Part B of the Individuals with Disabilities Education Act and entitlement to the benefits of the Foundation School Program, as provided in Texas Education Code (TEC), §42.003(a).

To Graduate under the Foundation High School Program

(b) A student entering Grade 9 in the 2014-2015 school year and thereafter who receives special education services may graduate and be awarded a regular high school diploma if the student meets one of the following conditions.

(1) The student has demonstrated mastery of the required state standards (or district standards if greater) in Chapters 110-118, 126-128, and 130 of this title and satisfactorily completed credit requirements for graduation under the Foundation High School Program specified in §74.12 of this title (relating to Foundation High School Program) applicable to students in general education as well as satisfactory performance as established in the TEC, Chapter 39, on the required state assessments, unless the student's admission, review, and dismissal (ARD) committee has determined that satisfactory performance on the required state assessments is not necessary for graduation.

(2) The student has demonstrated mastery of the required state standards (or district standards if greater) in Chapters 110-118, 126-128, and 130 of this title and satisfactorily completed credit requirements for graduation under the Foundation High School Program specified in §74.12 of this title through courses, one or more of which contain modified curriculum that is aligned to the standards applicable to students in general education, as well as satisfactory performance as established in the TEC, Chapter 39, on the required state assessments, unless the student's ARD committee has determined that satisfactory performance on the required state assessments is not necessary for graduation. The student must also successfully complete the student's individualized education program (IEP) and meet one of the following conditions.

(A) Consistent with the IEP, the student has obtained full-time employment, based on the student's abilities and local employment opportunities, in addition to mastering sufficient self-help skills to enable the student to maintain the employment without direct and ongoing educational support of the local school district.

(B) Consistent with the IEP, the student has demonstrated mastery of specific employability skills and self-help skills that do not require direct ongoing educational support of the local school district.

(C) The student has access to services that are not within the legal responsibility of public education or employment or educational options for which the student has been prepared by the academic program.

(D) The student no longer meets age eligibility requirements.

Earning an Endorsement under the Foundation High School Program

(see HB165 on next page for update on graduation requirements)

(c) A student receiving special education services may earn an endorsement under §74.13 of this title (relating to Endorsements) if the student:

    (1) satisfactorily completes the requirements for graduation under the Foundation High School Program specified in §74.12 of this title as well as the additional credit requirements in mathematics, science, and elective courses as specified in §74.13(e) of this title with or without modified curriculum;

    (2) satisfactorily completes the courses required for the endorsement under §74.13(f) of this title without any modified curriculum; and

    (3) performs satisfactorily as established in the TEC, Chapter 39, on the required state assessments.

(d) Notwithstanding subsection (c)(3) of this section, a student receiving special education services classified in Grade 11 or 12 who has taken each of the state assessments required by Chapter 101, Subchapter CC, of this title (relating to Commissioner's Rules Concerning Implementation of the Academic Content Areas Testing Program) or Subchapter DD of this title (relating to Commissioner's Rules Concerning Substitute Assessments for Graduation) but failed to achieve satisfactory performance on no more than two of the assessments is eligible to receive an endorsement if the student has met the requirements in subsection (c)(1) and (2) of this section.

(e) In order for a student receiving special education services to use a course to satisfy both a requirement under the Foundation High School Program specified in §74.12 of this title and a requirement for an endorsement under §74.13 of this title, the student must satisfactorily complete the course without any modified curriculum.

(f) A student receiving special education services who entered Grade 9 before the 2014-2015

(g) A student receiving special education services who entered Grade 9 before the 2014-2015 school year may graduate and be awarded a regular high school diploma if the student meets one of the following conditions.

(h) All students graduating under this section must be provided with a summary of academic achievement and functional performance as described in 34 Code of Federal Regulations (CFR), §300.305(e)(3). This summary must consider, as appropriate, the views of the parent and student and written recommendations from adult service agencies on how to assist the student in meeting postsecondary goals. An evaluation as required by 34 CFR, §300.305(e)(1), must be included as part of the summary for a student graduating under subsections (b)(2)(A), (B), or (C) or (g)(4)(A), (B), or (C) of this section.

(i) Students who participate in graduation ceremonies but who are not graduating under subsections (b)(2)(A), (B), or (C) or (g)(4)(A), (B), or (C) of this section and who will remain in school to complete their education do not have to be evaluated in accordance with subsection (h) of this section.

(j) Employability and self-help skills referenced under subsections (b)(2) and (g)(4) of this section are those skills directly related to the preparation of students for employment, including general skills necessary to obtain or retain employment.

(k) For students who receive a diploma according to subsections (b)(2)(A), (B), or (C) or (g)(4)(A), (B), or (C) of this section, the ARD committee must determine needed educational services upon the request of the student or parent to resume services, as long as the student meets the age eligibility requirements.

(l) For purposes of this section, modified curriculum and modified content refer to any reduction of the amount or complexity of the required knowledge and skills in Chapters 110-118, 126-128, and 130 of this title. Substitutions that are specifically authorized in statute or rule must not be considered modified curriculum or modified content.

House Bill No. 165
May 21, 2019
An ACT relating to providing for endorsements for public high school students enrolled in special education programs.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 28.025, Education Code, is amended by adding Subsections (c-7) and (c-8) to read as follows:
 (c-7) Subject to Subsection (c-8), a student who is enrolled in a special education program under Subchapter A, Chapter 29, **may earn an endorsement** on the student's transcript by:
(1) successfully completing, **with or without modification** of the curriculum:
(A) the curriculum requirements identified by the State Board of Education under Subsection (a); and (B) the additional endorsement curriculum requirements prescribed by the State Board of Education under Subsection (c-2); and (2) successfully completing all curriculum requirements for that endorsement adopted by the State Board of Education:
  (A) without modification of the curriculum; or
  (B) with modification of the curriculum,
provided that the curriculum, as modified, is sufficiently rigorous as determined by the student's admission, review, and dismissal committee.
(c-8) For purposes of Subsection (c-7), the admission, review, and dismissal committee of a student in a special education program under Subchapter A, Chapter 29, shall determine whether the student is required to achieve satisfactory performance on an end-of-course assessment instrument to earn an endorsement on the student's transcript.
  SECTION 2. This Act applies beginning with the 2019-2020 school year.
  SECTION 3. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2019.

State Programs Supporting Texas Students

The State of Texas has developed several programs to encourage students to pursue a strong academic high school program which will adequately prepare them for further study and to face challenges in the twenty-first century work place. These programs focus on admissions, grants, tuition exemptions, and financial aid, which will enable well-prepared, eligible students to attend public and non-profit institutions of higher learning in the State of Texas. Some programs specify that students must graduate under the Distinguished Level of Achievement under the Foundation High School Program.

Top Ten Percent Admissions

Applicants from accredited Texas schools who graduate in the top ten percent of their high school class shall be admitted to a general academic institution if the students meet the following conditions:
- Distinguished level of achievement complete under the Foundation High School Program.
- satisfied college Readiness standard on ACT or SAT
- submit a completed application prior to filing deadlines set by the college
- meet curriculum requirements established by college/university
- provide additional documents requested by the college, including essays, letters of recommendations, admissions tests, high school transcript.

Note: *Colleges may limit the number of first-time freshmen eligible for admission due to enrollment caps (i.e., University of Texas). In some instances, students may be admitted to the university but not to the college of choice within the university. Colleges may admit students on a first-come-first-admitted basis or may use a lottery system.*

There are several Texas grant opportunities for students. The four main ones are Toward Excellence, Access, and Success (TEXAS) Grant Program, Texas Educational Opportunity Grant (TEOG), Texas Public Education Grant Program (TPEG), Tuition Equalization Grant Program (TEG). All require students to be a Texas Resident, be registered for Selective Service, or be exempt, demonstrate a financial need and be enrolled at least three-quarter time, with the exception TEOG, which requires half-time minimum enrollment. Both TEXAS and TEOG Grant Programs also require that the student cannot have been convicted of a felony or a crime involving a controlled substance. See below for more information.

Toward Excellence, Access, and Success (TEXAS) Grant Program was established by the Texas Legislature to make sure that well-prepared high school graduates with financial need can go to college. The financial aid office at each college and university will determine the student's eligibility.

Texas Educational Opportunity Grant (TEOG) provides grant aid to students with financial need who are enrolled in Texas public two-year community colleges, in public technical colleges, or public state colleges in Texas. In addition to requirements above, student cannot be concurrently receiving a renewal TEXAS Grant.

Texas Public Education Grant Program (TPEG) Public colleges or universities make TPEG awards from their own resources; therefore, only in-state colleges and universities may participate and is a need based grant.

Tuition Equalization Grant Program (TEG) provides grant aid to students with financial need and enables students to attend private, non-profit colleges and universities in Texas.

General Information

Texas Financial Aid Information Center
Toll free: 1.877.782.7322 or 1.888.311.8881

Exemption Information
1.800.242.3062, ext. 6387 (unmanned)

Texas Higher Education Coordinating Board
Web Address: www.thecb.state.tx.us

Links to other sources
Web Address: www.mytexasfuture.org

Texas Guaranteed Student Loan Corporation
Web Address: www.AdventuresInEducation.org

Texas First Program promotes efficiency in the state public education system and incentivizes the enrollment of high-performing students who complete high school early and intend to enroll at eligible institutions within the state of Texas.

Fast Track Your Path to Texas Universities

Texas First Program

We're excited to introduce the TEXAS FIRST PROGRAM. This prestigious opportunity enables you to graduate early with the Distinguished Level of Achievement AND receive a scholarship for college.

As one of Texas' top students, you may be eligible to accelerate your path to college and receive a scholarship for one or two semesters at any Texas public institution of higher education, including colleges, universities, and technical colleges.

Talk to your counselor today to see if this exciting new opportunity is the right path for you!

For more information, visit our website or scan the QR code on the left.

LOOKING FOR MORE INFORMATION?

THE FINE PRINT:

Here's what you need to be eligible:

- Texas residency
- FAFSA completion
- At least 22 high school credits and a final GPA equivalent to 3.0 or higher
- Additional academic requirements, including college readiness test scores, STAAR exam participation, and demonstration of mastery in various subjects

The Texas Higher Education Coordinating Board website link above includes a detailed list of eligibility requirements.

If you graduate two or more semesters before your class, you'll receive a two-semester scholarship, equivalent to the amount of the TEXAS grant, upon admission to any Texas public institution of higher education, including colleges, universities, and technical colleges. You may also be eligible for additional financial aid at most of these institutions!

The Texas First Diploma does not guarantee automatic admission for students. Ask your counselor if your grade point average at graduation qualifies you for automatic admission under the state's top 10 percent law.

You can apply to any college or university you choose; however, the scholarship will apply only at the Texas public institution of higher education where you have been admitted.

Use it or lose it! The scholarship offer will expire at the end of the first academic year following your graduation, so we encourage you to attend college directly after high school.

NOTE: *Before September 1, 2023, the Texas First Scholarship was only applicable at 10 Texas public universities. However, effective September 1, 2023, the number of*

institutions of higher education eligible to award the Texas First Scholarship to eligible Texas First Diploma graduates expanded from 10 universities to all Texas public institutions of higher education, including colleges, universities, and technical colleges (Senate Bill 2294, 88th Texas Legislature, Regular Session). Please see your high school counselor for information regarding eligibility requirements to graduate early under the Texas First Program and receive a scholarship up to one year upon admission to any eligible Texas public institution of higher education, per Texas Education Code, Section 61.003.

THECB | **Texas Higher Education COORDINATING BOARD**

Course Offerings

The table lists all the high school course offerings with grade placement, credit, prerequisites, and some basic information on each course. This information serves as a brief overview of student requirements for high school graduation. Complete course descriptions will be found on the pages included. Course offerings are subject to change each year. A variety of courses are offered to provide students with choices (as applicable by the Texas Education Agency) to meet graduation requirements. Each campus will provide students and parents a list of courses available for students to select from during the registration process. If a course is unable to be offered, the campus will notify the students and parents.

The following abbreviations appear in the table to indicate the type of course:
• I   Independent Course - May receive credit for each semester passed. Students may enter or exit these courses at the end of the first semester. Students who are enrolled the entire year, pass the second semester and have a passing average for the year, earn one credit.
• IS   Independent Sequential Course - May receive credit for each semester passed. Students may exit at the end of the first semester but may not enter at mid-term. Students who are enrolled the entire year, pass the second semester, and have a passing average for the year earn one credit.
• R   Courses are required during the year indicated on the chart.
• E   Students may elect to take the course during the year shown and must meet prerequisites.
• VP Course is available through the Virtual Pathways Program.

Course requires the use of technology. NOTE: All dual credit courses require the use of technology.

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Language Arts									
English									51
English I-IV	VP	R	R	R	R	1-4	IS	Taken in sequence	
English for Speakers of Other Languages		E	E			1-2	IS	May count only two credits for English requirements.	
PACE (Personal, Academic, and Career Exploration) **OR** PACE Plus	VP	R R				1/2 1	I IS	Required for all 9th graders Placement determined by district criteria	
ACT/SAT Preparatory Strategies	VP			E	E	1/2	I	May be taken for graduation credit or local credit	
College Readiness & Study Skills					E	1/2	I		
Creative Writing	VP		E	E	E	1/2-1	IS		
Literature and the Bible				E	E	1	I		
Reading									54
Reading I-III		E	E	E	E	1/2-3	I	Counselor approval; recommended for students reading below grade level	
Journalism									54
Photojournalism	VP	E	E	E	E	1/2	I		
Journalism I		E	E	E	E	1	IS		
Advanced Journalism I, II, III			E	E	E	1-3	IS	Journalism I; Taken in sequence; Teacher approval for all levels	
Speech and Debate									54
Professional Communications	VP	E	E	E	E	1/2	I		
Debate I		E	E	E	E	1	IS	Tournaments required	
Debate II and III			E	E	E	1-2	IS	Debate I; tournaments required; taken in sequence; Teacher approval for both levels	
Independent Study/Speech or Debate IV					E	1	IS	Debate I-III; tournaments required; Teacher approval	

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Social Studies									55
World Geography Studies	VP	E	E			1	IS	World Geography or World History is required in 9th or 10 grade	
Human Geography - AP	VP	E	E	E	E	1	IS	May substitute for World Geography	
World History Studies	VP	E	E			1	IS	World History or World Geography is required in 9th or 10th grade	
World History Studies - AP (K-level only)	VP	E	E			1	IS	May substitute for World History	
United States History	VP			R		1	IS	World Geography or World History	
United States History - AP (K-level only)	VP			E		1	IS	May substitute for required U.S. History	
United States Government	VP				R	1/2	I	U.S. History	
United States Government - AP (K-level only)	VP				E	1/2	I	May substitute for required U.S. Government	
European History - AP				E	E	1	IS	U.S. History or concurrent enrollment	
Economics/Free-Enterprise	VP				R	1/2	I	U.S. History	
Personal Financial Literacy Plus Economics	VP				E	1/2	I	May substitute for required Economics	
Macro Economics - AP (K-level only)	VP				E	1/2	I	May substitute for required Economics	
African American Studies			E	E	E	1	IS		
Western Civilization and the Bible				E	E	1/2	I		
Mexican American Studies			E	E	E	1	IS		
Sociology	VP			E	E	1/2	I		
Personal Financial Literacy			E	E	E	1/2	I	May not substitute for Personal Financial Literacy Plus Economics	
Psychology	VP			E	E	1/2	I		
Psychology - AP (K-level only)	VP			E	E	1/2	I		
Special Topics in Social Studies:									
World Area Studies K (K-level only)	VP	E	E	E	E	1/2-1	I		
Street Law				E	E	1/2-1	I		

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Mathematics									**57**
Algebra I	VP	R				1	IS		
Geometry	VP	E	R			1	IS	Algebra I	
Algebra II	VP		E	E	E	1	IS	Geometry	
Precalculus	VP			E	E	1	IS	Algebra II	
Calculus-AP	VP			E	E	1	IS	Precalculus	
Statistics-AP	VP			E	E	1	IS	Algebra II	
Statistics- L	VP			E	E	1	IS	Geometry	
Algebraic Reasoning	VP			E	E	1	IS	Geometry	
Mathematical Models with Applications				E	E	1	IS	Geometry	
Independent Study in Math - College Algebra K (K-level only)	VP			E	E	1	IS	Algebra II	
Independent Study in Mathematics Advanced Algebra (L-level only)				E	E	1	IS	Algebra II	
Advanced Quantitative Reasoning K (K-level only)				E	E	1	IS	Algebra II	
Accounting II K (K-level only)				E	E	1	IS	Algebra II or concurrent <u>and</u> Accounting I	
Robotics II K (K-level only)			E	E	E	1	IS	Required prerequisite: Robotics I	
HORIZONS									**60**
English I HORIZONS	VP	E				1	IS	Identified as Gifted	
English II HORIZONS	VP		E			1	IS	Identified as Gifted	
English III HORIZONS	VP			E		1	IS	Identified as Gifted	
English IV HORIZONS	VP				E	1	IS	Identified as Gifted	
World Geography HORIZONS	VP	E	E	E	E	1	IS	Identified as Gifted; see history prerequisite	
World History Studies HORIZONS	VP	E	E	E	E	1	IS	Identified as Gifted; see history prerequisite	
World History Studies AP/ HORIZONS	VP	E	E	E	E	1	IS	Identified as Gifted; see history prerequisite	
U.S. History AP/HORIZONS	VP			E		1	IS	Identified as Gifted; see history prerequisite	
U.S. Government AP/ HORIZONS	VP				E	1/2	I	Identified as Gifted; see history prerequisite	
European History AP/ HORIZONS	VP			E	E	1	IS	Identified as Gifted; see history prerequisite	
Macro Economics AP/ HORIZONS	VP				E	1/2	I	Identified as Gifted; see history prerequisite	
Psychology AP/HORIZONS	VP			E	E	1/2	I	Identified as Gifted; see history prerequisite	
Human Geography AP/ HORIZONS	VP	E	E	E	E	1	IS	Identified as Gifted; see history prerequisite	
Geometry K/HORIZONS	VP	E	E			1	IS	Identified as Gifted; see math prerequisite	
Algebra II K/HORIZONS	VP		E	E		1	IS	Identified as Gifted; see math prerequisite	
Precalculus K/HORIZONS	VP			E	E	1	IS	Identified as Gifted; see math prerequisite	

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
HORIZONS (continued)									**60**
Calculus AP/HORIZONS	VP			E	E	1	IS	Identified as Gifted; see math prerequisite	
Statistics AP/HORIZONS	VP			E	E	1	IS	Identified as Gifted; see math prerequisite	
Biology K/ HORIZONS	VP	E	E			1	IS	Identified as Gifted; see science prerequisite	
Chemistry K/HORIZONS	VP		E	E	E	1	IS	Identified as Gifted; see science prerequisite	
Physics K/HORIZONS	VP		E	E	E	1	IS	Identified as Gifted; see science prerequisite	
Biology AP/HORIZONS	VP			E	E	1	IS	Identified as Gifted; see science prerequisite	
Chemistry AP/HORIZONS	VP			E	E	1	IS	Identified as Gifted; see science prerequisite	
Physics 1 AP/HORIZONS	VP		E	E	E	1	IS	Identified as Gifted; see science prerequisite	
Physics 2 AP/HORIZONS				E	E	1	IS	Identified as Gifted; see science prerequisite	
Physics C AP/HORIZONS				E	E	1	IS	Identified as Gifted; see science prerequisite	
Environmental Science AP/HORIZONS	VP		E	E	E	1	IS	Identified as Gifted; see science prerequisite	
Astronomy K/HORIZONS				E	E	1	IS	Identified as Gifted; see science prerequisite	

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Science									**60**
Integrated Physics and Chemistry	VP		E	E	E	1	IS	Biology	
Biology	VP	R				1	IS		
Chemistry	VP		E	E		1	IS	Biology and Algebra I	
Physics	VP		E	E	E	1	IS	Biology and completion of or concurrent in Algebra I	
Astronomy				E	E	1	IS	Required: Biology, Algebra I, and IP&C or Chemistry Recommended: Physics	
Aquatic Science			E	E	E	1	IS	Required: Biology Recommended: IP&C or Chemistry; or concurrent enrollment in either course	
Environmental Systems	VP		E	E	E	1	IS	Required: Biology Recommended: IP&C or Chemistry; or concurrent enrollment in either course	
Earth Systems Science	VP			E	E	1	IS	Required: Algebra I and two credits of high school science	
Food Science K (K-level only)				E	E	1	IS	Culinary Arts **and** 3 units of science (Including Biology and Chemistry)	
Forensic Science K (K-level only)				E	E	1	IS	Required: Biology and Chemistry Recommended: Medical Terminology and Principles of Health Science	
Advanced Animal Science K (K-level only)				E	E	1	IS	Biology, Chemistry; and Vet Med or at least 1 credit of Animal Science courses (Small Animal, Equine Science, Livestock Prod.)	
Advanced Plant and Soil Science K (K-level only)				E	E	1	IS	Biology, Chemistry, and Greenhouse Operation & Production	
Pathophysiology K (K-level only)				E	E	1	IS	Required prerequisite: Biology and Chemistry Recommended prerequisites: Principles of Health Science and Medical Terminology, Anatomy and Physiology K (or concurrent with Anatomy & Physiology)	
Engineering Design and Problem Solving K (K-level only)				E	E	1	IS	Algebra II, Chemistry, and Physics; or concurrent with Physics, **and** Engineering Design and Presentation I or Robotics II K or Manufacturing Engineering Technology K (ARC)	
Anatomy and Physiology K (K-level only)				E	E	1	IS	Required: Biology and Chemistry Recommended: Medical Terminology and Principles of Health Science	

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Science (continued)									56
Biology - AP	VP			E	E	1	IS	Biology and Chemistry	
Chemistry - AP	VP			E	E	1	IS	Biology, Chemistry, and Algebra II	
Environmental Science-AP	VP		E	E	E	1	IS	Prerequisites: Biology and completion or concurrent enrollment in Chemistry	
Physics 1- AP (Algebra based)	VP		E	E	E	1	IS	Biology, and completion or concurrent enrollment in Algebra II; course may substitute for Physics	
Physics 2 - AP (Algebra based)				E	E	1	IS	Biology, and Physics or AP Physics 1 and completion or concurrent enrollment in Precalculus	
Physics C: (Calculus based)				E	E	2	IS	Biology, and Physics or AP Physics 1 and completion or concurrent enrollment in Calculus	

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Languages Other Than English									
Modern Languages: French, German, Spanish, ASL									63
Level I	*VP	E	E	E	E	1	IS	Any two levels of the same foreign language meet the FHSP requirements * VP - Only Spanish I, II, III L, III K, IV K, IV AP and ASL I, II are available in the Virtual Pathways Program
Level II	*VP	E	E	E	E	1	IS	
Level III L	*VP	E	E	E	E	1	IS	
Level III K	*VP	E	E	E	E	1	IS	
Levels IV K or AP, V K or AP, and VI K	*VP	E	E	E	E	1-3	IS	
Spanish for Native Speakers I		E	E	E	E	1	IS	Placement assessment
Spanish for Native Speakers II/ III K		E	E	E	E	2	IS	
Spanish for Native Speakers IV AP		E	E	E	E	1	IS	
Classical Language: Latin									64
Latin I		E	E	E	E	1	IS	Any two levels of the same foreign language meet the FHSP requirements
Latin II		E	E	E	E	1	IS	
Latin III K and IV K or AP		E	E	E	E	1-2	IS	
Programming Language: Computer Science									64
AP Computer Science Principles	VP	E	E	E	E	1	IS	Required prerequisite: Algebra I May not be taken post Computer Science III K
Computer Science I K	VP	E	E	E	E	1	IS	Required prerequisite: Algebra I
Computer Science II K	VP		E	E	E	1	IS	Required prerequisite: Algebra II or concurrent AND: CompSci I K or Geometry K and prior programming.
Computer Science III K	VP			E	E	1	IS	Required prerequisite: Computer Science II K

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Physical Education/Health									65
Lifetime Fitness and Wellness Pursuits	VP	E	E	E	E	1	I	
Skill-based Activities		E	E	E	E	1	I	
Off-Campus PE		E	E	E	E	1/2-4	I	See your Counselor for more information
Athletics I-IV		E	E	E	E	1/2-4	I	
Health	VP	E	E	E	E	1/2	I	Required credit for graduation Class of 2018-2028
Principles of Health Science			E	E	E	1	IS	Satisfies health credit required for graduation

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Local Credit Courses**									
** Office Assistant					E	1/2-1	1	Counselor approval	
** Teacher Assistant					E	1/2-1	I	Counselor approval	
** Cheerleading			E	E	E	1/2-1	I	Counselor approval	
** ACT/SAT Prep	VP			E	E	1/2	I	May also be taken for graduation credit, see Counselor	

** Local credits do not count toward required credits for graduation.

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Fine Arts									
Visual Arts									66
*** Art I DP - Drawing and Painting	VP	E	E	E	E	1	IS	First in sequence **** Only one state credit may be earned at the Art I level.*	
*** Art I S - Sculpture/ Ceramics		E	E	E	E	1	IS	First in sequence **** Only one state credit may be earned at the Art I level.*	
*** Art I P - Photography		E	E	E	E	1	IS	First in sequence **** Only one state credit may be earned at the Art I level.*	
*** Art I DM - Digital Art and Media		E	E	E	E	1	IS	First in sequence **** Only one state credit may be earned at the Art I level.*	
Art II - Drawing/Painting		E	E	E	E	1	IS	Art I DP, Art I S, Art I P, or Art I DM (1 credit)	
Art II - Sculpture/Ceramics		E	E	E	E	1	IS	Art I DP, Art I S, Art I P, or Art I DM (1 credit)	
Art II - Photography		E	E	E	E	1	IS	Art I DP, Art I S, Art I P, or Art I DM (1 credit)	
Art II - Digital Art and Media		E	E	E	E	1	IS	Art I DP, Art I S, Art I P, or Art I DM (1 credit)	
Art II Design			E	E	E	1	IS	Art II DP, Art II S, Art II P, or Art II DM	
Art III - Drawing/Painting			E	E	E	1	IS	Art II - Drawing/Painting	
Art III - Sculpture/Ceramics			E	E	E	1	IS	Art II - Sculpture/Ceramics	
Art III - Photography			E	E	E	1	IS	Art II - Photography	
Art III - Digital Art and Media			E	E	E	1	IS	Art II - Digital Art and Media	
Art III Design			E	E	E	1	IS	Art II Design	
Art IV - Studio 2D, 3D, Photography, Digital Art and Media or Design				E	E	1	IS	Level III Art course in the same series	
AP Art - Drawing				E	E	1	IS	Any Level II Art course	
AP Art - 2D				E	E	1	IS		
AP Art - Photography				E	E	1	IS	Any Level II Art Course; Student may only take 1 of these AP courses.	
AP Art - Digital Art and Media				E	E	1	IS		
AP Art - 3D				E	E	1	IS	Any Level II Art course	
AP Art - Art History	VP			E	E	1	IS	A Level I Fine Arts course is a required prerequisite	
Floral Design			E	E	E	1	IS	Required prerequisite (or concurrent): Principles of AFNR for 10 graders	

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Theatre Arts								**69**
Theatre Arts I-IV	E	E	E	E	1-4	IS	Teacher recommendation for Advanced Theatre Arts I	
Theatre Production I-IV	E	E	E	E	1-4	IS	Teacher recommendation for all levels	
Technical Theatre I-IV	E	E	E	E	1-4	IS	Teacher approval for levels II, III, IV	
Music								**69**
Band I	E	E	E	E	1/2-1	I or IS	I if paired with PACE; IS for all other students	
Choral I	E	E	E	E	1/2-1	I or IS	I if paired with PACE; IS for all other students	
Orchestra I	E	E	E	E	1/2-1	I or IS	I if paired with PACE; IS is for all other students	
Band II-IV		E	E	E	1-3	IS		
Choir II-V		E	E	E	1-3	IS		
Orchestra II-IV		E	E	E	1-3	IS		
Orchestra II-IV		E	E	E	1-3	IS		
Vocal Ensemble I-IV	E	E	E	E	1-4	IS	Varsity Mixed Choir; audition; director approval	
Music Theory AP			E	E	1	IS	A level I Fine Arts course is a required prerequisite. Minimum of two years membership in high school band, choir, or orchestra and taken concurrently with band, choir or orchestra OR a minimum proficiency score on the CFISD Advanced Theory Placement Test.	
Instrumental Ensemble Band I-IV	E	E	E	E	1/2-4	I	Concurrent enrollment in band and director approval required	
Instrumental Ensemble Orchestra I-IV	E	E	E	E	1/2-4	I	Concurrent enrollment in orchestra and director approval required	
Dance								**71**
Dance I-IV	E	E	E	E	1-4	IS	One year's participation in Drill team can substitute for 1 PE credit	

Career and Technical Education

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Agriculture, Food, and Natural Resources								**75**
Principles of Ag, Food, and Natural Resources	E	E			1	IS	Required of all 9th/10th graders wanting to take an Ag course	
Small Animal Management		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10th graders: Principles of Ag	
Equine Science		E	E	E	1/2	I	Required prerequisite (or concurrent) for 10th graders: Principles of Ag	
Livestock Production		E	E	E	1	IS	Required prerequisite (or concurrent) for 10th graders: Principles of Ag	
Veterinary Medical Applications			E	E	1	IS	Required prerequisites: Livestock Prod, Small Animal Mgmt, or Equine Science	
Advanced Animal Science K (K-level only)			E	E	1	IS	Required prerequisite: Biology, Chemistry and Vet Med or at least 1 credit of Animal Science courses (Small Animal, Equine Science, Livestock Prod.)	

Course			9	10	11	12	Credit	Type	Information/Prerequisites	Page
Agriculture, Food, and Natural Resources (continued)										**75**
Wildlife, Fisheries and Ecology Mgmt				E	E	E	1	IS	Required prerequisite: (or concurrent) for 10th graders: Principles of Ag	
Forestry & Woodland Ecosystems					E	E	1	IS	Required prerequisite: Wildlife, Fisheries and Ecology Mgmt	
Range Ecology Management					E	E	1	IS	Required prerequisite: Wildlife, Fisheries and Ecology Mgmt	
Floral Design				E	E	E	1	IS	Required prerequisite (or concurrent) for 10th graders: Principles of Ag	
Greenhouse Operation & Production				E	E	E	1	IS	Required prerequisite (or concurrent) for 10th graders: Principles of Ag	
Advanced Floral Design					E	E	1	IS	Required prerequisite: Floral Design Recommended prerequisite: TSFA Level I Floral Certification	
Advanced Plant and Soil Science K (K-level only)					E	E	1	IS	Required prerequisite: Biology, Chemistry and Greenhouse Operation	
Capstone - Plant Science						E	1	IS	Required prerequisite: Greenhouse Operation or Floral Design and 12th grade	
Agricultural Mechanics and Metal technologies				E	E	E	1	IS	Required prerequisite (or concurrent) for 10th graders: Principles of Ag	
Agricultural Equipment Design & Fabrication					E	E	1	IS	Required prerequisite: Ag Mech and Metal Tech	
Capstone - Ag Mech						E	1	IS	Required prerequisite: Ag Mech and Metal Tech and 12th grade	
Practicum in Ag, Food, and Natural Resources (work-based)						E	2	IS	Required prerequisite: at least two credits in Ag cluster	
Architecture and Construction										**80**
Principles of Architecture		VP	E	E	E		1	IS		
Principles of Manufacturing			E	E	E		1	IS		
Construction Technology I				E	E	E	2	IS	Required prerequisite: Principles of Arch or Principles of Manufacturing	
Construction Technology II					E	E	2	IS	Required prerequisite: Construction Technology I	
Mill and Cabinetmaking Technology				E	E	E	2	IS	Required prerequisite: Construction Technology I	
Practicum in Construction Technology (work-based)						E	2	IS	Required prerequisite: Construction Technology I and 12th grade	
Interior Design				E	E	E	1	IS	Recommended prerequisite: Principles of Arch	
Capstone - Interior Design						E	1	IS	Required prerequisite: Three (3) courses in program of study and 12th grade	
Architectural Design I		VP	E	E	E	E	1	IS	Required prerequisite: Principles of Arch Recommended prerequisite: Geometry	
Architectural Design II		VP		E	E	E	2	IS	Required prerequisite: Architectural Design I	
Capstone - Architecture						E	1	IS	Required prerequisite: Three (3) courses in program of study and 12th grade	
Practicum in Architectural Design (work-based)						E	2	IS	Required prerequisite: Architectural Design I and 12th grade	
Practicum in Architectural Design I **Workforce**					E	E	2	IS	Required prerequisite: Architectural Design II and portfolio approved by Lone Star College	
Practicum in Architectural Design II **Workforce**						E	2	IS	Required prerequisite: Practicum in Architectural Design I Workforce	

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Arts, A/V Technology, and Communications								**84**
Professional Communications	E	E	E	E	1/2	I		
Principles of Arts, Audio/Video Technology & Communications	E	E			1	IS		
Digital Media	E	E	E	E	1	IS		
Animation I		E	E	E	1	IS	Recommended prerequisite: Digital Media	
Animation II			E	E	2	IS	Required prerequisite: Animation I	
Practicum in Animation				E	2	IS	Required prerequisite: Animation II and 12th grade	
Digital Audio Technology I	E	E	E	E	1	IS		
Digital Audio Technology II			E	E	1	IS	Required prerequisite: Digital Audio Tech I Recommended prerequisite: Audio/Video Prod I	
Audio/Video Production I		E	E	E	2	IS	Recommended prerequisite: Principles of Arts, A/V Tech & Comm or Digital Audio Technology I	
Audio/Video Production II			E	E	2	IS	Required prerequisite: Audio/Video Production I	
Practicum in Audio/Video Production				E	2	IS	Required prerequisite: Audio/Video Production II or Digital Audio Technology II and 12th grade	
Fashion Design I		E	E	E	1	IS		
Fashion Design II			E	E	2	IS	Required prerequisite: Fashion Design I	
Capstone - Fashion Design				E	1	IS	Required prerequisite: Fashion Design II and 12th grade	
Business, Marketing & Finance								**89**
Principles of Business, Marketing, and Finance	E	E			1	IS		
Accounting I		E	E	E	1	IS	Recommended prerequisite: Principles of Bus/Marketing/Finance Required prerequisite: Geometry	
Accounting II K (K-level only)			E	E	1	IS	Required prerequisite: Accounting I and Algebra II or concurrent	
Advanced Marketing			E	E	2	IS	Required prerequisite: At least one Marketing course (Social Media Mktg or Sports & Entertainment Mktg)	
Foundations of Business Communication & Technologies (formerly BIM I)	E	E	E	E	1	IS	Recommended prerequisite: Touch System Data Entry	
Business Communication & Technologies (formerly BIM II)		E	E	E	1	IS	Required prerequisite: Foundations of Business Communication & Technologies (formerly BIM I)	
Business Management			E	E	1	IS	Recommended prerequisite: At least one Business course (BIM I or II, Global Business, Human Resources Mgmt or Virtual Business)	
Digital Media	E	E	E	E	1	IS		

Course	9	10	11	12	Credit	Type	Information/Prerequisites	Page
Business, Marketing and Finance (continued)								**89**
Entrepreneurship		E	E	E	1	IS	Recommended prerequisite: Principles of Bus/Mktg/Finance	
Global Business		E	E	E	1/2	I	Recommended prerequisite: Principles of Business/Marketing/Finance	
Human Resources Management			E	E	1/2	I	Recommended prerequisite: Principles of Business/Marketing/Finance	
Money Matters	E	E	E	E	1	IS		
Securities and Investments			E	E	1	IS	Recommended prerequisite: at least one Finance course (Accounting I or Money Matters)	
Social Media Marketing		E	E	E	1/2	I	Recommended prerequisite: Principles of Bus/Mktg/Finance and/or Virtual Business	
Sports and Entertainment Marketing I		E	E	E	1/2	I	Recommended prerequisite: Principles of Bus/Mktg/Finance	
Sports and Entertainment Marketing II		E	E	E	1/2	I	Required prerequisite: Sports & Entertainment Marketing I	
Touch System Data Entry	E	E			1/2	I		
Virtual Business		E	E	E	1/2	I	Recommended prerequisite: Principles of Business/Marketing/Finance	
Practicum in Entrepreneurship I/II (work-based)			E	E	2	IS	Required prerequisite - at least 1 credit in Business, Marketing & Finance cluster	
Education and Training								**95**
Principles of Education and Training	E	E	E		1	IS		
Principles of Human Services					1	IS	Offered in Middle School only	
Child Development		E	E	E	1	IS	Recommended prerequisite: Principles of Human Services or Principles of Education & Training	
Communication and Technology in Education		E	E	E	1	IS	Recommended prerequisite: Principles of Education & Training or Principles of Human Services	
Teacher Prep I			E	E	2	IS	Recommended prerequisite: Principles of Education & Training or Principles of Human Services and Child Dev or Communication & Technology in Education	
Early Learning I			E	E	2	IS	Recommended prerequisite: Principles of Human Services or Principles of Education & Training and Child Development	
Teacher Prep II				E	2	IS	Required prerequisite: Teacher Prep I	
Early Learning II				E	2	IS	Required prerequisite: Early Learning I	
Lifetime Nutrition and Wellness		E	E	E	1/2	I	Recommended prerequisite: Principles of Hospitality & Tourism or Principles of Human Services or Principles of Education & Training or Principles of Health Science	
Interpersonal Studies		E	E	E	1/2	I	Recommended prerequisite: Principles of Hospitality & Tourism or Principles of Human Services or Principles of Education & Training or Principles of Health Science	

Course			9	10	11	12	Credit	Type	Information/Prerequisites	Page
Engineering										**99**
Principles of Applied Engineering		VP	E	E			1	IS		
Engineering Design and Presentation I		VP	E	E	E	E	1	IS	Required prerequisite: Principles of Applied Engineering	
Engineering Design and Presentation II		VP		E	E	E	2	IS	Required prerequisite: Engineering Design and Presentation I	
Engineering Design and Problem Solving K (K-level only)					E	E	1	IS	Required prerequisite: Algebra II, Chemistry, Physics (or concurrent), and Engineering Design and Presentation I or or Robotics II K or Manufacturing Engineering Technology K (ARC)	
Practicum in STEM						E	2	IS	Required prerequisite: Engineering Design I or Robotics I	
Robotics I			E	E	E	E	1	IS	Required prerequisite: Principles of Applied Engineering or Principles of Manufacturing	
Robotics II K (K-level only)				E	E	E	1	IS	Required prerequisite: Robotics I	
Capstone - Engineering						E	1	IS	Required prerequisite: Three (3) courses in program of study and 12th grade	

Course			9	10	11	12	Credit	Type	Information/Prerequisites	Page
Health Science										**102**
Principles of Health Science			E	E	E		1	IS		
Medical Terminology				E	E	E	1	IS	Recommended prerequisite: Principles of Health Science	
Health Science Theory/ Clinicals					E	E	2	IS	Required prerequisite: Principles of Health Science, Medical Terminology and Biology and facility requirements	
Anatomy and Physiology K (K-level only)					E	E	1	IS	Required prerequisite: Biology and Chemistry Recommended prerequisite: Principles of Health Science and Medical Terminology	
Pathophysiology K (K-level only)					E	E	1	IS	Required prerequisite: Biology and Chemistry Recommended prerequisites: Principles of Health Science and Medical Terminology, Anatomy and Physiology K (or concurrent with Anatomy & Physiology)	
Practicum in Health Science (certification or work-based)						E	2	IS	Required prerequisite: Principles of Health Science and 1 advanced health science-related course and 12th grade Recommended: Medical Terminology	
Lifetime Nutrition and Wellness				E	E	E	1/2	I	Recommended prerequisite: Principles of Hospitality & Tourism or Principles of Human Services or Principles of Education & Training or Principles of Health Science	
Interpersonal Studies				E	E	E	1/2	I	Recommended prerequisite: Principles of Hospitality & Tourism or Principles of Human Services or Principles of Education & Training or Principles of Health Science	
Forensic Science K (K- level only)					E	E	1	IS	Required prerequisite: Biology and Chemistry Recommended prerequisite: Principles of Health Science and Medical Terminology	

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Hospitality and Tourism									**105**
Principles of Hospitality and Tourism						1	IS	Offered in Middle School only	
Introduction to Culinary Arts		E	E			1	IS	Recommended prerequisite: Principles of Hospitality	
Culinary Arts			E	E	E	2	IS	Required prerequisite: Intro to Culinary Arts and Food Handler certification	
Advanced Culinary Arts				E	E	2	IS	Required prerequisite: Culinary Arts and Food Handler or Food Protection Manager	
Food Science K (K-level only)				E	E	1	IS	Required prerequisites: Culinary Arts and three units of science (including Biology & Chemistry)	
Practicum in Culinary Arts					E	2	IS	Required prerequisite: Culinary Arts and Food Handler or Food Protection Manager	
Human Services									**107**
Principles of Human Services						1	IS	Offered in Middle School only	
Introduction to Cosmetology			E			1	IS	May be taken in 11th grade if concurrent with Cos I	
Cosmetology I				E		2	IS	Required prerequisite: (or concurrent) Intro to Cosmetology	
Cosmetology II					E	3	IS	Required prerequisite: Cosmetology I and 12th grade	
Information Technology									**109**
Principles of Computers and Coding (formerly Principles of Information Technology)						1	IS	Offered in Middle School only	
AP Computer Science Principles	VP	E	E	E	E	1	IS	Required prerequisite: Algebra I. May not be taken post Computer Science III K	
Computer Science I K	VP	E	E	E	E	1	IS	Required prerequisite: Algebra I	
Computer Science II K	VP		E	E	E	1	IS	Required prerequisites: Algebra II or concurrent; Computer Science I K or Geometry K and prior programming experience	
Computer Science III K	VP			E	E	1	IS	Required prerequisite: Computer Science II K	
Computer Science IV K				E	E	1	IS	Required prerequisite: Computer Science III K or concurrent	
Networking		E	E	E	E	1	IS	Recommended prerequisite: Principles of Computers and Coding (formerly Principles of Information Technology)	
Internetworking Technologies I			E	E	E	1	IS	Recommended prerequisite: Networking and Computer Science I K	
Internetworking Technologies II				E	E	1	IS	Required prerequisite: Internetworking Tech I	
Capstone - Cybersecurity					E	1	IS	Required prerequisite (or concurrent): At least two technology courses with at least one being Networking or Internetworking Tech I & 12th grade	
Practicum in Information Technology					E	2	IS	Required prerequisite (or concurrent): At least two technology courses with at least one being Networking or Internetworking Tech I	

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Information Technology (continued)									**109**
Digital Media		E	E	E	E	1	IS		
Web Design (Web Tech I)		E	E	E	E	1	IS		
Web Game Development			E	E	E	1	IS	Required prerequisite: Web Technologies I or Web Design	
Capstone-Web Development					E	1	IS	Required prerequisite: Three (3) courses in program of study and 12th grade	
Manufacturing									**114**
Principles of Manufacturing		E	E	E		1	IS		
Principles of Applied Engineering		E	E			1	IS		
Diversified Manufacturing I		E	E	E	E	1	IS	Required prerequisite: Principles of Manufacturing	
Diversified Manufacturing II			E	E	E	1	IS	Required prerequisite: Diversified Manufacturing I	
Precision Metal Manufacturing I				E	E	2	IS	Required prerequisite: Diversified Manufacturing I	
Precision Metal Manufacturing II					E	2	IS	Required prerequisite: Precision Metal Manufacturing I and 12th grade	
Robotics I		E	E	E	E	1	IS	Required prerequisite: Principles of Applied Engineering or Principles of Manufacturing	
Robotics II K (K-level only)			E	E	E	1	IS	Required prerequisite: Robotics I	
Welding I		E	E	E	E	2	IS	Required prerequisite: Principles of Manufacturing	
Welding II			E	E	E	2	IS	Required prerequisite: Welding I	
Practicum in Manufacturing					E	2	IS	Required prerequisite: Welding I or Precision Metal Manufacturing I or Diversified Manufacturing I or Robotics I and 12th grade	
Transportation, Distribution, and Logistics									**118**
Automotive Basics		E	E	E	E	1	IS	Should not be taken concurrently with or after Automotive Technology I.	
Automotive Technology I			E	E	E	2	IS		
Automotive Technology II				E	E	2	IS	Required prerequisite: Automotive Technology I	
Practicum in Transportation Systems (work-based)					E	3	IS	Required prerequisite: Automotive Technology I and 12th grade standing	
General Career Development									**120**
General Employability Skills			E	E	E	1	IS		
Student to Industry Connections				E	E	1	IS	Recommended prerequisite: General Employability Skills	
Career Preparation				E	E	2	IS	Recommended prerequisite: General Employability Skills	

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Vocational Training Courses for Students in Special Education									**125**
Business Media Production Systems			E	E	E	2-4	IS	IEP committee recommendation	
Commercial Food		E	E	E	E	2	IS	IEP committee recommendation	
Vocational Adjustment Class (VAC)				E	E	1-8	IS	IEP committee recommendation	
Occupational Training				E	E	1-2	IS	IEP committee recommendation	

Course		9	10	11	12	Credit	Type	Information/Prerequisites	Page
Leadership									**125**
Leadworthy	VP	E	E	E	E	1/2	I		
Student Leadership				E	E	1/2-1	I	For student leaders only	
PALs				E	E	1	IS	Application and interview with teacher	
AFJROTC		E	E	E	E	1-4	IS		
Team Sport Officiating			E	E	E	1	I	Association and test fees required	

🕐 A clock icon is used to designate elective courses requiring additional practice/rehearsal time outside of the regular school day. Schools will limit practice/rehearsal time to a maximum of eight hours per week, Monday through Thursday, per activity. Additional practices/rehearsals (beyond the eight hours) may be required after school on Friday and/or on Saturday. Competitions for these courses are generally scheduled on Friday and/or Saturday. Schedules for specific activities will be provided by the teacher.

LANGUAGE ARTS

ENGLISH

Welcome to High School! The goal of the high school language arts curriculum is to develop, strengthen, and broaden students' literacy, communication skills, and analytical capabilities so that they become critical, life-long learners capable of both meaningful collaboration and independent thought.

English I   1 credit

This course connects listening, speaking, reading, writing, and thinking throughout the following TEKS strands: developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. Students will engage in academic conversations, writing, and reading to facilitate critical thinking and adapt to the ever-evolving nature of language and literacy. Students will study the habits of the capable reader and the capable writer, establishing practices that will be applied to future endeavors. Students will encounter a diverse range of self-selected and assigned texts from multiple genres representing a broad range of authors, viewpoints, and literary traditions. Texts will include informational, literary, and multimodal (multimedia) texts. Students will write for a variety of purposes and study techniques appropriate to communicating their ideas with clarity and purpose.

English I SOL (for Speakers of Other Languages)

                                                          1 credit

This course focuses on the fundamental English language skills of reading, writing, speaking and listening in an effort to build a foundation for student success in high school English classes. Students practice both reading and writing as a process. Students perform an array of reading strategies as they work to become proficient in understanding and responding appropriately to a variety of texts. Students write for varied audiences and purposes and work to develop ideas, voice, word choice, fluency, and organization in their writing while applying conventions of the English language. Instruction in such skills is accommodated to meet the varying needs of students who are at different stages of English language acquisition. The strategies and methodologies of English as a Second Language are utilized throughout this program that parallels with English I.

English II   1 credit

In this course, students will continue to develop, strengthen, and broaden their literacy, communication skills, and analytical capabilities so that they become critical learners capable of both meaningful collaboration and independent thought. This course connects listening, speaking, reading, writing, and thinking throughout the following TEKS strands: developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. Students will engage in academic conversations, writing, and reading to facilitate critical thinking and adapt to the ever-evolving nature of language and literacy. Students will study the habits of the capable reader and the capable writer, establishing practices that will be applied to future endeavors. Students will encounter a diverse range of self-selected and assigned texts from multiple genres representing a broad range of authors, viewpoints, and literary traditions. Texts will include informational, literary, and multimodal (multimedia) texts that increase in complexity and sophistication. Students will write for a variety of purposes and study techniques appropriate to communicating their ideas with clarity and purpose.

English II SOL (for Speakers of Other Languages)

                                                          1 credit

This course emphasizes continuing development of the fundamental English language skills of reading, writing, speaking and listening in an effort to continue to build the foundation for student success in high school English classes. Included within the study are the identification of literary themes and forms, use of effective reading strategies, and development of speaking/listening skills. Instruction in such skills is accommodated to meet the varying needs of students who are at different stages of English language acquisition. The strategies and methodologies of English as a Second Language are utilized throughout this program that parallels with English II.

English III   1 credit

This course presents advanced work in composition and reading. Students will continue to develop, strengthen, and broaden their literacy, communication skills, and analytical capabilities so that they become critical learners capable of both meaningful collaboration and independent thought. This course connects listening, speaking, reading, writing, and thinking throughout the following TEKS strands: developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. Students will engage in academic conversations, writing, and reading to facilitate critical thinking and adapt to the ever-evolving nature of language and literacy. Students will encounter a diverse range of self-selected and assigned texts from multiple genres representing a broad range of authors, viewpoints, and literary traditions. Texts will include informational, literary, and multimodal (multimedia) texts. Students will write for a variety of purposes and study techniques appropriate to communicating their ideas with clarity and purpose.

English III SSL (Sheltered Second Language)   1 credit

This course is designed for students previously enrolled in English I SOL and English II SOL and/or for speakers of other languages who need to develop proficiency in the use of English. The strategies and methodologies used to aid speakers of other languages in developing skills in English are utilized throughout this course. Thus, in considering the individual's oral proficiency and other academic competency skills in English, this course is accommodated to enhance the critical processes and features of second language acquisition. Focus of the course is on an overview of American literature, including samples of traditional and multi-ethnic selections that represent this country's cultural diversity. Writing occurs in a variety of ways as appropriate. Correct English grammar and syntax are approached through direct instruction and/or through the writing process. Research is assigned as fits the students' needs and English skills. Practice in listening and speaking occurs throughout the course. Students write for varied audiences and purposes and work to apply effective ideas, voice, word choice, fluency, organization, and conventions in their writing. Instruction in such skills is accommodated to meet the varying needs of students who are at different stages of English language acquisition. The strategies and methodologies of English as a Second Language are utilized throughout this program that parallels with English III.

English III-Advanced Placement/HORIZONS   1 credit

English III H/AP covers the curriculum for the Advanced Placement English Language & Composition course, which focuses on the development and revision of evidence-based analytical and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. During the course, students will evaluate, synthesize, and cite research to support their arguments. They will also read and analyze rhetorical elements and their effects in nonfiction texts – including images as forms of text – from a range of disciplines and historical periods. Writing assignments will include expository, analytical, and argumentative essays that require students to analyze and interpret nonfiction works. The AP English Language & Composition course aligns to an introductory college-level rhetoric and writing curriculum, and students may take the AP English Language Exam at the end of the course to earn college credit.

English IV   1 credit

The English IV course presents advanced work in composition and reading designed to enable students to become self-directed learners and critical thinkers directed toward college and career readiness. Coursework is designed so that students habitually practice the reading and writing skills that will enable them to independently access and analyze tests in the following genres: short fiction, poetry, drama, informational and argumentative text, the novel, and multimodal and digital texts. Student will use a variety of listening and speaking skills and collaborative strategies to process course content. Text selections will be primarily taken from British literature and will include traditional, classic, and contemporary selections that represent this country's literary diversity. As students read, they will be asked to move through the levels of thinking - focusing on comprehension, analysis, and evaluation - before they write for varied audiences and purposes. Students will hone their writing skills throughout the year by developing their ideas and applying effective voice, word choice, fluency, logical organization of material, and appropriate conventions of language.

English IV SSL (Sheltered Second Language)   1 credit

This course is designed to aid speakers of other languages in developing skills in English and to take these speakers of other languages through a program of English composition and a variety of readings from British and World and contemporary literature. Strategies and methodologies for aiding these students in acquiring increasing competency in English are utilized throughout this course with accommodations in the English IV program occurring to meet the language learning needs of the individual student. Students write in a variety of forms, work on appropriate research skills, and use multiple strategies during the reading process. Appropriate and correct English grammar is approached through direct instruction and/or through the writing process. Opportunities for practice of listening and speaking are inherent in the course.

English IV-Advanced Placement/HORIZONS   1 credit

English IV H/AP covers the curriculum for the Advanced Placement English Literature & Composition course, which focuses on reading, analyzing, and writing about imaginative literature – fiction, poetry, and drama – from various time periods. Students will engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure to readers. During the course, students will consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments will include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. The AP English Literature & Composition course aligns to an introductory college-level literature and writing curriculum, and students may take the AP English Literature Exam at the end of the course to earn college credit.

PACE

PACE- Personal, Academic, and Career Exploration
1/2 credit

This one semester course is designed to assist students in the transition from middle school to high school and build skills that will assist them in future transitions to career, college, adulthood, and independence. PACE will link relevant concepts so that students understand the "big picture" in preparing for life after high school while still in high school. Students will review and refine their 4-year plan already in place and will actively work to develop a personalized plan for life success based on their career aspirations. Coursework is focused around the skill areas of personal/social, academic, career, health/wellness, and life.
- Required in Grade 9
- The state required Speech TEKS are embedded in PACE.
- The state required instruction in cardiopulmonary resuscitation (CPR) is provided in PACE.

OR

PACE Plus (English/Math/Science)   **1 credit**
This two-semester course is required of all 9th-grade students who did not pass all 8th-grade core academic classes (language arts, reading, math, science, and social studies) or who have not met the state standards on all 8th-grade reading, math, science, and social studies STAAR tests. Beginning ESL students, intermediate ESL students, and some special education students in need of academic support are also required to take this year-long class. The course must be taken in grade nine to fulfill Cypress-Fairbanks' graduation requirements. PACE Plus is designed to assist students in the transition from middle school to high school and build skills that will assist them in future transitions to career, college, adulthood, and independence. This course will link relevant concepts so that students understand the "big picture" in preparing for life after high school while in high school. Students will review and refine their 4-year plan already in place and will actively work to develop a personalized plan for life success based on their career aspirations. Coursework is focused around the skill areas of personal/social, academic, and career, health/wellness, and life. PACE Plus will provide students with additional academic support in core areas.
- The state required Speech TEKS are embedded in PACE.
- The state required instruction in cardiopulmonary resuscitation (CPR) is provided in PACE.

ACT/SAT Preparatory Strategies   **1/2 credit**
This one-semester elective course is open to eleventh- grade students and fall semester twelfth-grade students who are college- bound and have successfully completed Algebra II or be concurrently enrolled in Algebra II. The course is designed to provide students with strategies to meet the academic requirements and demands of post-high school studies and to prepare students to successfully take college entrance exams. Units of study include preparation for college entrance exams (ACT and SAT), vocabulary expansion, objective test-taking skills, research and critical thinking, attitudes, goal setting, and time management. Strategies necessary for successfully reading, comprehending, and studying advanced-level content textbooks both in high school and in college will also be addressed.
- This course is noted on the transcript as Independent Study in English.
- Open to 11th- and 12th- grade students only
- Students may select to take the course for graduation credit or local credit. (Completion of Acknowledgment form is required.)

College Readiness & Study Skills   **1/2 credit**
This one semester elective course is open to 12th-grade students who plan to attend post-secondary education. The course is designed to help students transition into the post-secondary environment. Units of study include becoming familiar with campus resources and services, determining college readiness, identifying personality styles and learning preferences, career exploration, time management, developing an academic plan for college, and addressing financial literacy.
- Open to 12th-grade students only

Creative Writing   **1/2 or 1 credit**
This study of creative and imaginative writing allows high school students to develop increased skill, creativity, and versatility as writers. In the class, students will be provided the time to write independently and to share and critique their writings with others. In their efforts to perfect selected pieces of work, students will be expected to demonstrate an understanding of the recursive nature of the writing process, applying the conventions of usage and the mechanics of written English. Throughout the year, students will study and create a variety of genres such as essays, short stories, poetry, and drama. As a means of extending their knowledge of effective techniques and forms of writing, students will critically examine models of various types written by professional authors.
- Grades 10-12

Literature and the Bible   **1 credit**
The Literature and the Bible course is designed to provide students with knowledge of biblical content, characters, poetry, and narratives that are prerequisite to understanding contemporary society and culture, including literature, art, music, mores, and oratory. Students will become familiar with the contents and history of the Old and New testaments for the purpose of understanding the literary style and structure of each of the testaments and their consequential influences on literature. Over the duration of the course, students will read assigned literature and engage in researching self-selected and assigned topics that examine the Bible's influence on literature.
- Grades 11-12

READING

Reading I-III   1/2 - 3 credits

Reading I, II, III offers students instruction in fluency, word study, vocabulary, and comprehension strategies. The curriculum emphasizes the six critical reading processes that are part of the state secondary reading curriculum and STAAR. Students are given opportunities to locate information in varied sources, to read critically, to evaluate sources, and to draw supportable conclusions. Students learn how various texts are organized and how authors choose language for effects. All of these strategies are applied using reading material from all subject areas.

- ⌨ Course requires the use of technology

JOURNALISM

Photojournalism   1/2 credit

Photojournalism introduces students to the world of photography and journalism. The law, ethics, and history of photography complement the major units of study: operation and care of the digital camera, taking pictures, teamwork, and management skills. In addition, students will have opportunities to use state-of-the-art computer-aided publishing tools and other hands-on production tools.

- Students must have their own digital camera, and a fee will be charged for necessary photographic supplies.
- This course requires work outside of class to complete assignments.
- ⌨ Course requires the use of technology

Journalism I   1 credit

Students enrolled in Journalism write in a variety of forms for a variety of audiences and purposes. Students are expected to plan, draft, and complete written compositions on a regular basis, carefully examining their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English. Students will become analytical consumers of media and technology to enhance their communication skills. Writing, technology, visual, and electronic media are used as tools for learning as students produce effective communications. Journalism students will learn journalistic traditions, research self-selected topics, write journalistic texts, and learn the principals of publication.

- ⌨ Course requires the use of technology

Advanced Journalism I, II, III - Yearbook   1 - 3 credits

Students enrolled in this course learn all the skills required to develop a school yearbook. Students learn advanced publishing skills, interviewing techniques, design and layout expertise, and sophisticated writing skills. They become adept at using complex software that is used in the professional publishing industry. In addition, students learn how to work as leaders and as a team as they manage this production process.

- Students must have the recommendation of their previous journalism teacher to enroll in this class.
- Courses must be taken in sequence.
- Prerequisite: Journalism I
- ⌨ Course requires the use of technology

🕐 Production of the yearbook may require 3 to 8 hours of after-school activities per week.

Advanced Journalism I, II, III - Newspaper   1 - 3 credits

Students enrolled in Advanced Journalism: Newspaper I, II, III communicate in a variety of forms for a variety of audiences and purposes. Students are expected to plan, draft, and complete written and/or visual communications on a regular basis, carefully examining their copy for clarity, engaging language, and the correct use of the conventions and mechanics of written English. Students are expected to become analytical consumers of media and technology to enhance their communication skills. In addition, students will learn journalistic ethics and standards. Writing, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce school newspapers.

- Students must have the recommendation of their previous journalism teacher to enroll in this class.
- Courses must be taken in sequence.
- Prerequisite: Journalism I
- ⌨ Course requires the use of technology

🕐 Production of the newspaper may require 3 to 8 hours of after-school activities per week.

SPEECH AND DEBATE

Professional Communications   1/2 credit

This high school speech course is designed to provide opportunities for students to understand and develop effective interpersonal communication skills for the 21st Century. Professional Communications blends written, oral, and graphic communication in a career-based, business environment. Students will prepare, present, and evaluate a variety of multi-media presentations that are appropriate for the professional setting.

- Grades 9 – 12

Debate I, II, III   1 - 3 credits

Gaining a general understanding of the major forms of debate, studying logic and reasoning and learning to prepare and present actual debates, oratories, and extemporaneous speeches, are the objectives of this course in argumentation. Participation in competitive speech and debate events is a requirement for this class. Debate II-III build on the fundamentals and continue to develop speech and debate skills.

- Students must have the recommendation of the debate teacher to enroll in levels II and III.
- Courses must be taken in sequence.
- ⌨ Course requires the use of technology

🕐 Students involved in Speech/Debate competitions may be required to work after school to prepare. Preparation time will be limited to 8 hours per week on Monday through Thursday. After 2:30 on Friday, there is no limit on the number of hours students may work. Speech competitions are held on Friday evenings and Saturdays. Student fees for tournament competitions are required.

Independent Study/Speech or Debate IV   1 credit
Activities designed for high achieving students to conduct research, produce original work in print or some other medium, develop an advanced speaking skill and study extensively in a specific area of interest are provided in this course. The prerequisites for enrollment in this course are three years of speech and teacher approval.

- 🖥️ Course requires the use of technology

SOCIAL STUDIES

World Geography Studies   1 credit
In this course, students analyze the relationships between people, places, and environments. Students use problem-solving and decision-making skills to ask and answer geographic questions. A significant portion of the course will center around physical processes, places, and regions, the environment, the political, economic and social processes that shape cultural patterns, human systems such as population distribution and urbanization patterns, and the economic conditions which have led to and reinforced the developed and developing world.
- This course may be taken during the 9th or 10th grade to fulfill the first social studies requirement for the Foundation High School Program.

Human Geography-Advanced Placement/HORIZONS   1 credit
Human Geography is about making connections through the study of patterns and processes which shape human understanding, use, and modification of the Earth's surface. In today's world where places are increasingly interdependent, it is important to have an understanding of how events in one region of the world can have a major impact on events in other regions. Human Geography provides a framework to understand how this world is spatially organized and interdependent. In this rigorous course, students will develop a sophisticated view of the world enabling them to use geographic concepts and tools to make sense of why things happen where they do.
- This course of study is the equivalent of an introductory college course and is available to students interested in taking the Advanced Placement examination in Human Geography.
- This course may not be taken in addition to World Geography.

World History Studies   1 credit
The purpose of this one-year course is to provide students with a chronological study of world history. The major emphasis of this course is on the study of significant people, events, and issues from the earliest times to the present. Students will examine historical points of reference, evaluate the causes and effects of economic imperialism, the historic origins of contemporary economic systems, trace the historical development of law, and analyze the impact of major religious and philosophical traditions. Students will analyze the connections between major developments in science and technology and the growth of industrial economics.
- This course may be taken during the 9th or 10th grade to fulfill the first social studies requirement for the Foundation

High School Program.

World History Studies–Advanced Placement/HORIZONS   1 credit
The purpose of the Advanced Placement World History course is to develop greater understanding of world processes and contacts, in interaction with different types of human societies. Building on a short summary of cultural and institutional world history prior to 1200 C.E. (AD), the course focuses primarily on the last 1000 years of global experience. Using a chronological approach, the curriculum uses six major themes as unifying threads, helping students to put what is particular about each time period or society into a larger framework. Knowledge of major developments that illustrate or link the six thematic areas and of major civilizations in Asia, sub-Saharan Africa, Europe, and the Americas is expected. This course of study is the equivalent of an introductory college course and is available to students interested in taking the Advanced Placement examination in World History Studies. This course may be substituted for World History Studies.
- This course may be taken during the 9th or 10th grade to fulfill the first social studies requirement for the Foundation High School Program.

United States History   1 credit
This course is a required one-year study of the United States from 1877 to the present. The time span of the course is divided into units such as the Progressives, Civil Rights, and the Cold War. Within each unit, events are looked at from several perspectives such as geographic, political, economic, social, and international influences. Emphasis is placed on relating the effects of past events to the present. The course is enriched with various activities which help students learn social studies skills as well as historical content.
- Prerequisite: World Geography or World History

United States History-Advanced Placement/HORIZONS   1 credit
The United States History AP course is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and historical resources of U.S. history. Students will learn to assess historical materials to determine the relevance of those materials to a given problem and to evaluate the reliability and importance of selected materials. Students will develop skills necessary to make informed judgments and to present reasons and evidence clearly and persuasively in essay format. This course of study is the equivalent of a college introductory course and is available to juniors or seniors interested in taking the AP examination in American history.
- Prerequisite: World Geography or World History
- Should a student enroll in United States History AP and drop the course at the end of the first semester, the student will have to take both semesters of U.S. History. In this situation, the first semester of U.S. History AP can count as an elective.

United States Government   1/2 credit

The primary objective of this required one-semester course is to prepare the student for decision-making within the framework of the American political system. The course begins with an overview of basic concepts found in all political systems, the philosophical background which led to our constitutional development, and the basic concepts found in the Constitution. The executive, legislative, and judicial branches of the federal government, including current issues of interest such as foreign affairs, will be studied. In addition, students study the fields of civil rights and liberties, political parties and suffrage, the Texas Constitution, and state and local government.
- Prerequisite: U.S. History

United States Government-Advanced Placement/ HORIZONS   1/2 credit

The United States Government Advanced Placement course is designed to provide students with an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. Students will also engage in an in-depth study of the various institutions, groups, beliefs and ideas that constitute the U.S. political system. Students are guided to use specific information critically to evaluate general propositions about government and politics as well as to present basic data relevant to government and politics in sustained written arguments. This course of study is the equivalent of a college introductory course and is available to seniors interested in taking the Advanced Placement examination in U.S. Government.
- Prerequisite: U.S. History

European History-Advanced Placement/HORIZONS
1 credit

The Advanced Placement European History course focuses on European history from the High Renaissance (approximately 1450) to the present. The themes studied are intellectual and cultural history, political and diplomatic history, and social and economic history. Students will analyze historical evidence and learn to apply their analysis in essays and multiple choice questions. The course is an elective and does not meet the state standards for substitution for the World History Studies required course.
- Prerequisite: U.S. History or concurrent enrollment
- May not substitute for World History Studies

Economics with Emphasis on the Free-Enterprise System and its Benefits K/HORIZONS   1/2 credit

This one-semester required course deals with the way that individuals and societies, particularly our society, have chosen to use scarce resources for the production of alternative goods. Students will learn how these scarce resources are distributed among the various peoples and groups in society. The course emphasizes the economic principles upon which the free enterprise system is based. Students will study the role government plays in this system and compare the American economic system to other types of economic systems. Students will also receive practical information in the field of personal finance.
- Prerequisite: U.S. History

Personal Financial Literacy and Economics
1/2 credit

This is an integrated course that applies the same economic way of thinking developed to making choices about how to allocate scarce resources in an economy to how to make them at the personal level. It requires demonstrated critical thinking by students who explore how to invest in themselves with education and skill development, how to earn income, and how to budget for spending, saving, investing, and protecting. Students will examine their individual responsibility for managing their personal finances and will understand that doing so will impact their standard of living and long-term financial well-being.
- Prerequisite: U.S. History
- May substitute for required Economics

Macro Economics-Advanced Placement/HORIZONS
1/2 credit

The Economics Advanced Placement course focuses on the concepts of macroeconomics by providing students with an understanding of the principles of economics that apply to an economic system as a whole. Particular emphasis is placed on the study of national income and price determination. The course develops students' familiarity with economic performance measures, economic growth, and international economics. This course of study is the equivalent of a college introductory course and is available to seniors interested in taking the Advanced Placement examination in Macroeconomics.
- May substitute for required Economics
- Prerequisite: U.S. History

African American Studies   1 credit

Ethnic Studies: African American Studies focuses on the historical and cultural contributions of African Americans. This course is designed to assist students in understanding issues and events from multiple perspectives. This course develops an understanding of the historical roots of African American culture, especially as it pertains to social, economic, and political interactions within the broader context of United States history. It requires an analysis of important ideas, social and cultural values, beliefs, and traditions. Knowledge of past achievements provides citizens of the 21st century with a broader context within which to address the many issues facing the United States.
- Grades 10 - 12

Western Civilization and the Bible   1/2 credit

The purpose of this social studies electives course is to teach students knowledge of biblical content, characters, and narratives that are prerequisites to understanding contemporary society and culture including public policy. It will familiarize students with the contents and history of the Hebrew Scriptures and New Testament. Students will learn about the influence of the Hebrew Scriptures and New Testament on law, history, government, music, customs, and culture.
- Grades 11-12

Mexican American Studies   1 credit

Ethnic Studies: Mexican American Studies course focuses on the historical and cultural contributions of Mexican Americans. Students explore history and culture from an interdisciplinary perspective. The course emphasizes events in the 20th and 21st centuries, but students will also engage with events prior to the 20th century. Students will utilize primary and secondary sources to learn about the complexities of the Mexican experience.
• Grades 10- 12

Sociology   1/2 credit

Sociology is a study in social behavior and organization of human society. This course describes the development of the field as a social science by identifying methods and strategies of research leading to an understanding of how the individual relates to society and the ever-changing world.
• Grades 11-12

Personal Financial Literacy   1/2 credit

Personal Financial Literacy is designed to teach students how to analyze decisions involving earning and spending, saving and investing, credit and borrowing, insuring and protecting, and college and postsecondary education and training.
• Grades 10-12

Psychology   1/2 credit

Psychology is designed to acquaint students with the concept of human behavior. This elective provides a general introduction to the field of psychology. Specific topics include the following: learning and creativity, perception, theories of personality, human growth and development, and abnormalities. Psychology involves group work, laboratory experiments, independent reading/research, and active participation by the student.
• Grades 11-12

Psychology-Advanced Placement/HORIZONS
                                                               1/2 credit

The Psychology Advanced Placement course is designed to provide students with an analytical perspective about the field of psychology. After a general introduction to the methods, application, and history of the study of psychology, several areas of emphasis will be explored. These include sensation and perception, states of consciousness, learning, cognition, motivation and emotions, personality, abnormal psychology, and treatment of psychological disorders. The course is available to juniors and seniors interested in taking the Advanced Placement exam in Psychology.
• Grades 11-12

Special Topics in Social Studies–World Area Studies K
                                                               1/2 - 1 credit

World Area Studies is designed to provide students the opportunity to study the geography, culture, history, politics, and economic development of selected regions and countries. Current world problems, such as population growth, global pollution, nuclear weapons, arms control, and world hunger will be explored. The regional studies will include an analysis of the issues and events pertinent to the area. Major regions of the world will be studied; however, the course allows for flexibility regarding countries studied within each region as they relate to current events. Methods for resolving international problems will be analyzed.
• Grades 9-12

Special Topics in Social Studies-Street Law
                                                               1/2 - 1 credit

The Street Law course is designed to give students a deeper understanding of the impact of criminal law and civil law upon their daily lives. Court structure, criminal procedure, civil rights, and other legal issues will be examined. This course is available to juniors and seniors only.
• Grades 11-12

MATHEMATICS

Algebra I   1 credit

In Algebra I, students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology, specifically graphing technology, to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and create new functions through transformations.

Geometry   1 credit

In Geometry, students will build on the knowledge and skills for mathematics and will begin to focus on more precise terminology, symbolic representations, and the development of proofs. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability. Students will connect previous knowledge from Algebra I to Geometry through the coordinate and transformational geometry strand. Students will use technology, specifically graphing technology, to collect and explore data.
• Prerequisite: Algebra I

Algebra II   1 credit

In Algebra II, students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods. Students will use technology, specifically graphing technology, to collect and explore data and analyze statistical relationships.
• Prerequisite: Geometry

Precalculus   1 credit

Precalculus is the preparation for Calculus. The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Precalculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology, specifically graphing technology, to build understanding, make connections between representations, and provide support in solving problems.
- Prerequisite: Algebra II

Precalculus - Advanced Placement/Horizons 1 credit

Precalculus is the preparation for Calculus. In Precalculus AP, students will study polynomial and rational functions, exponential and logarithmic functions, trigonometric and polar functions, as well as functions involving parametric, vectors, and matrices. Students will use computers and graphing technology to explore, discover, and reinforce the concepts of Preclulus. Students who take the course will be prepared for the AP Precalculus exam.
- Prerequisite: Algebra II

Calculus AB - Advanced Placement/ HORIZONS

                                  1 credit

This course covers content and skills that are in a first-semester calculus course at the college level. Topics include limits, continuity, differentiation of algebraic and transcendental functions, contextual and analytical applications of differentiation, integration, accumulation of change, differential equations, and applications of integration including area and volume. Students will use computers and graphing technology to explore, discover and reinforce the concepts of calculus. Students who take this course will be prepared for the AP Calculus AB exam.
- Prerequisite: Precalculus

Calculus BC - Advanced Placement/ HORIZONS

                                  1 credit

This course covers content and skills that are introduced in both first- and second-semester calculus courses at the college level. Topics include the topics in AP Calculus AB course (limits, continuity, differentiation of algebraic and transcendental functions, contextual and analytical applications of differentiation, integration, accumulation of change, differential equations, and applications of integration including area and volume) as well as topics specific to AP Calculus BC such as additional techniques of integration, Euler's method, logistic models, parametric equations, polar coordinates, vector-valued functions, and infinite sequences and series. Students will use computers and graphing technology to explore, discover, and reinforce the concepts of calculus. Students who take this course will be prepared for the AP Calculus BC exam.
- Prerequisite: Precalculus

Statistics-Advanced Placement/HORIZONS   1 credit

This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes evident in the content, skills and assessment in the AP Statistics course: exploring data, sampling and experimentation, probability and simulation, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. Students who take the course will be prepared to take the AP Statistics exam.
- Prerequisite: Algebra II

Mathematical Models with Applications   1 credit

In Mathematical Models with Applications, students build on the knowledge and skills for mathematics and provides a path for students to succeed in Algebra II and prepares them for various post-secondary choices. Students learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, model information, solve problems, and communicate solutions. Students will use a variety of tools to support their learning, including physical and digital manipulatives.
- Prerequisite: Geometry

Statistics L   1 credit

In Statistics, students will build on the knowledge and skills for mathematics and broaden their knowledge of variability and statistical processes. Students will study sampling and experimentation, categorical and quantitative data, probability and random variables, inference, and bivariate data. Students will connect data and statistical processes to real-world situations. In addition, students will extend their knowledge of data analysis. Students will use technology, specifically graphing technology, to collect and explore data.
- Prerequisite: Geometry

Algebraic Reasoning   1 credit

In Algebraic Reasoning, students will build on the knowledge and skills for mathematics, continue with the development of mathematical reasoning related to algebraic understandings and processes, and deepen a foundation for studies in subsequent mathematics courses. Students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Students will study these functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness such as probes, measurement tools, and software tools, including spreadsheets. Students will use technology, specifically graphing technology, to collect and explore data.
- Prerequisite: Geometry

Independent Study in Mathematics – College Algebra K   1 credit

In Independent Study in Mathematics, students will extend their mathematical understanding beyond the Algebra II level in a specific area or areas of mathematics. In College Algebra, students will study applications of polynomial, rational, radical, absolute-value, piecewise defined, exponential and logarithmic functions, equations, inequalities, graphing skills, and systems of equations using matrices. Students will use technology, specifically graphing technology, to collect and explore data.

- Prerequisite: Algebra II

Independent Study in Mathematics – Advanced Algebra   1 credit

In Independent Study in Mathematics, students will extend their mathematical understanding beyond the Algebra II level in a specific area or areas of mathematics. In Advanced Algebra, students will study basic algebraic operations, solving linear equations and inequalities, laws of integer exponents, factoring, rational expressions, the Cartesian coordinate system, graphing lines, finding equations of lines, and solving linear systems. In addition, students will study special products and factoring, rational expressions and equations, rational exponents, radicals, radical equations, quadratic equations, absolute value equations and inequalities, complex numbers, equations of lines, an introduction to the function concept, and graphing. Students will use technology, specifically graphing technology, to collect and explore data.

- Grade 11-12
- Prerequisite: Algebra II
- Advanced Algebra may not be taken post College Algebra
- Advanced Algebra may not be taken post Precalculus

Advanced Quantitative Reasoning K   1 credit

In Advanced Quantitative Reasoning, students will develop and apply skills necessary for college, careers, and life. Course content consists primarily of applications of high school mathematics concepts to prepare students to become well-educated and highly informed 21st century citizens. Students will develop and apply reasoning, planning, and communication to make decisions and solve problems in applied situations involving numerical reasoning, probability, statistical analysis, finance, mathematical selection, and modeling with algebra, geometry, trigonometry, and discrete mathematics. Students will use technology, specifically graphing technology, to collect and explore data.

- Prerequisite: Algebra II

Accounting II K   1 credit
Certification: QuickBooks Certified User

Students continue the investigation of the field of accounting in this advanced course, emphasizing corporate accounting and integrated financial analysis. Students reflect on this knowledge as they engage in various managerial and cost accounting activities. This course is vital for students planning to major in finance or seeking an entry-level position in accounting. This course satisfies a high school math graduation requirement.

- Grades 11 - 12
- Required prerequisites: Algebra II (or concurrent) and Accounting I
- Program of Study: Accounting & Financial Services
- Satisfies advanced course requirement for Business & Industry endorsement
- QuickBooks certification satisfies requirement to earn a performance acknowledgement.
- 💻 Course requires the use of technology.

Robotics II K   1 credit

In Robotics II K, students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs.

- Grade 10-12
- Required prerequisite: Robotics I
- Program of Study: Robotics
- Satisfies advanced course requirement for STEM endorsement
- FANUC Robot Operator 1 certification satisfies requirement to earn a Performance Acknowledgement
- Completing this course satisfies a math credit required for graduation
- 💻 Course requires the use of technology.

HORIZONS
Academically Gifted Program

The courses in this section are exclusively for identified gifted (HORIZONS) students and are designed to meet their specific nature and needs.

HORIZONS English I   1 credit

This course, designated for HORIZONS students only, follows the curriculum established for all levels of English I in the District (see English I course description). In addition, the course offers differentiated instruction to meet the needs of the HORIZONS student. Enrichment, extension, choice, and performance of independent projects is inherent in English I HORIZONS.

HORIZONS English II   1 credit

Limited to HORIZONS students only, this course follows the Districts' English II curriculum. (See English II course description) The course is modified to meet the needs of HORIZONS students through insertion of differentiated offerings and instruction. Enrichment, extension, choice, and performance of independent projects are inherent in English II HORIZONS.

HORIZONS World Geography   1 credit

Limited to HORIZONS students only, this course is designed to provide ninth- to twelfth-grade HORIZONS students the opportunity to study the world as it is today. This course focuses on the major themes of geography. The curriculum includes an emphasis on physical geography of the world and human geography including historical, political, and economical developments of selected regions of the world. Environment and society will be emphasized by studying interaction of physical and human stems and identifying the central role of resources in the environment. Students will also develop geographic skills including the ability to acquire, arrange, and use geographic information.

HORIZONS World History Studies   1 credit

Limited to HORIZONS students only, HORIZONS World History will follow a thematic approach to the study of world history. Because these units of study are organized into themes, the course lends itself to extension into universal concepts. These themes include science and technology, civilizations, philosophy and belief systems, government, cooperation and conflict, and humanities. The curriculum allows gifted students to explore topics through problem-solving, role-playing, simulations, and independent research.

Other Courses Appropriate for HORIZONS Students

HORIZONS students are encouraged to take the courses listed above along with other courses identified as appropriate for HORIZONS students. These courses may be identified as K-level or Advanced Placement and are available in the core academic areas of English, math, science, and social studies. HORIZONS students may also want to consider Advanced Placement courses in foreign language, technology applications, and art.

SCIENCE

Integrated Physics and Chemistry   1 credit

In Integrated Physics and Chemistry, students conduct laboratory and field investigations, use engineering practices, use scientific practices during investigation, and make informed decisions using critical thinking and scientific problem-solving. This course integrates the disciplines of physics and chemistry in the following topics: force, motion, energy, and matter.
- Required prerequisite : Biology

Biology   1 credit

Students in Biology focus on patterns, processes, and relationships of living organisms through four main concepts: biological structures, functions, and processes; mechanisms of genetics; biological evolution; and interdependence within environmental systems.

Chemistry   1 credit

In Chemistry, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem-solving. Students study a variety of topics that include characteristics of matter, use of the Periodic Table, development of atomic theory, chemical bonding, chemical stoichiometry, gas laws, solution chemistry, acid-base chemistry, thermochemistry, and nuclear chemistry. Students investigate how chemistry is an integral part of our daily lives.
- Required prerequisite: Biology and Algebra I

Physics   1 credit

In Physics, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific-problem solving. Students study a variety of topics that include: laws of motion, changes within physical systems and conservation of energy and momentum, forces, characteristics and behavior of waves, and electricity and magnetism. Students will apply conceptual knowledge and collaborative skills to experimental design, implementation, and interpretation.
- Required prerequisites: Biology and completion of or concurrent enrollment in Algebra I
- Physics 1 AP may substitute for Physics.

Astronomy   1 credit

In Astronomy, students focus on patterns, processes, and relationships among astronomical objects in our universe. Students acquire astronomical knowledge and supporting evidence about Sun-Earth-Moon relationships, the solar system, the Milky Way, the size and scale of the universe, and the benefits and limitations of exploration. Students conduct laboratory and field investigations to support their developing conceptual framework of our place in space and time.
- Required prerequisites: Biology, Algebra I and IP&C or Chemistry
- Recommended prerequisite: Physics

Aquatic Science   1 credit
In Aquatic Science, students study the interactions of biotic and abiotic components in aquatic environments, including natural and human impacts on aquatic systems. Investigations and field work in this course may emphasize fresh water or marine aspects of aquatic science depending primarily upon the natural resources available for study near the school. Students who successfully complete Aquatic Science acquire knowledge about how the properties of water and fluid dynamics affect aquatic ecosystems and acquire knowledge about a variety of aquatic systems. Students who successfully complete Aquatic Science conduct investigations and observations of aquatic environments, work collaboratively with peers, and develop critical-thinking and problem-solving skills.
- Required prerequisite: Biology
- Recommended Prerequisite: IP&C or Chemistry; or concurrent enrollment in either course

Environmental Systems   1 credit
In Environmental Systems, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem-solving. Students study a variety of topics that include biotic and abiotic factors in habitats, ecosystems and biomes, interrelationships among resources and an environmental system, sources and flow of energy through an environmental system, relationship between carrying capacity and changes in populations and ecosystems, natural changes in the environment, and human activities that impact the natural environment.
- Required prerequisite: Biology
- Recommended Prerequisite: IP&C or Chemistry; or concurrent enrollment in either course

Earth Systems Science   1 credit
The Earth Systems Science course is designed to build on students' prior scientific and academic knowledge and skills to develop their understanding of Earth's systems. These systems (the atmosphere, hydrosphere, geosphere, and biosphere) interact through time to produce the Earth's landscapes, climate, and resources. Students explore the geologic history of individual dynamic systems through the flow of energy and matter, their current states, and how these systems affect and are affected by human use.
- Required prerequisites: Algebra I and two credits of high school science

Food Science K   1 credit
In Food Science, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem-solving. Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public.
- Grades 11 - 12
- Required prerequisite: Culinary Arts **and** three units of science (including Biology and Chemistry)
- Program of Study: Culinary Arts

Forensic Science K   1 credit
In Forensic Science, students will learn terminology and investigative procedures related to crime scenes, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific practices, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis. Students will learn the history, legal aspects, and career options for forensic science.
- Grades 11-12
- Required prerequisite: Biology and Chemistry
- Recommended prerequisites: Medical Terminology and Principles of Health Science.

Advanced Animal Science K   1 credit
This course is designed for students preparing for careers in the field of animal science. Emphasis will be placed on the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.
- Grade 12
- Required prerequisite: Biology, Chemistry; and Vet Med or at least 1 credit of Animal Science courses (Small Animal, Equine Science, Livestock Prod.)
- Program of Study: Animal Science

Advanced Plant and Soil Science K   1 credit
Certification: BASF Plant Science
Advanced Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science. In this course, students will analyze such concepts as impact on production of food, fiber, and other economic crops; factors within habitats and ecosystems; watershed, weathering, and erosion; along with origin and impact of fossil fuels and alternative energy sources.
- Grades 11-12
- Required prerequisites: Biology, Chemistry and Greenhouse Operation & Production
- Program of Study: Plant Science

Pathophysiology K   1 credit
In Pathophysiology, students conduct laboratory and field investigations, use scientific practices during investigations, make informed decisions using critical thinking and scientific problem-solving and demonstrate professional standards as related to business and industry. Students in Pathophysiology study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology.
- Grades 11-12
- Required Prerequisites: Biology and Chemistry
- Recommended prerequisites: Medical Terminology, Principles of Health Science, and Anatomy & Physiology (or concurrent with Anatomy & Physiology)
- Program of Study: Diagnostic & Therapeutic Services

Engineering Design and Problem Solving K   1 credit

Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems, moving from well-defined toward more open- ended, with real-world application. Students apply critical thinking skills to justify a solution from multiple design options. This course is intended to stimulate students' ingenuity, intellectual talents, and practical skills in devising solutions to engineering design problems in a project-based learning environment. Students use the engineering design process cycle to investigate, design, plan, create, and evaluate solutions. At the same time, this course fosters awareness of the social and ethical implications of technological development.
- Grades 11-12
- Required Prerequisites: Algebra II, Chemistry, and Physics (or concurrent) **and** Engineering and Design Presentation I or Robotics II K
- Programs of Study: Engineering Foundations and Robotics

- Course requires the use of technology.

Anatomy and Physiology K   1 credit

Anatomy and Physiology is a college preparatory course designed to extend the student's knowledge and understanding of the human body in respect to its structure (anatomy) and function (physiology). A survey of each organ system is presented with initial emphasis upon its anatomy, followed by an enhanced study of its physiology. This course is lab-oriented and teaches proper dissection techniques as well as evaluating the cause and effect of disease, trauma, and congenital defects on the structure and function of cells, tissues, organs, and systems. This course is recommended for students pursuing an education in the medical sciences.
- Grades 11-12
- Required prerequisite: Biology and Chemistry
- Recommended prerequisites: Medical Terminology and Principles of Health Science
- Program of Study: Diagnostic & Therapeutic Services

Biology-Advanced Placement   1 credit

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions.
- Required prerequisites: Biology and Chemistry

Chemistry-Advanced Placement   1 credit

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.
- Required prerequisite: Biology, Chemistry and Algebra II

Environmental Science-Advanced Placement   1 credit

The AP Environmental Science course is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.
- Required prerequisites: Biology and completion or concurrent enrollment in Chemistry.

Physics 1-Advanced Placement   1 credit

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics by developing models of physical phenomena through inquiry-based investigations. Students build their understanding of physical models as they explore and solve problems in these topics: Kinematics; Forces and Translational Dynamics; Work, Energy, and Power; Linear Momentum; Torque and Rotational Dynamics; Energy and Momentum of Rotating Systems; Oscillations; and Fluids.
- Required prerequisite: completion or concurrent enrollment in Algebra II
- Algebra-based
- This course may substitute for Physics

Physics 2-Advanced Placement   1 credit

AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics by developing models of physical phenomena through inquiry-based investigations. Students build their understanding of physical models as they explore and solve problems in these topics: Thermodynamics, Electric Force, Field, and Potential; Electric Circuits; Magnetism and Electromagnetism; Geometric Optics; Waves, Sound, and Physical Optics; and Modern Physics. AP Physics 2 is equivalent to the second course in an introductory college course sequence in algebra-based physics.
- Required prerequisite: Physics or AP Physics 1 and completion or concurrent enrollment in Precalculus
- Algebra-based

Physics C: Mechanics & EM-Advanced Placement 2 credits

AP Physics C: Mechanics & Electricity and Magnetism is a calculus-based introductory college-level physics course. Students cultivate their understanding of physics by developing models of physical phenomena through inquiry-based investigations. Students build their understanding of physical models as they explore and solve problems in these topics: Kinematics; Forces and Translational Dynamics; Work, Energy, and Power; Linear Momentum; Torque and Rotational Dynamics; Energy and Momentum of Rotating Systems; Oscillations; Electric Charges, Fields, and Gauss's Law; Electric Potential; Conductors and Capacitors; Electric Circuits; Magnetic Fields and Electromagnetism; Electromagnetic Induction. This year-long, two-period block schedule course is equivalent to two semesters (first and second courses) in an introductory college course sequence in calculus-based physics (often for engineer and science majors).
- Required prerequisites: Physics or AP Physics 1 and completion or concurrent enrollment in Calculus.
- Calculus-based

LANGUAGES OTHER THAN ENGLISH

Students may take any two levels of the same foreign language to meet the requirements for the Foundation High School Program.

MODERN LANGUAGES: FRENCH, GERMAN, SPANISH

Level I   1 credit
The goal of studying modern languages is communicative competence. This introduction course introduces students to language and develops novice-level proficiency in speaking, listening, reading, and writing. At the end of the course, students are expected to reach a Novice Mid-Novice High proficiency level and be able to engage in simple conversations within the limits of practiced vocabulary and structure. Students will also gain perspective and insight into the cultures of the countries where the language is spoken. Classes are conducted in the language as much as possible.

Level II   1 credit
Level II provides opportunities to further develop students' novice-level proficiency in listening, speaking, reading, and writing for communicative competence. Emphasis is placed on expanding vocabulary from memorized words and phrases to sentence level discourse. Students will also continue to gain insight into the culture perspectives, products and practices of the countries where the language is spoken. By the end of the course, students are expected to reach a Novice High-Intermediate Low proficiency level. Classes are conducted in the language as much as possible.

Level III (L or K)   1 credit
Level III classes are conducted in the language and provide opportunities to develop intermediate language proficiency in speaking, listening, reading, and writing. By the end of the course, students should have adequate control of basic structural patterns and should be able to express themselves at a paragraph level. In addition, students will have a deeper understanding of the language and cultural perspectives associated with it. At the end of the course, students are expected to reach an Intermediate Low-Intermediate Mid proficiency level.

Level IV K or AP, V K or AP, and VI K   1 - 3 credits
While there is a continued emphasis on proficiency, the Level IV-VI classes, which is conducted in the language, pursues a more in-depth study of language, culture, and literature. Refinement of grammatical concepts and vocabulary enrichment are stressed. At the end of levels IV and V, students have the option to take the Advanced Placement Exam.

Spanish for Native Speakers I   1 credit
This course is for learners who have Spanish language background. Students will further develop and improve their proficiency in listening, speaking, reading, and writing. Emphasis is placed on students' communicative competence in both formal and informal situations.

Spanish or Native Speakers II / III K   2 credits
This course is for students who have successfully completed Spanish for Native Speakers I or received an 80+ on the district placement test. Students will complete Spanish II during the first semester and Spanish III K in the second semester. Both courses will focus on the refinement of reading and writing skills. Students must pass the first semester with a 70+ to be eligible for III K in the spring. Successful completion of these two courses will prepare students to take Spanish for Native Speakers IV AP the following year.

Spanish for Native Speakers IV AP   1 credit
Spanish for Native Speakers IV AP is designed for students who have successfully completed Native Speakers II / III K. This course will follow the College Board expectations and will prepare students to take the Spanish Language AP Exam in the spring.

MODERN LANGUAGES: AMERICAN SIGN LANGUAGE

ASL Level I
1 credit
The goal of the study of modern languages is communicative competence. This introduction course introduces students to language and develops novice-level proficiency in receptive and expressive communication. At the end of the course, students are expected to reach a Novice Mid-Novice High proficiency level and be able to engage in simple conversations within the limits of practiced vocabulary and structure. Students will also gain perspective and insight into the Deaf culture and Deaf history. Classes are conducted in the language as much as possible.

ASL Level II   1 credit
Level II provides opportunities to further develop students' novice-level proficiency in receptive and expressive competence. Emphasis is placed on expanding vocabulary from memorized words and phrases to sentence level discourse. Students will also continue to gain insight into the cultural perspectives of Deaf Americans- showing competence of understanding the diversity within the Deaf Community. By the end of the course, students are expected to reach a Novice High-Intermediate Low proficiency level. Classes are conducted in the language as much as possible.

ASL Level III K   1 credit
Level III classes are conducted in the language and provide opportunities to further develop intermediate language proficiency in receptive and expressive communication. By the end of the course, students should have adequate control of basic structural patterns and should be able to express themselves at a paragraph level. In addition, students will have a deeper understanding of the language and cultural perspectives associated with the Deaf Community. At the end of the course, students are expected to reach an Intermediate Low-Intermediate Mid proficiency level.

ASL Level IV K   1 credit

While there is a continued emphasis on proficiency, the Level IV class, which is conducted in the language, pursues a more in-depth study of language, culture, and ASL literature. Refinement of grammatical concepts and vocabulary enrichment are stressed.

CLASSICAL LANGUAGES: LATIN

Latin I   1 credit

This course introduces students to Latin and focuses on the development of skills in reading and writing, with an emphasis on reading comprehension, the development of both oral and written skills, and vocabulary derivatives. Studies of the ancient Roman world, daily life, mythology and history are included.

Latin II   1 credit

As the course continues, new grammar and structural concepts are included with an increased emphasis on reading, writing, speaking and listening, and the culture of the Roman Empire.

Latin III K – IV K or AP   1 - 2 credits

Latin III emphasizes the work of major Latin authors with an introduction of Cicero. Latin IV introduces Virgil and The Aeneid. In both courses, focus is on the continued development of the four language skills. Students in Level IV will follow the College Board Advanced Placement curriculum and will have the option of taking the Advanced Placement Exam.

PROGRAMMING LANGUAGES

The following computer programming courses may satisfy the LOTE requirement for graduation:

AP Computer Science Principles
Computer Science I K
Computer Science II K
Computer Science III K

* Colleges and universities set their own entrance requirements. Consequently, a student should verify admission requirements with the specific college/university.
** See Programming & Software Development Program of Study in the Career & Technical Education section for more details.

AP Computer Science Principles   1 credit

The AP Computer Science Principles course will introduce students to the essential ideas of computer science and show how computing and technology can influence the world. Students will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life.
- Grades 9 - 12
- Required prerequisite: Algebra I
- Recommended to be taken prior to or concurrent with Computer Science II K
- May not be taken post Computer Science III K
- Program of Study: Programming & Software Development
- Course requires the use of technology.

Computer Science I K   1 credit

Computer Science I K is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals, and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science II K.
- Grades 9 - 12
- Required prerequisite: Algebra I
- Programs of Study: Programming & Software Development, Networking, Cybersecurity, Web Development
- Course requires the use of technology.

Computer Science II K (AP A Test Prep)   1 credit

Computer Science II K is a programming course designed to cover the Advance Placement Computer Science AP A Exam topics. The curriculum will build upon the topics addressed in Computer Science I K. Object-oriented components in the language of Java will be stressed. Other topics include decision-making, looping, arrays, inheritance, interfaces, abstract classes, Java collections, sorting, searching, and the AP Case Study.
- Grades 10 - 12 (9th graders may enroll if concurrent with Algebra II)
- Required prerequisite: Algebra II or concurrent; Computer Science I K or Geometry K and prior programming experience
- Program of Study: Programming & Software Development
- Course requires the use of technology.

Computer Science III K   1 credit

Computer Science III K is a continuation of Computer Science II K and builds upon such topics as object-oriented programming, inheritance, and classes. Students go on to address advanced topics such as stacks, queues, advanced recursion, linked lists, binary trees, and advanced sorting, and searching topics in preparation for and alignment with college-level computer science.
- Grades 11 - 12
- Required prerequisite: Computer Science II K
- IT Specialist Java and Oracle Java SE 8 Programmer certification satisfy the requirement to earn a performance Acknowledgment.
- Program of Study: Programming & Software Development
- Course requires the use of technology.

PHYSICAL EDUCATION / HEALTH

PHYSICAL EDUCATION

A student is required to take physical education two semesters. A criterion-reference fitness test is administered in all physical education classes each semester.

Lifetime Fitness and Wellness   1 credit

The Lifetime Fitness and Wellness course provides a study of fitness and wellness which explores their relationship as it pertains to a healthy lifestyle. This course evaluates the student's level of fitness and wellness and develops lifelong healthy habits. The learning emphasis for this course will be based on the the following areas: components of physical fitness, consumer issues, physiological principals, safety practices, lifestyle assessment, and the design and sustainment of a personal fitness goal.

Skill-Based Activities   1 credit

The Skill-Based Lifetime Activities course offers students the opportunity to demonstrate mastery in basic sports, basic sport knowledge, and health and fitness principles. Students experience opportunities that promote physical literacy and lifetime wellness. Students in Skill-Based Lifetime Activities will participate in a minimum of one lifelong fitness activity. The learning emphasis for this course will be based on: target games, striking/fielding games, fitness activities, rhythmic activities, and innovative games with international significance.

Off-Campus PE   1/2 - 1 credit

Students may also meet the physical education requirements if they participate in a district-approved Olympic caliber, off-campus training program. Contact the school counselor for more information.

Athletics

Athletics is offered each year of high school and includes choices from twenty-two different sports for both men and women. A student enrolled in Athletics may earn a maximum of four credits toward graduation. Athletics is an instructional model designed to provide athletes with an authentic, in-depth sport experience. It is intended to move isolated skill practice into sequential, progressive, and realistic game situations with the primary objective of developing highly competitive team members. Taking responsibility for personal and social behavior and respecting differences among people in sport settings are all inherent within the team model. Athletes are actively engaged in the sport of choice, working on skills for game play situations under the direction of their head coach. Students are placed in athletics as the result of student performance criteria conducted in pre-season tryout sessions and ultimate recommendation from the head coach. Students elected to participate must maintain academic eligibility as mandated by the University Interscholastic League. Due to the rigorous nature of assigned workouts, a current UIL medical physical is required for enrollment and participation in the class. In accordance with UIL rules, schools limit practice for in-season athletic activities to a maximum of eight hours per school week (Monday through Friday until 2:30 p.m.) per activity, in addition to a maximum of 60 minutes per school day, Monday through the end of the school day on Friday. After 2:30 p.m. on Friday and on Saturday, practice time and/or competitions are not limited by UIL.   A schedule will be provided regularly by the coach/school.

HEALTH

Health   1/2 credit

In Health, students develop skills, including CPR that will make them health-literate adults. Students gain a deeper understanding of the knowledge and behaviors they use to safeguard their health, particularly pertaining to health risks. Students are taught how to access accurate information they can use to promote health for themselves and others. Students use problem-solving, research, goal-setting, and communication skills to protect their health and that of the community. Parents will have an opportunity to preview the curriculum.

Principles of Health Science   1 credit

This course is designed for students interested in medical and associated health careers. It gives an overview of the therapeutic, diagnostic, environmental, and informational systems of the healthcare industry. Topics include career requirements, medical history, trends in financing healthcare, ethical and legal responsibilities, human anatomy and physiology as related to the healthcare profession, client care, safety, first aid, and CPR. This course prepares the student for the transition to clinical and/or work-based experiences available in the advanced health science courses.

- Grades 9 - 11
- Completion of this course satisfies the health credit required for graduation.
- Program of Study: Diagnostic & Therapeutic Services

FINE ARTS

VISUAL ARTS

Students develop skills in observation, problem-solving, visual communication, manipulation of art media, self-expression, and critique. The student is responsible for paying a course fee: fees are determined at the campus level. Additional supplies and/or supply fees may be required. Only one state credit may be earned from the following Art I courses: Art I DP or Art I S or Art I P or Art I DM.

Art I Drawing and Painting   1 credit

Art I Drawing and Painting is a foundation course that uses 2D and 3D materials with an emphasis on drawing and painting. Students will explore the Elements of Art and apply the Principles of Design in planning, developing and creating original works of art. While tackling creative challenges, students will study techniques, contemporary artists and art history as they make cultural connections and explore realities, relationships, and ideas. Students will develop a portfolio that demonstrates an understanding of a variety of media and problem-solving skills. One full credit (2 sequential semesters) must be earned in Art I for entry into a Level II art course.

- A student may only earn one Art I credit.
- Additional supplies and/or supply fees may be required.

Art I Sculpture and Ceramics   1 credit

Art I Sculpture and Ceramics is a foundation course that uses 3D and 2D materials with an emphasis on sculpture and ceramics. Students will explore the Elements of Art and apply the Principles of Design in planning, developing and creating original works of art. While tackling creative challenges, students will study techniques, contemporary artists and art history as they make cultural connections and explore realities, relationships, and ideas. Students will develop a portfolio that demonstrates an understanding of a variety of media and problem-solving skills. One full credit (2 sequential semesters) must be earned in Art I for entry into a Level II art course.

- A student may only earn one Art I credit.
- Additional supplies and/or supply fees may be required.

Art I Photography   1 credit

Art I Photography is a foundation course with an emphasis on photographic media. Design elements and principles, history of art, art criticism as well as basic skills in drawing, color theory, and electronic media will be covered. Students will develop skills of observation, problem-solving, and visual communication, manipulation of art media, and self-expression.
One full credit (2 sequential semesters) must be earned in Art I for entry into a Level II art course.

- A student may only earn one Art I credit.
- Having a 35mm camera of their own is beneficial to students taking this class.
- Additional supplies and/or supply fees may be required.

- Course requires the use of technology.

Art I Digital Art and Media   1 credit

Art I Digital Art and Media is a foundation course that uses computers and other digital media along with 2D and 3D materials. Students will explore the Elements of Art and apply the Principles of Design in planning, developing and creating original works of art. While tackling creative challenges, students will study techniques, contemporary artists and art history as they make cultural connections and explore realities, relationships, and ideas. Students will develop a portfolio that demonstrates an understanding of a variety of media and problem-solving skills. One full credit (2 sequential semesters) must be earned in Art I for entry into a Level II art course.

- A student may only earn one Art I credit.
- Having a Digital SLR camera of their own is beneficial to students taking this class.
- Additional supplies and/or supply fees may be required.

- Course requires the use of technology.

Art II Drawing/Painting   1 credit

This second-year art course provides students who have successfully completed an Art I course an opportunity to further develop their drawing and painting skills through the use of advanced concepts and processes. Development of a portfolio is required.

- Prerequisite: Art I DP, Art I S, Art I P, or Art I DM
- Additional supplies and/or supply fees may be required.

Art II Sculpture/Ceramics   1 credit

This second-year art course provides students who have successfully completed an Art I course an opportunity to further develop their three-dimensional skills through the use of advanced concepts and processing in clay and a variety of other media. Development of a portfolio is required.

- Prerequisite: Art I DP, Art I S, Art I P, or Art I DM
- Additional supplies and/or supply fees may be required.

Art II Photography   1 credit

This second-year art course focuses on techniques that will aid students in expressing their ideas. Students will work in color and black and white, with various camera types and formats, explore alternative photographic processes and digital media as well as working to further their own personal vision. Design principles, elements of art, history of art and art criticism learned in Photo I will be built upon in Photo II. Students will also build skills of critical thinking, problem-solving, and aesthetics. Development of a portfolio is required.

- Prerequisite: Art I DP, Art I S, Art I P, or Art I DM
- Having a 35mm camera of their own is beneficial to students taking this class.
- Additional supplies and/or supply fees may be required.
- Course requires the use of technology.

Art II Digital Art and Media   1 credit

This second-year art course focuses on creating art works that communicate visual ideas and concepts by incorporating the elements/principles of design and drawing skills into a digital format. Various design software such as Adobe Photoshop, Illustrator, and other software will be explored. Emphasis will be placed on creativity, originality, and problem-solving skills.

- Prerequisite: Art I DP, Art I S, Art I P, or Art I DM
- Having a Digital SLR camera of their own is beneficial to students taking this class.
- Additional supplies and/or supply fees may be required.
- Course requires the use of technology.

Art II Design   1 credit

This second-year art course provides students who have successfully completed an Art I course an opportunity to focus on creating art works that communicate visual ideas and concepts by incorporating the elements/principles of design through 2D and/or 3D art mediums. Development of a portfolio is required.

- Prerequisite: Art II DP, Art II S, Art II P, or Art II DM
- Must be approved by teacher
- Additional supplies and/or supply fees may be required.
- Course requires the use of technology.

Art III Drawing/Painting   1 credit

This third-year course provides an in-depth study of the concepts, techniques, and self-expression of drawing and painting on an advanced level. Completion of a cohesive portfolio is required.

- Prerequisite: Art II Drawing/Painting
- Additional supplies and/or supply fees may be required.

Art III Sculpture/Ceramics   1 credit

This third-year course provides an in-depth study of the concepts, techniques, and self-expression of 3D artwork on an advanced level. Completion of a cohesive portfolio is required.

- Prerequisite: Art II Sculpture
- Additional supplies and/or supply fees may be required.

Art III Photography   1 credit

This third-year course provides an in-depth study of the concepts, techniques, processes, and self-expression through photography on an advanced level. Completion of a cohesive portfolio is required.

- Prerequisite: Art II Photography
- Having a 35mm camera of their own is beneficial to students taking this class.
- Additional supplies and/or supply fees may be required.
- Course requires the use of technology.

Art III Digital Art and Media   1 credit

This third-year course provides an in-depth study of digital concepts, techniques, and self-expression on an advanced level. Completion of a cohesive portfolio is required.

- Prerequisite: Art II Digital Art and Media
- Having a DIgital SLR camera of their own is beneficial to students taking this class.
- Additional supplies and/or supply fees may be required.
- Course requires the use of technology.

Art III Design   1 credit

This third-year course provides an in-depth study of the concepts, techniques, and self-expression of 2D and/or 3D art work on an advanced level. Completion of a cohesive portfolio is required.

- Prerequisite: Students must have completed the Level II Art course in the same series.
- Must be approved by teacher.
- Additional supplies and/or supply fees may be required.
- Course requires the use of technology.

Art IV Studio – Drawing/Painting, Sculpture/Ceramics, Photography, Digital Art and Media or Design
                                                     1 credit

The experiences given and skills developed in the first three levels of art courses prepare students for in-depth study of special problems based on their previous credits. They will produce a body of artwork in their chosen area of art (drawing, painting, sculpture, ceramics, electronic media, photography, printmaking) and develop evaluative criteria for selecting artworks to include in a portfolio. Preparation of a portfolio is required.

- Prerequisite: Students must have completed the Level III art course in the same series
- Having a Digital SLR camera of their own is beneficial to students taking Digital Art Media or Photography classes.
- Additional supplies and/or supply fees may be required.
- Course requires the use of technology.

ADVANCED PLACEMENT ART COURSES

Students can take AP at either the Art III or Art IV Level.

These courses are designed to help students mature as artists and find their personal style and direction. Students will be continuously involved in the investigation of formal and conceptual issues. The student will work towards developing a strong cohesive portfolio that meets the AP requirements in quality, concentration, and breadth.

AP Art - Drawing
AP Art - 2D Design*
AP Art – Photography (see AP – Art 2D)*
AP Art – Digital Art and Media (see AP – Art 2D)*
AP Art - 3D Design

- Prerequisite: Juniors or seniors who have completed Art II course
- Additional supplies and/or supply fees may be required.

*Student may only take 1 of these AP courses.

AP Art – Drawing   1 credit
The drawing portfolio course is designed to address a very broad interpretation of drawing issues. Painting, printmaking, abstract, and observational works are included in a drawing portfolio. This portfolio allows for a more specific course of study that readily parallels specialized drawing curriculum and programs in college and university art departments as well as in art schools. Works presented in the portfolio may have been produced in art classes and may cover a period longer than a single school year. Work presented in an Advanced Placement Drawing portfolio may not be included in other Advanced Placement portfolios at another time. The portfolio is submitted as both original pieces and as digital images of selected pieces that represent the student's best works and includes a written statement defining the student's focus of concentration.
- Prerequisite: Students must have completed a Level II course
- Additional supplies and/or supply fees may be required.

- 🖥 Course requires the use of technology.

AP Art – 2D Design   1 credit
The Two-Dimensional Design Advanced Placement portfolio is intended to address a very broad interpretation of two-dimensional design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way. For this portfolio, students are asked to demonstrate proficiency in two-dimensional design using a variety of art forms. These could include, but are not limited to, photography, mixed media, digital art and media, painting, and printmaking. The portfolio is submitted as both original pieces and as digital images of selected pieces that represent the student's focus of concentration.
- Prerequisite: Students must have completed a Level II course
- Additional supplies and/or supply fees may be required.

- 🖥 Course requires the use of technology.

AP Art – 3D Design   1 credit
The 3D Design portfolio course is intended to address a very broad interpretation of sculptural issues in depth and space. Such elements and concepts can be articulated through additive, subtractive, and/or fabrication processes. A variety of approaches might include jewelry, traditional sculpture, architectural models, apparel, ceramics, fiber arts, or metal works. The portfolio is submitted as digital images of selected pieces that represent the student's best works and includes a written statement defining the student's focus of concentration.
- Prerequisite: Students must have completed a Level II course
- Additional supplies and/or supply fees may be required.

- 🖥 Course requires the use of technology.

AP Art – Photography   1 credit
(another 2D design option)
The Two-Dimensional Design Advanced Placement portfolio is intended to address a very broad interpretation of two-dimensional design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way. For this portfolio, students are asked to demonstrate proficiency in two-dimensional design using a variety of art forms. These could include, but are not limited to, photography, mixed media, digital art and media, painting, and printmaking. The portfolio is submitted as both original pieces and as digital images of selected pieces that represent the student's best works and includes a written statement defining the student's focus of concentration. .
- Prerequisite: Students must have completed a Level II course
- Having a Digital SLR camera of their own is beneficial to students taking this class.
- Additional supplies and/or supply fees may be required.

- 🖥 Course requires the use of technology.

AP Art – Digital Art and Media   1 credit
(another 2D design option)
The Two-Dimensional Design Advanced Placement portfolio is intended to address a very broad interpretation of two-dimensional design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way. For this portfolio, students are asked to demonstrate proficiency in two-dimensional design using a variety of art forms. These could include, but are not limited to, photography, mixed media, digital art and media, painting, and printmaking. The portfolio is submitted as both original pieces and as digital images of selected pieces that represent the student's best works and includes a written statement defining the student's focus of concentration.
- Prerequisite: Students must have completed a Level II course
- Having a Digital SLR camera of their own is beneficial to students taking this class.
- Additional supplies and/or supply fees may be required.

- 🖥 Course requires the use of technology.

AP Art History   1 credit
Students will explore and examine the form, function, content, and context surrounding various artworks and works of architecture from ancient to contemporary periods from a variety of cultures. Students are expected to prepare for the College Board examination through the course.
- Juniors or seniors
- A level-I Fine Arts credit is a required prerequisite.

- 🖥 Course requires the use of technology.

FLORAL DESIGN

Floral Design   **1 credit**
Certifications: TSFA Knowledge Based Floral Cert and TSFA Level 1 Floral Cert

This course is designed to develop a student's ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Horticulture systems, career opportunities, entry requirements, and industry expectations will also be covered.

- Grades 10-12
- Required prerequisite (or concurrent): Principles of AFNR for 10th graders
- Completing this course satisfies a fine arts credit required for graduation.
- The TSFA Knowledge Based Floral Cert and TSFA Level 1 Floral Cert are recommended for students moving on to Advanced Floral Design.
- Lab supplies and/or fee required.
- See the Plant Science Program of Study in the Career and Technical Education section for more details.

THEATRE ARTS

Additional supplies and/or supply fees may be required.

Students involved in theatre productions will be required to attend rehearsals or crew calls after school or in the evenings. The amount of time required will not exceed 8 hours per week from Monday through Thursday. Students may be expected to attend rehearsals or work days on Friday and Saturday. Specific rehearsal times will vary by school, and the theatre arts teacher will provide a complete rehearsal schedule.

Theatre Arts I   **1 credit**

The purpose of this course is to cover the fundamentals of acting and theatrical production. Classroom activities include mime/pantomime, improvisation, characterization, and technical theatre. Emphasis will be placed on a variety of in-class performances and individual/group presentations.

Theatre Arts II-IV   **1 - 3 credits**

These courses are designed for the student who shows continued interest in theatre arts and wishes to take advanced courses in theatre production. Emphasis will be placed on a variety of in-class performances and individual/group presentations. Students may have the opportunity to participate in class/campus events and productions.

- Completion of a previous level I theatre course required

Theatre Production I   **1 credit**

The purpose of this course is to study acting and/or technical theatre, and the relationship(s) to the productions process. Emphasis will be placed on in-class performances and individual/group presentations. Students may have the opportunity to participate in campus events and productions.

- Prerequisite: Teacher recommendation

Theatre Production II-IV   **1 - 3 credits**

The purpose of these courses is to continue the study of acting and/or technical theatre and the relationship(s) to the production process. Emphasis will be placed on in-class performances and individual/group presentations. Students may have the opportunity to participate in campus events and productions.

- Prerequisite: Teacher recommendation
- Completion of a previous level I theatre course required

Technical Theatre I   **1 credit**

The purpose of this course is to develop knowledge and application of skills related to technical theatre. Topics will include: scenery, lighting, sound, costuming, hair/makeup, marketing/publicity, and their relationship to the overall theatrical process.

Technical Theatre II-IV   **1 - 3 credits**

The purpose of this course is to continue the application of skills related to technical theatre. Topics will include: scenery, lighting, sound, costuming, hair/makeup, marketing/publicity, and their relationship to the overall theatrical process. Students may have the opportunity to participate in campus events and productions.

- Prerequisite: Teacher approval
- Completion of a previous level I of theatre course required.

MUSIC

Student costs for band, choir, and orchestra programs are determined at the campus level. Required costs could include instruments, repairs, accessories, and uniform costs. Optional costs could include fees for region auditions, solo and ensemble contest, accompanists, trip costs, fair-share donations, and private lessons. Parents with financial need should reach out to the head director of their selected program.

Band I-IV   **1/2 - 4 credits**

Band students receive instruction on both marching and concert fundamentals. During marching season, students learn marching fundamentals, marching chart reading, how to play and march simultaneously, spatial awareness, kinesthetic awareness and movement memory. A variety of musical styles are performed. Physical conditioning is also emphasized. Concert season is ongoing and provides students an opportunity to continue musical growth and experience music literature. Individual, small, and large ensemble concepts and skills are emphasized. The high school band program provides multiple levels of band classes during the school day. Instructional priorities include instrumental technique, musicianship, critical listening, cultural growth, basic music theory, creative self-expression, rehearsal and concert etiquette, self-discipline, responsible citizenship, effective communication, problem-solving, and production of quality products. Students are placed in each level by specific performance criteria including an audition.

Students in the marching band rehearse 6-8 hours after school per calendar week beginning the first week of school until the final marching contest of the season usually around the beginning of November. Summer marching rehearsals begin the last week of July or August 1 depending on the needs of the band program and the school calendar. Marching training sessions are sometimes held in June. Marching band students attend all varsity football games including playoff games. Marching rehearsal requirements for playoff games are significantly reduced to 1 or 2 hours per week. Members of competition marching bands participate in 3-5 marching contests as well. Marching bands may advance to the UIL Area and State Marching Championships. Performances during the concert season include 3-5 concerts and 3-5 festival performances. Students may also participate in a series of auditions related to the all-state process as well as solo and ensemble contests. Attendance at after-school section rehearsals is required. Students participating in marching band must have a physical on file with the director. Students in marching band will also earn PE credit after school in 2 fall semesters.

Band membership requires, a 1-2 hour weekly section rehearsal during concert season. More advanced performing groups may require an additional weekly full ensemble rehearsal of 1-2 hours. Additional full group rehearsals often occur leading up to major performances. Specific rehearsal and performance requirements for each band are provided by the director.

Choral Music I-IV   1/2 - 4 credits

This course is designed to develop and refine music reading skills and to encourage artistic expression through choral singing. Rehearsals focus on choral techniques through proper vocal production. Theory and sight-reading techniques are also emphasized with continued development of the knowledge and skills in musicianship and performance. Students will sing literature from the Renaissance to popular and show choir music. This enables the students to gain an appreciation for different vocal styles, composers, form, periods, and cultures. Choir classes are ability-based and placement is determined by various performance criteria developed by the choral staff and may include an audition. A student with no prior experience may enroll in the program and will be place in the appropriate group by the director. Attendance at after-school rehearsals and performances is a requirement for the performing choirs. Students will participate in three to four concerts per year, solo and ensemble contest, UIL concert and sight-reading contest and a music festival.

After school rehearsals are held prior to contests and performances. These sessions are scheduled through the director. A calendar with specific rehearsal and performance requirements for each choir is provided by the director at the beginning of the school year and updated as needed.

Vocal Ensemble I - IV   1 - 4 credits

This small group of top vocal students is comprised of the most highly skilled and motivated students in the choral program. A student must be chosen as a member of the varsity mixed choir in the program to be considered for membership in this very select ensemble. Emphasis is placed on carrying an independent part in a small ensemble group, and students must exhibit the appropriate level of vocal technique, sight-reading ability, and work ethic in order to be considered for this course. This group is focused on advanced literature and performs music selected from a wide variety of musical styles including traditional choral music, madrigals, motets, and Broadway and popular literature. Performance is stressed, and some time will be devoted to choreography. The name of such a group may differ with the high school in which it is organized.

• Prerequisite: Varsity mixed choir; audition and approval of the choral director

Attendance at extra rehearsals, competitions, and numerous performances of this ensemble is required.

Music Theory AP   1 credit

The main objective of the AP Music Theory Course is for students to develop aural, sight singing, written, composition, and analytical skills in music. This course covers material typically taught at the college freshman level with emphasis placed on basic pitch and rhythmic notation or scale structures, pitch intervals, chord structure and movement, part writing, ear training, harmonization, and music composition. Upon completion of this course, students will be prepared to take the College Board Advanced Placement Music Theory Examination.

Prerequisites:
• 11th and 12th graders
• A level I Music course is a required prerequisite.
• Minimum of two years membership in high school band, choir, or orchestra and taken concurrently with band, choir, or orchestra OR a minimum proficiency school on the CFISD Advanced Theory Placement Test.

Orchestra I-IV   1/2 - 4 credits

The high school orchestra program provides one to four levels of classes during the school day. Instructional priorities include instrument technique, musicianship, critical listening, cultural growth, basic music theory, creative self-expression, rehearsal and concert etiquette, self-discipline, responsible citizenship, effective communication, problem-solving, and production of quality products. Orchestra students are given an opportunity to continue musical growth and experience quality music literature. Several large ensemble, small ensemble, and individual performance opportunities are provided for students in performing orchestras. Performances include 3-5 concerts and 3-5 festival performances. Students may also participate individually in a series of auditions related to the all-state process as well as solo and ensemble contests.

🕐 Orchestra membership requires a 1-2 hour weekly section rehearsal. More advanced performing groups may require an additional weekly full ensemble rehearsal of 1-2 hours. Additional full group rehearsals often occur leading up to major performances. Specific rehearsal and performance requirements for each orchestra are provided by the director.

Instrumental Ensemble Band/Orchestra I-IV
                                      1/2 - 4 credits

This course requires concurrent enrollment in a band or orchestra class and requires director approval. This course is intended for those students who are striving to reach a degree of excellence in musical performance and who elect to schedule two instrumental music courses during the same semester. Emphasis is placed on individual performances as well as small to medium ensemble performances. The names of these band and orchestra groups may differ with the high school in which it is organized. In accordance with UIL Policy (Section 1102.b.1), students may not perform on the same instrument in two ensembles under the same UIL organizational code at UIL contests.

DANCE
Additional supplies and/or supply fees may be required.

Dance I-II   1-2 credits
                                    (Fine Arts or PE)

Dance I-II students will learn fundamental skills in these dance techniques: ballet, modern, jazz, tap, hip-hop, folk, character, and World Dance. In addition, course objectives will emphasize (1) creative expression through movement; (2) awareness of space, time, and energy in dance technique and improvisational studies; (3) development of self-confidence through the use of the body as an expressive instrument; and (4) appreciation of dance as an art form.

Dance III-IV   1-2 credits
                                    (Fine Arts only)

Dance III-IV students will build on skills and techniques learned in Dance I & II, including creative expression, improvisation, and appreciation of dance as an art form. Qualities of movement are also explored. These include swinging, percussion, suspension, sustained, collapsing, and vibrancy. Kinesthetic awareness and movement memory is emphasized as well. Dance techniques explored may include ballet, modern, jazz, tap, hip-hop, folk, character, and world dance.
• Prerequisite: Previous level Dance course

Dance Team I-IV   1 - 4 credits

Instructional priorities of the high school dance program include development of dance techniques, creative expression, improvisation, and appreciation of dance as an art form. Qualities of movement are also explored. These include swinging, percussion, suspension, sustained, collapsing, and vibrancy. Kinesthetic awareness and movement memory is emphasized as well. Dance techniques explored may include ballet, modern, jazz, tap, folk, character, and world dance. As students progress from Dance I to IV, more advanced techniques and skills are acquired. Dance Team will meet the requirement of 1 PE credit for before/after school participation.

Possible costs include costumes, practice apparel, camps, trips, individual entry fees, and other items specific to each school. Specific cost expectations vary from campus to campus and are available from the dance instructor. Costs for the first year of Dance Team are the highest.
• Prerequisite: Tryout

🕐 Rehearsal and performance requirements vary from campus to campus. Dance teams generally practice 8 hours per week before/after school from Monday to Thursday. An additional 2 to 4 hours of rehearsal is required on selected weekends. The Dance Team performs at all varsity football games including playoff games, participates in 3 to 5 spring contests, and produces a spring show. Other performance opportunities are determined by the director.
• Students participating in Dance Team must have a physical on file with the Director.
• Additional supplies and/or supply fees may be required.

Dance Composition I-III   1-3 credits

This small group of top dance students is comprised of the most highly skilled and motivated students in the dance program. Students create their own Dance Studies using a variety of processes and elements in response to a variety of choreographic exercises.
• Director approval required.
• Concurrent enrollment in Dance Team I-IV required.

CAREER AND TECHNICAL EDUCATION

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Students participating in Career and Technical Education (CTE) courses may incur some **additional expense if the course includes constructing projects** to be taken home for personal use. Cost of the personal project will vary, depending upon the type of project, its size, and the materials used. Some CTE courses also include requirements to **purchase tools and/or uniforms** for personal use (such as lab kits for cosmetology and scrubs for some health science classes). In addition, some advanced certifications/licenses, such as Real Estate Agent and Pharmacy Technician, will have associated fees.

While not a course requirement, if any **student chooses to raise an animal as an ag project**, all animal-project costs are the responsibility of the student. Raising animal projects may require one to two hours per day outside of school hours. See your agriscience teacher for more information.

Students may choose to **participate in extra-curricular contests** related to their coursework. Preparation for contest events may be held outside of school hours, possibly one to two hours per week.

Want more information? See your CTE teacher, counselor, or visit the CFISD CTE website at www.cfisd.net/CTE.

FREQUENTLY ASKED QUESTIONS ABOUT EARNING CERTIFICATIONS WITHIN CTE COURSES

What certifications are available?
Over 60 certifications are available. The certifications are listed on the following pages, next to the course in which the certification prep takes place.

Architectural Design II (2) **(A) (CCMR)**	10 - 12	**Required** Architectural Design I	Autodesk Revit Autodesk AutoCAD	Students will gain advanced knowledge and skills specific to those needed to enter a career in architecture and construction. 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. **Lab supply fee.**

Why should I get certified?
Being able to add certifications to your resume allows you to stand out against others in whatever comes next for you. That might be a job or college application. Even if your next step ends up being in an area unrelated to your certification, having the credential on your resume proves to prospective employers and/or institutions that you are trainable.

While some of the certifications are free to students, some have a cost. Is it worth the cost?
While there is a cost for some of the more advanced certifications, in almost every case, it is at a fraction of the cost for anyone wishing to earn that certification outside of doing so in their CTE course. The largest savings is related to there being little or no cost for the training and practice certification exams. Whereas someone may pay $300 to $500 for software training and exam practice, CFISD CTE students pay nothing. Likewise, some pay as much as $15,000 to go to cosmetology school, yet CFISD CTE students pay as little as $400 from start to finish to leave high school with their Cosmetology Operator License.

FREQUENTLY ASKED QUESTIONS ABOUT CTE PROGRAMS OF STUDY

What is a CTE Program of Study?
Each CTE Program of Study includes a state-approved coherent sequence of courses, industry-based certification(s), and work-based learning to ensure students are prepared for in-demand, high-skill, and high-wage careers in Texas.

What do CTE Programs of Study look like in CFISD?
CFISD offers CTE Programs of Study for around thirty (30) different industry fields. Each includes a recommended sequence of courses, the ability to learn with industry-standard materials/equipment, the opportunity to add at least one industry-based certification to your resume, and options to grow under the guidance of industry professionals.

What CTE Programs of Study does CFISD offer?

(List is subject to change - see www.CFISD.net/CTE for updates. Offered at every CFISD high school.)

Accounting & Financial Services	Agricultural Technology & Mechanical Systems	Animal Science	Architectural Drafting & Design
Automotive Technician	Business Management	Construction	Cosmetology
Culinary Arts	Cybersecurity	Diagnostic & Therapeutic Services	Digital Communication - Audio
Digital Communication - Video	Early Learning	Engineering Foundations	Entrepreneurship
Environmental & Natural Resources	Fashion Design	Graphic Design & Interactive Media	Interior Design
Manufacturing Technology	Marketing & Sales	Networking Systems	Plant Science
Programming & Software Development	Robotics - Engineering Focus	Robotics - Manufacturing Focus	Teaching & Training
Web Development	Welding		

How many courses make up a program of study?

Students are considered to have "completed" a program of study if they have taken at least three courses for at least a total of 4 credits, with at least one course being labeled as advanced. CTE courses considered as "advanced" will include "**(A)**" under the name of the course on the program of study pages that follow.

Do I have to take the courses in a particular order?

The program of study promotion materials list a recommended order to take the courses within a program of study, paying attention to things like level of rigor and prerequisites. The progression of courses exposes students to general concepts related to that industry in the beginning course(s) and progresses to more advanced concepts that are more specific to those who concentrate in that industry. For example, in Accounting & Financial Services, the beginning courses expose students to concepts such as personal finance and basic spreadsheets. As the courses progress, students delve deeper into the business accounting cycle and learn how to utilize and certify in QuickBooks, an industry-based accounting software. Students in that program of study have the opportunity to complete their time in high school with a course that involves working side-by-side with professionals in that industry.

What supports exist to help me learn more about what program of study might be right for me?

• Information found on www.CFISD.net/CTE and this High School Course Description Book
• Middle School Information Events
• Career exploration lessons including a career interest survey in 8th grade
• Feeder high school events designed for incoming students to learn about options
• PACE course taken by all 9th grade students with additional career and program of study exploration
• Annual conferences with high school counselors
• 4-year plan reviews in every CTE course
• Contact your counselor or a CTE teacher if you still have questions

When do I have to decide on the program of study I want to pursue?

While conversations may happen before then, students submit their first 4-year plan in 8th grade. The course selections are entered into Xello, a software program allowing students and their parents to keep track of their 4-year plan throughout their high school career.

Am I able to make changes in later years?

There is a window of time each year during which 4-year plans are reviewed and adjustments may be made. Because of the way courses fit together in a sequence, making adjustments within a program of study are "easier" to make than changing between programs of study, especially beyond the first year or two of courses. NOTE: While there are windows of time when adjustments to 4-year plans may be requested, there are also deadlines and periods of time when courses for the following and/or current year are locked and may not be changed.

Does taking courses to complete a CTE program of study mean I can't take any other offerings?

No. There are students who complete CTE programs of study who are also very active in areas such as fine arts, athletics, AFJROTC, foreign language, etc. However, this does take planning and could depend upon courses taken in middle school and/or summer school. This is why starting the planning conversation as early as 6th grade is important.

When can I take my first CTE course?

Students can get a jumpstart on a program of study or do some exploration ahead of time by choosing from the following high school credit CTE courses offered in 7th and/or 8th grade:

- Principles of Applied Engineering
- Principles of Architecture
- Principles of Business, Marketing, & Finance
- Principles of Hospitality & Tourism
- Principles of Human Services
- Principles of Computers and Coding
- Principles of Manufacturing

Are there other opportunities to take high school credit courses in middle school?

Yes. In addition to taking advantage of the option to make room for more CTE courses in high school by taking one or more CTE course in middle school, the same is true for taking other high school credit courses such as foreign language in middle school… especially if you are wanting to take a CTE program of study that includes block courses (courses that last 2 or 3 periods each day). See the Middle School Course Description Book (https://www.cfisd.net/academics/curriculum-course-descriptions) or your counselor for more information on high school credits available at middle school.

Do CTE certifications and Programs of Study impact my CCMR status?

CCMR stands for College, Career, and Military Readiness. A CCMR indicator measures a student's preparedness for success after high school, whether they choose to attend college, enter the workforce, or join the military. Meeting a CCMR indicator ("earning a CCMR point") before graduation not only benefits students in their post-secondary pursuits, it also qualifies them for certain district-provided incentives. There are multiple ways students can earn their CCMR point. One method involves students earning at least one CTE Industry-Based Certification (IBC) as outlined by the TEA Accountability System, plus completing the related program of study. CTE courses including certifications recognized by TEA for CCMR will include "**(CCMR)**" under the name of the course on the program of study pages that follow. See https://www.cfisd.net/academics/advanced-academics/college-career-military-readiness for more information on CCMR.

How do I "earn my CCMR point" through CTE?

- Select a CTE Program of Study related to my interests
- Earn at least four credits by taking three or more courses within that program of study
- At least one of the courses taken must be advanced (labeled "**(A)**")
- Earn at least one CTE Industry-Based Certification (IBC) as outlined by the TEA Accountability System (labeled "**(CCMR)**") within that same program of study

AGRICULTURE, FOOD, & NATURAL RESOURCES

AG 1 – Animal Science

9TH GRADE
Principles of Agriculture (1)
Quality Counts Verification

10TH GRADE
Small Animal Mgmt (0.5) & Equine Sci (0.5)
*Fear Free Vet, *Equine Mgmt & Eval*
OR
Livestock Production (1)
*TX BQA, *Fundamentals of Animal Sci*

11TH GRADE
***Vet Med Applications (1)**
*Vet Med Appl Cert, *Cert Vet Assist 1*
OR
Livestock Production (1)
*TX BQA, *Fundamentals of Animal Sci*

12TH GRADE
***Advanced Animal Science K (1-sci)**
OR
***Practicum in Agriculture (2)**
Certified Vet Assistant 2

EXAMPLE OCCUPATIONS

Vet Assistants/Lab Animal Caretaker
Median Wage: $29,906
Annual Openings: 1,348
10-year Growth: 24%

Vet Technologists/Technicians
Median Wage: $33,679
Annual Openings: 1,217
10-year Growth: 24%

Veterinarian
Median Wage: $103,160
Annual Openings: 347
10-year Growth: 26%

AG 2 – Plant Science
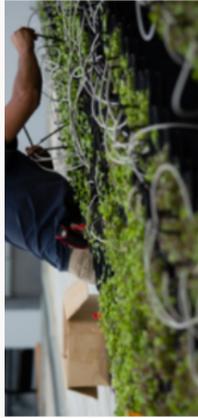
9TH GRADE
Principles of Agriculture (1)
Quality Counts Verification

10TH GRADE
Greenhouse Operation & Production (1)
OR
Floral Design (1-fine arts)
*TSFA Knowledge Based Floral Cert.
TSFA Level I Floral Certification

11TH GRADE
***Advanced Plant & Soil Science K (1-sci)**
BASF Plant Science Certification
OR
***Advanced Floral Design (1)**
TSFA Level II Floral Certification

12TH GRADE
***Capstone - Plant Science (1)**
BENZ Principles of Floral Design
OR
***Practicum in Agriculture (2)**

EXAMPLE OCCUPATIONS

Pesticide Handlers & Sprayers, Vegetation
Median Wage: $46,153
Annual Openings: 205
10-year Growth: 17%

Biological Technicians
Median Wage: $45,787
Annual Openings: 879
10-year Growth: 14%

Farmer & Other Agricultural Manager
Median Wage: $65,490
Annual Openings: 28,020
10-year Growth: 4%

AG 3 – Agricultural Technology & Mechanical Systems

9TH GRADE
Principles of Agriculture (1)
Quality Counts Verification

10TH GRADE
Ag Mechanics (1)
OSHA-10hr
AWS D9.1 Sheet Metal Welding

11TH GRADE
***Ag Equipment (1)**
AWS D1.1 Structural Steel

12TH GRADE
***Capstone - Ag Mech (1)**
Additional AWS
OR
***Practicum in Agriculture (2)**
Additional AWS

EXAMPLE OCCUPATIONS

Farm Equipment Mechanic/Tech
Median Wage: $46,587
Annual Openings: 326
10-year Growth: 23%

Mobile Heavy Equipment Mechanic
Median Wage: $57,943
Annual Openings: 2,637
10-year Growth: 31%

Farmer & Other Agricultural Manager
Median Wage: $65,490
Annual Openings: 28,020
10-year Growth: 4%

AG 4 – Environmental & Natural Res

9TH GRADE
Principles of Agriculture (1)
Quality Counts Verification

10TH GRADE
Wildlife, Fisheries & Ecology Mgmt (1)
Hunter Safety
Boater Safety
Angler Safety

11TH GRADE
Forestry & Woodland Ecosystems (1)
Ducks Unlimited

12TH GRADE
***Range Ecology Mgmt (1)**
OR
***Practicum in Agriculture (2)**

EXAMPLE OCCUPATIONS

Environmental Engineering Tech
Median Wage: $48,124
Annual Openings: 186
10-year Growth: 18%

Environmental Scientist/Specialist
Median Wage: $75,421
Annual Openings: 731
10-year Growth: 25%

Environmental Engineer
Median Wage: $103,246
Annual Openings: 316
10-year Growth: 18%

CFISD.NET/CTE   * Advanced Course for Endorsement or Certification impacting "Career ready" status as outlined by TEA Accountability for College, Career or Military Readiness (CCMR)   rev 9-2025

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AGRICULTURE, FOOD AND NATURAL RESOURCES
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Animal Science Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Agriculture, Food and Natural Resources (1)	9 - 10	**NONE** Required of all 9th/10th graders wanting to take an Ag course	Quality Counts Verification	This course is an introductory class that prepares students for careers in agriculture, food, and natural resources. The emphasis is on career opportunities, personal development, globalization, industry standards, details, practices, and expectations.
Small Animal Management (0.5)	10 - 12	**Required or concurrent** Principles of Ag for 10th graders	Students may log job shadowing hours for CVA.	This course is designed for students to acquire knowledge and skills related to small animals and the small animal management industry. Small Animal Management may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds.
Equine Science (0.5) **(CCMR)**	10 - 12	**Required or concurrent** Principles of Ag for 10th graders	Equine Mgmt & Evaluation Certification Students may log job shadowing hours for CVA.	In this concentrated study of horses, topics covered will include breeds, selection, uses, and other horse-related aspects of the agribusiness industry. Nutrition, reproduction, health and management of horses and related enterprises will be emphasized.
Livestock Production (1) **(CCMR)**	10 - 12	**Required or concurrent** Principles of Ag for 10th graders	TX BQA, Fundamentals of Animal Sci Certification Students may log job shadowing hours for CVA.	This course is an in-depth study to develop knowledge and skills pertaining to all areas and kinds of livestock production. Topics which give the student insight into livestock management include animal foods, nutrition and growth, reproduction, animal health, animal handling techniques, and livestock sales.
Veterinary Medical Applications (1) **(A) (CCMR)**	11 - 12	**Required** Small Animal, Equine Science, or Livestock Production	Vet Med Appl Cert and Certified Vet Assistant I Requires students to job shadow at vet related facility.	This course is designed for students preparing for careers in the field of animal science. Topics covered include, but are not limited to career opportunities, entry requirements, industry expectations, animal systems, and veterinary practices as they relate to both large and small animal species. **Scrubs or Lab supply fee.**
Advanced Animal Science K (1-science) **(A)**	11 - 12	**Required** Biology, Chemistry, and Vet Med or at least 1 credit from Small Animal, Equine, Livestock	Students may log job shadowing hours for CVA.	This course is designed for students preparing for careers in the field of animal science. Emphasis will be placed on the inter-relatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.
Practicum in Agriculture (2) **(A)**	12	**Required** At least two (2) Ag courses (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	Certified Vet Assistant II Requires students to job shadow at vet related facility.	This course allows students to apply agricultural concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course.

AGRICULTURE, FOOD AND NATURAL RESOURCES
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Plant Science Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Agriculture, Food and Natural Resources (1)	9 - 10	**NONE** Required of all 9th/10th graders wanting to take an Ag course	Quality Counts Verification	This course is an introductory class that prepares students for careers in agriculture, food, and natural resources. The emphasis is on career opportunities, personal development, globalization, industry standards, details, practices, and expectations.
Greenhouse Operation & Production (1)	10 - 12	**Required or concurrent** Principles of Ag for 10th graders		This course is designed to develop an understanding of greenhouse production techniques and practices. Students will gain an understanding of common horticultural management practices as they relate to food and ornamental plant production. Plant nutrition, plant use and identification, plant chemical uses and precautions are introduced along with tools and equipment used in the industry.
Floral Design (1-fine arts) **(CCMR)** NOTE: Students must be in 11th or 12th grade to take this course without taking Principles of Ag.	10 - 12	**Required or concurrent** Principles of Ag for 10th graders	TSFA Knowledge-based and TSFA Level 1 Floral Certs	This course is designed to develop a student's ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Horticulture systems, career opportunities, entry requirements, and industry expectations will also be covered. **Lab supply fee.**
Advanced Floral Design (1) **(A)**	11 - 12	**Required** Floral Design **Recommended** TSFA Level 1 Floral Cert	TSFA Level 2 Floral Cert	Advanced Floral Design students build on the knowledge from the Floral Design course and are introduced to more advanced floral design concepts, with an emphasis on specialty designs and specific occasion planning. **Lab supply fee.**
Advanced Plant & Soil Science K (1-science) **(A) (CCMR)**	11 - 12	**Required** Biology, Chemistry, and Greenhouse Operation & Production	BASF Plant Science Certification	Advanced Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science. In this course, students will analyze such concepts as impact on production of food, fiber and other economic crops; factors within habitats and ecosystems; watershed, weathering, and erosion; along with origin and impact of fossil fuels and alternative energy sources.
Capstone - Plant Science (1) **(A) (CCMR)**	12	**Required** Greenhouse Operation & Production or Floral Design & 12th grade	BENZ Principles of Floral Design	Career and Technical Education (CTE) Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students partner with mentor(s) or advisor(s) to develop a project. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts. **Lab supply fee.**
Practicum in Agriculture (2) **(A)**	12	**Required** At least two (2) Ag courses (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	TSFA Level 2 Floral Cert	This course allows students to apply agricultural concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course.

AGRICULTURE, FOOD AND NATURAL RESOURCES
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Agricultural Technology and Mechanical Systems Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Agriculture, Food and Natural Resources (1)	9 - 10	**NONE** Required of all 9th/10th graders wanting to take an Ag course	Quality Counts Verification	This course is an introductory class that prepares students for careers in agriculture, food, and natural resources. The emphasis is on career opportunities, personal development, globalization, industry standards, details, practices, and expectations.
Agricultural Mechanics & Metal Technologies (1) **(CCMR)**	10 - 12	**Required or concurrent** Principles of Ag for 10th graders	OSHA-10 AWS D9.1	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. Construction of a project or demonstration of skills will fulfill the requirements of the Supervised Agricultural Experience Program. **Lab supply fee.**
Agricultural Equipment & Design (1) **(A) (CCMR)**	11 - 12	**Required** Agricultural Mechanics & Metal Technologies	AWS D1.1	To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural equipment design and fabrication. In this course, students will take projects from design stage through construction and completion. Projects might include items such as agricultural machinery and equipment, fences, corrals, or other agricultural enclosures. **Lab supply fee.**
Capstone - Ag Mech (1) **(A) (CCMR)**	12	**Required** Agricultural Mechanics & Metal Technologies & 12th grade	AWS D1.1	Career and Technical Education (CTE) Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students partner with mentor(s) or advisor(s) to develop a project. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts. **Lab supply fee.**
Practicum in Agriculture (2) **(A) (CCMR)**	12	**Required** At least two (2) Ag courses (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	AWS D1.1	This course allows students to apply agricultural concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

AGRICULTURE, FOOD AND NATURAL RESOURCES
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Environment & Natural Resources Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Agriculture, Food and Natural Resources (1)	9 - 10	**NONE** Required of all 9th/10th graders wanting to take an Ag course	Quality Counts Verification	This course is an introductory class that prepares students for careers in agriculture, food, and natural resources. The emphasis is on career opportunities, personal development, globalization, industry standards, details, practices, and expectations.
Wildlife, Fisheries & Ecology Management (1)	10 - 12	**Required or concurrent** Principles of Ag for 10th graders	Hunter, Boater, & Angler Safety	This course is designed to inform the students about wildlife management and outdoor recreation. Hunting and fishing skills and safety are taught as well as water and boating safety. Wise use of our natural resources and career opportunities are also covered.
Forestry & Woodland Ecosystems(1) **(CCMR)**	11 - 12	**Required** Wildlife, Fisheries & Ecology Management	Ducks Unlimited	Forestry & Woodland Ecosystems examines current management practices for forestry and woodlands. Special emphasis is given to management as it relates to ecological requirements and how these practices impact the environment.
Range Ecology Management (1) **(A)**	11 - 12	**Required** Wildlife, Fisheries & Ecology Management		This course is designed to develop students' understanding of rangeland ecosystems and sustainable forage production. Students will study methods for maintaining and improving rangeland for livestock and wildlife management.
Practicum in Agriculture (2) **(A)**	12	**Required** At least two (2) Ag courses (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	Ducks Unlimited (if not already earned)	This course allows students to apply agricultural concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course.

ARCHITECTURE & CONSTRUCTION

A&C 1 – Architectural Drafting & Design

9TH GRADE
Principles of Architecture (1)

10TH GRADE
Architectural Design I (1)

11TH GRADE
*Architectural Design II (2)
*Autodesk Revit
*Autodesk AutoCAD

12TH GRADE
*Capstone - Architecture (1)
OR
*Practicum in Architectural Design (2)
Workforce Dual Credit towards Lone Star College
Architectural Design Level I Cert/AS Degree may be available on your campus

EXAMPLE OCCUPATIONS

Architectural or Civil Drafter
Median Wage: $57,424
Annual Openings: 1,366
10-year Growth: 15%

Architect
Median Wage: $80,903
Annual Openings: 966
10-year Growth: 18%

Construction Manager
Median Wage: $95,072
Annual Openings: 6,325
10-year Growth: 24%

A&C 2 – Construction

9TH GRADE
Principles of Architecture (1)
OR
Principles of Manufacturing (1)
(related elective)

10TH GRADE
Construction Technology I (2)
*OSHA-10hr
*NCCER CORE

11TH GRADE
*Construction Technology II (2)
*NCCER Carpentry Level 1
OR
*Mill & Cabinetmaking Technology (2)

12TH GRADE
*Practicum in Construction Tech (2)
*Other certs/training via Internships

EXAMPLE OCCUPATIONS

Drywall & Ceiling Tile Installer
Median Wage: $44,699
Annual Openings: 758
10-year Growth: 14%

Carpenter
Median Wage: $46,272
Annual Openings: 5,623
10-year Growth: 15%

Construction Manager
Median Wage: $95,072
Annual Openings: 6,325
10-year Growth: 24%

A&C 3 – Interior Design

9TH GRADE
Principles of Architecture (1)

10TH GRADE
Architectural Design I (1)

11TH GRADE
Interior Design (1)

12TH GRADE
*Capstone - Interior Design (1)
OR
*Architectural Design II (2)
*Autodesk AutoCAD
*Autodesk Revit

EXAMPLE OCCUPATIONS

Architectural or Civil Drafter
Median Wage: $57,424
Annual Openings: 1,366
10-year Growth: 15%

Interior Designer
Median Wage: $68,931
Annual Openings: 696
10-year Growth: 17.4%

Architect
Median Wage: $80,903
Annual Openings: 966
10-year Growth: 18%

ARCHITECTURE AND CONSTRUCTION
Endorsement: Business & Industry

| (A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Architectural Drafting & Design Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Architecture (1) 💻	8 - 11	**NONE**		Students will explore the various fields of architecture, construction science, and construction technology. The emphasis is on design, drafting, reading technical drawings, estimating and construction science. Students will use a variety of tools to accomplish hands-on activities related to model construction. This course is highly recommended for students planning a career in architecture or construction. **Lab supply fee.**
Architectural Design I (1) 💻	9 - 12	**Required** Principles of Architecture **Recommended** Geometry		Students explore the design, planning, and development of architectural drawings. Emphasis is placed on the production of construction documents and presentation media through traditional and computer-aided equipment. This course is highly recommended for students planning a career in architecture or a construction-related trade. **Lab supply fee.**
Architectural Design II (2) **(A) (CCMR)** 💻	10 - 12	**Required** Architectural Design I	Autodesk Revit Autodesk AutoCAD	Students will gain advanced knowledge and skills specific to those needed to enter a career in architecture and construction. 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. **Lab supply fee.**
Capstone - Architecture (1) **(A)** 💻	12	**Required** Three (3) courses in this program of study and 12th grade		Career and Technical Education (CTE) Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students partner with mentor(s) or advisor(s) to develop a project. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts. **Lab supply fee.**
Practicum in Architectural Design (2) **(A)** 💻 (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	12	**Required** Architectural Design I		An occupational specific course designed to provide technical instruction in architectural design. Instruction my be delivered through an unpaid laboratory training or through paid career preparation delivery arrangements. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**
Practicum in Architectural Design I **Workforce** (2) **(A)** 💻	11 - 12	**Required** Architectural Design II **and** approved LSC portfolio (AD II)		An occupation specific course designed to provide technical instruction in architectural design. This workforce courses include additional content aligned with the Lone Star College Architectural Design Technology AAS degree. **Lab supply fee.**
Practicum in Architectural Design II **Workforce** (2) **(A)** 💻	12	**Required** Practicum in Architectural Design I Workforce		A second occupation specific course designed to provide technical instruction in architectural design that builds upon concepts from the first Practicum course. This workforce courses include additional content aligned with the Lone Star College Architectural Design Technology AAS degree. **Lab supply fee.**

One or more of the courses in this program of study may be available for workforce dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

ARCHITECTURE AND CONSTRUCTION
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
⌨	Course requires the use of technology.

Construction Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Architecture (1) ⌨	8 - 11	**NONE**		Students will explore the various fields of architecture, construction science, and construction technology. The emphasis is on design, drafting, reading technical drawings, estimating and construction science. Students will use a variety of tools to accomplish hands-on activities related to model construction. This course is highly recommended for students planning a career in architecture or construction. **Lab supply fee.**
Principles of Manufacturing (1)	8 - 11	**NONE**		Principles of Manufacturing will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting, relevant activities and problems in a manufacturing setting. Students will design, produce, and assess products, services, and systems. They will use a variety of hand tools, power tools, machinery, computer hardware, and software applications to complete assignments and projects individually or with teams. **Lab supply fee.**
Construction Technology I (2) **(CCMR)**	10 - 12	**Required** Principles of Architecture **or** Principles of Manufacturing	OSHA-10 and NCCER CORE	Students will gain knowledge and skills specific to those needed to enter the work force or prepare for a postsecondary degree in the construction, architecture, or engineering field. Students will acquire knowledge and skills in safety, tool and machine usage, building materials, codes, and framing. **Lab supply fee.**
Construction Technology II (2) **(A) (CCMR)**	11 - 12	**Required** Construction Technology I	NCCER Carpentry Lvl 1 (NCCER CORE required)	In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians, or supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills. **Lab supply fee.**
Mill & Cabinetmaking Technology (2) **(A)**	10 - 12	**Required** Construction Technology I		Students will gain knowledge and skills specific to mill work and cabinet manufacturing and installation. Emphasis on cabinet design, tool usage, jointing methods, materials, finishes, and numerical and computer control production methods. **Lab supply fee.**
Practicum in Construction Technology (2) **(A)**	12	**Required** Construction Technology I and 12th grade (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	Other certs/ training via internships	While earlier courses in construction technology provided students with an overview of the construction industry, this course allows students to select and pursue a specialization. Students will have the opportunity to gain knowledge and develop advanced trade skills needed for a specific certification or licensure in a construction career such as General Construction, HVAC, Plumbing or Electrical. Because training requirements vary by specialization, a declaration of interest is required to determine the most appropriate method(s) of instruction. These may include classes on a college campus, pre-employment labs in the classroom, or employment (work-study), or a combination. If work-study, students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

*NOTE: Principles of Manufacturing is not a course within this program of study. It may be used to gain background knowledge in the design industries but will not count towards completing this program of study.

ARCHITECTURE AND CONSTRUCTION
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
⌨	Course requires the use of technology.

Interior Design Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Architecture (1) ⌨	8 - 11	**NONE**		Students will explore the various fields of architecture, construction science, and construction technology. The emphasis is on design, drafting, reading technical drawings, estimating and construction science. Students will use a variety of tools to accomplish hands-on activities related to model construction. This course is highly recommended for students planning a career in architecture or construction. **Lab supply fee.**
Architectural Design I (1) ⌨	9 - 12	**Required** Principles of Architecture **Recommended** Geometry		Students explore the design, planning, and development of architectural drawings. Emphasis is placed on the production of construction documents and presentation media through traditional and computer-aided equipment. This course is highly recommended for students planning a career in architecture or a construction-related trade. **Lab supply fee.**
Interior Design (1) ⌨	10 - 12	**Recommended** Principles of Architecture		This technical course provides students the opportunity to acquire knowledge and skills related to interior and exterior environments. This course provides instruction in the basic principles and elements of design and construction including the use of color, textiles, furniture, wall, window and floor coverings, space planning, and lighting in residential and non-residential environments. Students will investigate and prepare for career opportunities in construction, housing and interior design related fields. **Lab supply fee.**
Capstone - Interior Design (1) **(A)** ⌨	12	**Required** Three (3) courses in this program of study and 12th grade		Career and Technical Education (CTE) Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students partner with mentor(s) or advisor(s) to develop a project. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts. **Lab supply fee.**
Architectural Design II (2) **(A) (CCMR)** ⌨	10 - 12	**Required** Architectural Design I	Autodesk Revit Autodesk AutoCAD	Students will gain advanced knowledge and skills essential for pursuing a career in the architecture and construction fields. Instruction focuses on the history, principles, and techniques of architectural design, as well as the use of professional tools and software to produce detailed drawings, renderings, and scaled models for both commercial and residential purposes. **Lab supply fee.**

ARTS, A/V TECHNOLOGY & COMMUNICATIONS

ARTS 1 – Digital Comm–Video
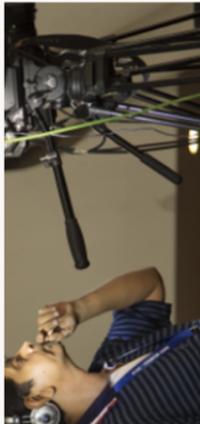
9TH GRADE
Principles of Arts, A/V Technology & Communication (1)
OR
Digital Audio Tech I (1)

10TH GRADE
Audio/Video Production I (2)
*Adobe Premiere Pro

11TH GRADE
*Audio/Video Production II (2)
Adobe After Effects

12TH GRADE
*Practicum in Audio/Video Production (2)
FAA Remote Drone Pilot

EXAMPLE OCCUPATIONS

Camera Operator, TV, Video, & Film
Median Wage: $48,422
Annual Openings: 155
10-year Growth: 20%

Audio & Video Technician
Median Wage: $46,319
Annual Openings: 626
10-year Growth: 30%

Producers & Director
Median Wage: $65,029
Annual Openings: 522
10-year Growth: 12%

ARTS 2 – Digital Comm–Audio

9TH GRADE
Digital Audio Tech I (1)

10TH GRADE
Principles of Arts, A/V Technology & Communication (1)
OR
Audio/Video Production I (2)
*Adobe Premiere Pro

11TH GRADE
*Digital Audio Tech II (1)

12TH GRADE
*Practicum in Audio/Video Production (2)
FAA Remote Drone Pilot

EXAMPLE OCCUPATIONS

Camera Operator, TV, Video, & Film
Median Wage: $48,422
Annual Openings: 155
10-year Growth: 20%

Audio & Video Technician
Median Wage: $46,319
Annual Openings: 626
10-year Growth: 30%

Producers & Director
Median Wage: $65,029
Annual Openings: 522
10-year Growth: 12%

ARTS 3 – Graphic Design & Interactive Media

9TH GRADE
Digital Media (1)
*Adobe Photoshop

10TH GRADE
Animation I (1)
Adobe Animate

11TH GRADE
*Animation II (2)
*Autodesk Maya

12TH GRADE
*Practicum in Animation (2)
*Adobe After Effects

EXAMPLE OCCUPATIONS

Software Developer
Median Wage: $111,705
Annual Openings: 15,324
10-year Growth: 36%

Graphic Designer
Median Wage: $50,973
Annual Openings: 1,766
10-year Growth: 10%

Art Director
Median Wage: $81,926
Annual Openings: 619
10-year Growth: 18%

ARTS 4 – Fashion Design

9TH GRADE
Digital Media (1)
*Adobe Photoshop

10TH GRADE
Fashion Design (1)

11TH GRADE
*Fashion Design II (2)

12TH GRADE
Capstone - Fashion Design (1)
(related elective)

EXAMPLE OCCUPATIONS

Sewing Machine Operator
Median Wage: $31,314
Annual Openings: 1,062
10-year Growth: 1.9%

Fashion Designer
Median Wage: $53,038
Annual Openings: 183
10-year Growth: 14.5%

Art Directors
Median Wage: $81,926
Annual Openings: 619
10-year Growth: 18%

ARTS, A/V TECHNOLOGY AND COMMUNICATIONS
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Digital Communication (Video) Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Arts, Audio/Video Technology, and Communications (1) 💻	9 - 10	**NONE**		This foundation course equips students with essential knowledge and skills, ensuring they are well-prepared to excel in advanced courses, fostering a deeper commitment to the program, and setting them up for success in their academic journey and future careers. The option for certification in Adobe Photoshop will be available for students but may require additional independent certification prep.
Digital Audio Technology I (1) 💻	9 - 12	**NONE**		This course provides skills for students to produce professional audio for a variety of real-world uses, such as: radio and television broadcasting, audio for video and film, audio for animation and game design, music production and live sound, and additional opportunities and skills sets. Students will master audio production equipment and create projects with a DAW (Digital Audio Workstation). Students will be expected to develop an understanding of the audio industry with a technical emphasis on production and critical-listening skills.
Audio/Video Production I (2) **(CCMR)** 💻	10 - 12	**Recommended** Principles of Arts, A/V Tech & Comm _or_ Digital Audio Tech I	Adobe Premiere Pro	Students will produce videos using professional standards in the area of pre-production, production and post-production Public Service announcements, news packages, documentaries, educational, promotional, and commercial productions. Students will work in crews to examine real-world issues related to current topics such as health care, government, business, or education. Productions will be created for audiences beyond the classroom such as school officials, non-profit organizations, higher education officials, government, or other stakeholders.
Audio/Video Production II (2) **(A)** 💻	11 - 12	**Required** Audio/Video Production I	Adobe After Effects	Students will form their own crews to create productions beyond the campus level with actual clients in industry, such as education, charity, and for-profit businesses in the community. Students will expand their skills to produce short films, music videos, movie trailers, television shows, web series, and others. Students will also use audio/video equipment to use media to cover various events in the athletic, arena, board meetings, corporate, family and other events in need of production. Students will learn the process to create an online marketing presence to form their own business.
Practicum in Audio/ Video Production (2) **(A)** 💻	12	**Required** Audio/Video Production II _or_ Digital Audio Technology II (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	FAA Remote Drone Pilot	Students will work as contractors to produce videos for a wide variety of organizations. Under the supervision of their AVP teacher, the practicum student will identify community production opportunities off campus, conduct meetings with clients, and manage video production equipment and crews. Students will also have the opportunity to pursue the training and certification needed to film using a drone. This course requires students to arrange their own transportation to produce a wide variety of media projects. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

One or more of the courses in this program of study may be available for workforce dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

ARTS, A/V TECHNOLOGY AND COMMUNICATIONS
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Digital Communication (Audio) Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Digital Audio Technology I (1) 💻	9 - 12	**NONE**		This course provides skills for students to produce professional audio for a variety of real-world uses, such as: radio and television broadcasting, audio for video and film, audio for animation and game design, music production and live sound, and additional opportunities and skills sets. Students will master audio production equipment and create projects with a DAW (Digital Audio Workstation). Students will be expected to develop an understanding of the audio industry with a technical emphasis on production and critical-listening skills.
Principles of Arts, Audio/Video Technology, and Communications (1) 💻	9 - 10	**NONE**		This foundation course equips students with essential knowledge and skills, ensuring they are well-prepared to excel in advanced courses, fostering a deeper commitment to the program, and setting them up for success in their academic journey and future careers. The option for certification in Adobe Photoshop will be available for students, but may require additional independent certification prep.
Audio/Video Production I (2) **(CCMR)** 💻	10 - 12	**Recommended** Principles of Arts, A/V Tech & Comm _or_ Digital Audio Tech I	Adobe Premiere Pro	Students will produce videos using professional standards in the area of pre-production, production and post-production Public Service announcements, news packages, documentaries, educational, promotional, and commercial productions. Students will work in crews to examine real-world issues related to current topics such as health care, government, business, or education. Productions will be created for audiences beyond the classroom such as school officials, non-profit organizations, higher education officials, government, or other stakeholders.
Digital Audio Technology II (1) **(A)** 💻	11 - 12	**Required** Digital Audio Technology I **Recommended** Audio/Video Production I		Students will form their own crews to create productions beyond the campus level with actual clients in industry, such as education, charity, and for-profit businesses in the community. Students will expand their skills to produce short films, music videos, movie trailers, television shows, web series, and others. Students will also use audio/video equipment to use media to cover various events in the athletic, arena, board meetings, corporate, family and other events in need of production. Students will learn the process to create an online marketing presence to form their own business.
Practicum in Audio/ Video Production (2) **(A)** 💻	12	**Required** Audio/Video Production II _or_ Digital Audio Technology II (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	FAA Remote Drone Pilot	Students will work as contractors to produce videos for a wide variety of organizations. Under the supervision of their AVP teacher, the practicum student will identify community production opportunities off campus, conduct meetings with clients, and manage video production equipment and crews. Students will also have the opportunity to pursue the training and certification needed to film using a drone. This course requires students to arrange their own transportation to produce a wide variety of media projects. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

One or more of the courses in this program of study may be available for workforce dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

ARTS, A/V TECHNOLOGY AND COMMUNICATIONS
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Graphic Design & Interactive Media Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Digital Media (1) **(CCMR)** 💻	9 - 12	**NONE**	Adobe Photoshop	Through the study of digital media and its application in information technology, students will design and create multimedia projects that address customer needs. Students will learn skills such as creating digital graphics, digital photography, using audio editing software, and creating video files. The emphasis will be on utilizing the features in Adobe Photoshop included in the corresponding industry-recognized certification.
Animation I (1) 💻	10 - 12	**Recommended** Digital Media	Adobe Animate	This course allows students to create animation projects using principles of design to combine graphics, images, and sound. A variety of techniques will be explored, including storyboarding, scripting/programming, interactivity, and flip books. The emphasis will be on utilizing the features in Adobe Animate included in the corresponding industry-recognized certification.
Animation II (2) **(A) (CCMR)** 💻	11 - 12	**Required** Animation I	Autodesk Maya	This course provides students the opportunity to expand upon the animation knowledge and skills mastered in the first animation course. A variety of advanced techniques will be explored, including orthographic and isometric drawing, framing, lighting, exaggeration, additive color, layers, and transitions. Products will be created utilizing industry-recognized technologies.
Practicum in Animation (2) **(A) (CCMR)** 💻	12	**Required** Animation II (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge, and physical ability to be considered for employment.)	Adobe After Effects	This course allows students to apply animation concepts and principles in the classroom and the workplace. Students will develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production animation products in a professional environment. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course.

ARTS, A/V TECHNOLOGY AND COMMUNICATIONS
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Fashion Design Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Digital Media (1) **(CCMR)** 💻	9 - 12	**NONE**	Adobe Photoshop	Through the study of digital media and its application in information technology, students will design and create multimedia projects that address customer needs. Students will learn skills such as creating digital graphics, digital photography, using audio editing software, and creating video files. The emphasis will be on utilizing the features in Adobe Photoshop included in the corresponding industry-recognized certification.
Fashion Design I (1)	10 - 12	**NONE**		This course emphasizes careers in fashion which span all aspects of the textile and apparel industries. Students interested will develop an understanding of the industry by participation in fashion, textile, and apparel projects, as well as exposure to laws governing the industry, skills related to commercial care of clothing, safety regulations, and general knowledge and skills leading to success in the Arts, Audio/Video Technology, and Communications career cluster. **Lab supply fee.**
Fashion Design II (2) **(A)** 💻	11 - 12	**Required** Fashion Design I		This course builds upon skills learned in Fashion Design I. Students continue to develop and refine their understanding of fashion figures, garment details, and construction. Students will develop an understanding of the industry by participation in fashion projects. **Lab supply fee.**
Capstone - Fashion Design (1) **(A)** 💻	12	**Required** Fashion Design II and 12th grade		Career and Technical Education (CTE) Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students partner with mentor(s) or advisor(s) to develop a project. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts. **Lab supply fee.**

ARTS, A/V TECHNOLOGY AND COMMUNICATIONS Related Electives
(May be taken in addition to a program of study in this field.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Professional Communications (0.5)	9 -12	**NONE**		This high school speech course is designed to provide opportunities for students to understand and develop effective interpersonal communication skills for the 21st century. Professional Communications blends written, oral, and graphic communication in a career-based, business environment. Students will prepare, present, and evaluate a variety of multi-media presentations that are appropriate for the professional setting.

BUSINESS, MARKETING & FINANCE

BMF 1 – Accounting & Financial Svs

9TH GRADE
Principles of Bus/Mktg/Finance (1)
OR
Fundamentals of Business Communication & Technologies (BIM I) (1)
*Microsoft Excel Expert
Microsoft Word Expert
OR
Money Matters (1)

10TH GRADE
Accounting I (1)
*NOCTI Accounting Foundations

11TH GRADE
*Accounting II K (1-math)
*Intuit QuickBooks Certified User

12TH GRADE
*Securities & Investments (1)
OR
*Practicum in Entrepreneurship (2)

EXAMPLE OCCUPATIONS

Tax Preparers
Median Wage: $56,956
Annual Openings: 898
10-year Growth: 14%

Accountant or Auditor
Median Wage: $78,022
Annual Openings: 12,989
10-year Growth: 20%

Personal Financial Advisor
Median Wage: $77,605
Annual Openings: 1,877
10-year Growth: 21%

BMF 2 – Business Management

9TH GRADE
Principles of Bus/Mktg/Finance (1)
OR
Fundamentals of Business Communication & Technologies (BIM I) (1)
*Microsoft Word/Excel Expert

10TH GRADE
Fundamentals of Business Communication & Technologies (BIM I) (1)
*Microsoft Word/Excel Expert
OR
Business Communications & Technologies (BIM II) (1)
*Microsoft Access Expert
*PMI Project Management Ready

11TH GRADE
*Business Management (1)
OR Global Business (0.5) & Human Resources Mgmt (0.5)

12TH GRADE
*Practicum in Entrepreneurship (2)

EXAMPLE OCCUPATIONS

Supervisor of Admin Support Workers
Median Wage: $59,585
Annual Openings: 13,885
10-year Growth: 9%

Human Resources Specialist
Median Wage: $61,278
Annual Openings: 6,239
10-year Growth: 23%

General and Operations Manager
Median Wage: $83,220
Annual Openings: 25,450
10-year Growth: 23%

BMF 3 – Entrepreneurship

9TH GRADE
Principles of Bus/Mktg/Finance (1)

10TH GRADE
Fundamentals of Business Communication & Technologies (BIM I) (1)
*Microsoft Word/Excel Expert

11TH GRADE
Entrepreneurship (1)
*Entrepreneurship & Small Business

12TH GRADE
*Practicum in Entrepreneurship (2)

EXAMPLE OCCUPATIONS

General and Operations Manager
Median Wage: $83,220
Annual Openings: 25,450
10-year Growth: 23%

Management Analyst
Median Wage: $93,983
Annual Openings: 6,030
10-year Growth: 25%

Chief Executive
Median Wage: $163,567
Annual Openings: 648
10-year Growth: 3%

BMF 4 – Marketing & Sales

9TH GRADE
Principles of Bus/Mktg/Finance (1)
OR
Digital Media (1)
*Adobe Photoshop

10TH GRADE
Sports & Entertainment Mktg I (0.5)
AND Virtual Business (0.5)
OR Entrepreneurship(1)
*Entrepreneurship & Small Business

11TH GRADE
*Sports & Entertainment Mktg I or II (0.5)
AND *Social Media Marketing (0.5)
STUKENT Social Media Mktg Cert
OR
*Practicum in Entrepreneurship I (2)

12TH GRADE
*Advanced Marketing (2)
OR
*Practicum in Entrepreneurship I (2)
OR
*Practicum in Entrepreneurship II (2)
*Real Estate Agent License

EXAMPLE OCCUPATIONS

Retail Salesperson
Median Wage: $28,356
Annual Openings: 56,132
10-year Growth: 15%

Market Research Analyst
Median Wage: $60,926
Annual Openings: 5,688
10-year Growth: 35%

Sales Manager
Median Wage: $123,729
Annual Openings: 3,368
10-year Growth:21%

* Advanced Course for Endorsement or Certification impacting "Career ready" status as outlined by TEA Accountability for College, Career or Military Readiness (CCMR)
NOTE: BIM I name changed to Fundamentals of Business Communication & Technologies and BIM II name changed to Business Communication & Technologies

BUSINESS, MARKETING & FINANCE
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Accounting & Financial Services Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Business, Marketing & Finance (1)	8 - 10	**NONE**		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. The engaging learning activities and simulations in this course provide the foundation for more advanced courses in the business, marketing, and finance clusters.
Foundations of Business Communication & Technologies (1) (formerly BIM I) (CCMR) 💻	9 - 12	**Recommended** Touch System Data Entry	Word Expert Excel Expert (Only Excel Expert is for CCMR in this program of study.)	BIM I prepares students to apply personal, interpersonal, and technology skills in other content areas, the workplace, and post-secondary education. The applications utilized in this course will include word processing, spreadsheets, multimedia presentations, databases, Internet research, and a look at emerging technologies.
Money Matters (1)	9 - 12	**NONE**		In Money Matters, students will gain an understanding of the fundamental principles of money and personal financial planning. Special emphasis is placed on bank record management, use of credit, investing, insurance, and budgets. In addition, students are introduced to financial market and securities analysis, and career readiness. Current economic events indicate that it is never too early for students to gain an awareness of factors that will impact their short-term and long-term financial plans.
Accounting I (1) (CCMR) 💻	10 - 12	**Required** Geometry **Recommended** Principles of Business, Marketing, & Finance	NOCTI Accounting Foundations	Accounting helps individuals and businesses manage their money. This course is one of the fastest growing and highly compensated areas of business. This course includes the complete accounting cycle, end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization.
Accounting II K (1-math) (A) (CCMR) 💻	11 - 12	**Required** Algebra II (or concurrent) **AND** Accounting I	QuickBooks Certified User	Students continue the investigation of the field of accounting in this advanced course, emphasizing corporate accounting and integrated financial analysis. Students reflect on this knowledge as they engage in various managerial and cost accounting activities. This course is vital for students planning to major in Finance or seeking an entry-level position in accounting. This course satisfies a high school math graduation requirement.
Securities & Investments (1) (A)	11 - 12	**Recommended** At least one finance course (Accounting I or Money Matters)		Securities and investments have become top story items in today's news. Knowing what a security is (and is not), how profit is generated, regulations and taxation issues, real estate law, and the nature of investment risk will not only help students understand the news but gain insight into options for their own personal financial planning as well. You, too, can soon own a part of your favorite company.
Practicum in Entrepreneurship I/II (2) (A) (CCMR) 💻 (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	11 - 12	**Required** At least one credit in Business, Marketing, & Finance		Practicum in Entrepreneurship provides students the opportunity to apply classroom learning and experiences to real-world business problems and opportunities. Students will prepare for an entrepreneurial career in their area of interest in their career cluster and build on and apply the knowledge and skills gained from courses taken in an array of career areas. Practicum experiences occur in a variety of locations appropriate to the nature and level of the student's need for work-based learning experience. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course.

BUSINESS, MARKETING & FINANCE
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
⌨	Course requires the use of technology.

Business Management Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Business, Marketing & Finance (1)	8 - 10	**NONE**		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. The engaging learning activities and simulations in this course provide the foundation for more advanced courses in the business, marketing, and finance clusters.
Foundations of Business Communication & Technologies (1) (formerly BIM I) **(CCMR)** ⌨	9 - 12	**Recommended** Touch System Data Entry	Word Expert Excel Expert	BIM I prepares students to apply personal, interpersonal, and technology skills in other content areas, the workplace, and post-secondary education. The applications utilized in this course will include word processing, spreadsheets, multimedia presentations, databases, Internet research, and a look at emerging technologies.
Business Communication & Technologies (1) (formerly BIM II) **(CCMR)** ⌨	10 - 12	**Required** Foundations of Business Communication & Technologies (formerly BIM I)	Access Expert PMI Project Management Ready	Students will complete this course utilizing and building on the skills culminated in BIM I by bringing those applications together while learning how to be a project manager. Lessons are aligned with the knowledge needed to integrate word processing, spreadsheet, database and presentation applications into skills required to become PMI Project Management Ready certified. This certification is globally recognized as the standard for demonstrating mastery of project management and may be a valuable addition to your credentials for current and future employment.
Global Business (0.5)	10 - 12	**Recommended** Principles of Business, Marketing, & Finance		In Global Business, students explore theories in trading and investing across national borders. This course includes topics related to differing laws, cultures and societies, and their impact on the application of basic business principles.
Human Resources Management (0.5)	11 - 12	**Recommended** Principles of Business, Marketing, & Finance		Typically, it is the employees that make or break a business. In this course, students analyze the primary functions of human resources management, which include recruitment, selection, training, development, and compensation. Topics will incorporate social responsibility of business and industry to its employees. Students develop a foundation in the economical, financial, technological, international, social, and ethical aspects of human resources in order to become competent managers, employees, and entrepreneurs.
Business Management (1) **(A)** ⌨	11 - 12	**Recommended** At least one business course (BIM I or II, Global Business, Human Resources Mgmt, Virtual Business)		In Business Management, students analyze the primary functions of management and leadership in this rapidly evolving global business environment. 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. This course is strongly recommended for those who strive to be their own boss one day.
Practicum in Entrepreneurship I/II (2) **(A) (CCMR)** ⌨ (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	11 - 12	**Required** At least one credit in Business, Marketing, & Finance		Practicum in Entrepreneurship provides students the opportunity to apply classroom learning and experiences to real-world business problems and opportunities. Students will prepare for an entrepreneurial career in their area of interest in their career cluster and build on and apply the knowledge and skills gained from courses taken in an array of career areas. Practicum experiences occur in a variety of locations appropriate to the nature and level of the student's need for work-based learning experience. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course.

One or more of the courses in this program of study may be available for workforce dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

BUSINESS, MARKETING & FINANCE
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Entrepreneurship Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Business, Marketing & Finance (1)	8 - 10	**NONE**		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. The engaging learning activities and simulations in this course provide the foundation for more advanced courses in the business, marketing, and finance clusters.
Foundations of Business Communication & Technologies (1) (formerly BIM I) 💻	9 - 12	**Recommended** Touch System Data Entry	Word Expert Excel Expert (These certs are not for CCMR in this program of study)	BIM I prepares students to apply personal, interpersonal, and technology skills in other content areas, the workplace, and post-secondary education. The applications utilized in this course will include word processing, spreadsheets, multimedia presentations, databases, Internet research, and a look at emerging technologies.
Entrepreneurship (1) **(CCMR)**	10 - 12	**Recommended** Principles of Business, Marketing, & Finance	Entrepreneurship and Small Business	In Entrepreneurship, students will gain knowledge and skills needed to become an entrepreneur. Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students will understand the capital required, the return on investment desired, and the potential for profit.
Practicum in Entrepreneurship I/II (2) **(A) (CCMR)** 💻 (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	11 - 12	**Required** At least one credit in Business, Marketing, & Finance		Practicum in Entrepreneurship provides students the opportunity to apply classroom learning and experiences to real-world business problems and opportunities. Students will prepare for an entrepreneurial career in their area of interest in their career cluster and build on and apply the knowledge and skills gained from courses taken in an array of career areas. Practicum experiences occur in a variety of locations appropriate to the nature and level of the student's need for work-based learning experience. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course.

BUSINESS, MARKETING & FINANCE
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Marketing & Sales Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Business, Marketing & Finance (1)	8 - 10	**NONE**		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. The engaging learning activities and simulations in this course provide the foundation for more advanced courses in the business, marketing, and finance clusters.
Digital Media (1) 💻	9 - 12	**NONE**	Adobe Photoshop (This cert is not for CCMR in this program of study.)	Through the study of digital media and its application in information technology, students will design and create multimedia projects that address customer needs. Students will learn skills such as creating digital graphics, digital photography, using audio editing software, and creating video files. The emphasis will be on utilizing the features in Adobe Photoshop included in the corresponding industry-recognized certification.
Virtual Business (0.5) 💻	10 - 12	**Recommended** Principles of Business, Marketing, & Finance		Virtual Business is designed for students to start a virtual business by creating a web presence, conducting online and off-line marketing, examining contracts appropriate for an online business and demonstrating project management skills. Students will also demonstrate bookkeeping skills for a virtual business, maintain business records, and understand legal issues associated with a virtual business. The culminating project will include building a functional website that incorporates the essentials of a virtual business.
Sports & Entertainment Marketing I (0.5)	10 - 12	**Recommended** Principles of Business, Marketing, & Finance		Sports and Entertainment Marketing I allows students to apply marketing principles and processes to the sports & entertainment industry. Students will investigate sponsorships, promotion/public relations, merchandising, advertising, sales, and events through case studies and simulations. Behind the superstars are those who have mastered the craft of developing the true connections with consumers needed to build that passion.
Entrepreneurship (1) **(CCMR)**	10 - 12	**Recommended** Principles of Business, Marketing, & Finance	Entrepreneurship and Small Business	In Entrepreneurship, students will gain knowledge and skills needed to become an entrepreneur. Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students will understand the capital required, the return on investment desired, and the potential for profit.
Sports & Entertainment Marketing II (0.5) **(A)**	10 - 12	**Required** Sports & Entertainment Marketing I		Sports and Entertainment Marketing II is an advanced course designed to build upon students' prior knowledge of sports and entertainment marketing. Students will develop a thorough understanding of advanced marketing concepts and theories as they relate to the sports and entertainment industries. Students will investigate the components of branding, sponsorships and endorsements, as well as promotion plans needed for sports and entertainment events.
Social Media Marketing (0.5) **(A)** 💻	10 - 12	**Recommended** Principles of Business, Marketing, & Finance and/or Virtual Business	STUKENT Social Media	Social Media Marketing is designed to look at the rise of social media and how marketers are integrating social media tools in their overall marketing strategy. The course will investigate how the marketing community measures success in the everchanging world of social media. Students will manage a successful social media presence for an organization via a social media simulation. Through this simulation, they will understand techniques for gaining customer and consumer buy-in to achieve marketing goals, and properly select social media platforms to engage consumers and monitor and measure the results of these efforts.
Advanced Marketing (2) **(A)**	11 - 12	**Required** At least one Marketing course (Social Media Mktg, or Sports & Entertain Mktg)		Advanced Marketing builds upon the ideas taught in previous Marketing courses. The course is intended for students interested in taking their marketing skills to the next level and developing an action plan for a successful future. This course includes instructional areas designed to provide an understanding of advanced marketing principles, careers in marketing and the importance of entrepreneurship in our economy. Major emphasis is placed on marketing principles, communication, market research, sales, career development, customer service, and entrepreneurship.
Practicum in Entrepreneurship I/II (2) **(A) (CCMR)** 💻 (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	11 - 12	**Required** At least one credit in Business, Marketing, & Finance	Real Estate Agent License (must be 18 to test) (This cert is only for CCMR in this program of study.)	Practicum in Entrepreneurship provides students the opportunity to apply classroom learning and experiences to real-world business problems and opportunities. Students will prepare for an entrepreneurial career in their area of interest in their career cluster and build on and apply the knowledge and skills gained from courses taken in an array of career areas. Practicum experiences occur in a variety of locations appropriate to the nature and level of the student's need for work-based learning experience. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. Students, turning 18 by the summer after their graduation, may opt to pursue their real estate license for an additional cost if pursuing the Marketing & Sales Program of Study.

BUSINESS, MARKETING & FINANCE
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.	
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.	
💻	Course requires the use of technology.	

BUSINESS, MARKETING & FINANCE Related Elective
(May be taken in addition to any program of study in this field.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Touch System Data Entry (0.5) 💻	7 - 10			Touch System Data Entry is strongly recommended for all students. This course develops keyboarding skills (using the touch method) and formatting skills (arrangement, placement, and spacing of common business documents) that all students need for personal applications as well as for success in the workplace.

EDUCATION & TRAINING

E&T 1 – Teaching & Training

9TH GRADE
Principles of Human Services (1-7th/8th gd)
OR
Principles of Education & Training (1)

10TH GRADE
Communication & Technology in Education (1)
OR
Child Development (1)

11TH GRADE
*Teacher Prep I (2-student teaching)
*Seniors–see cert options in Teacher Prep II

12TH GRADE
*Teacher Prep II (2-student teaching)
*Educational Aide I Certification
CFISD Letter of Intent to Interview

EXAMPLE OCCUPATIONS

CFISD Starting Salary in 2025-26
$65,000

Statewide:
Teaching Assistant, K-12
Median Wage: $28,066
Annual Openings: 10,000
10-year Growth: 15%

Secondary Teacher, except SpEd/CTE
Median Wage: $61,035
Annual Openings: 8,288
10-year Growth: 14%

Education Administrator, K-12
Median Wage: $81,976
Annual Openings: 2,676
10-year Growth: 14%

E&T 2– Early Learning

9TH GRADE
Principles of Human Services (1-7th/8th gd)
OR
Principles of Education & Training (1)

10TH GRADE
Child Development (1)

11TH GRADE
*Early Learning I (2-preschool)
AHA CPR/First Aid
*Seniors - see cert options in Early Learning II

12TH GRADE
*Early Learning II (2-preschool)
*Educational Aide I Certification
CFISD Letter of Intent to Interview

EXAMPLE OCCUPATIONS

CFISD Starting Salary in 2025-26
$65,000

Statewide:
Child Care Workers
Median Wage: $23,528
Annual Openings: 12,823
10-year Growth: 17%

Preschool Teacher, except SpEd
Median Wage: $24,127
Annual Openings: 4,148
10-year Growth: 26%

Elementary Teacher, except SpEd
Median Wage: $61,389
Annual Openings: 11,712
10-year Growth: 13%

EDUCATION AND TRAINING
Endorsement: Public Service

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.	
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.	
💻	Course requires the use of technology.	

Teaching & Training Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Human Services (1)	7 - 8	**NONE**		This course will enable students to investigate careers in the Human Services Career Cluster, including counseling & mental health, early childhood development, family & community services, and personal care and consumer services. Each student is expected to complete the knowledge and skills essential for success in high-wage or high-demand human services careers.
Principles of Education and Training (1)	9 - 11	**NONE**		This course is designed to introduce learners to the various careers and the basic knowledge and skills essential for success within the Education and Training career cluster. This course explores traditional and nontraditional education careers such as teaching, coaching, paraprofessional jobs, administrative, counseling, psychologist, social worker, corporate trainer, and pediatrician through hands-on activities. They will utilize labor market information, knowledge of technology, and societal or economic trends to forecast job profiles within the cluster.
Communication and Technology in Education (1) 💻	10 - 12	**Recommended** Principles of Education and Training **or** Principles of Human Services		This is an extended course of study designed to provide students with the fundamentals of planning, managing, and training services needed to provide learning support services in K-12 classrooms. Students will develop knowledge and skills regarding the professional, ethical, and legal responsibilities in teaching related to educational technology; as well as, understand laws and pedagogical justifications regarding classroom technology use. This course provides an opportunity for students to participate in training related to Google for Education, Microsoft Office Fundamentals, and Common Sense Media and Digital Citizenship as they relate to standards set by the International Society for Technology in Education.
Child Development (1)	10 - 12	**Recommended** Principles of Education and Training **or** Principles of Human Services		This popular, high interest course addresses knowledge and skills related to child growth and development from prenatal through school-age children. It equips future parents with child development skills to promote the well-being and healthy development of children. Legislation and public policies affecting children are also emphasized. Careers in this area include early childhood educators, child care center employees, neonatal medical professions, and all future parents of children.
Teacher Prep I (2) **(A) (CCMR)** 💻	11 - 12	**Recommended** Principles of Edu/Training **or** Principles of Human Svs **AND** Comm & Tech in Education **or** Child Dev	Educational Aide I (seniors)* CFISD Letter of Intent to Interview (seniors)	This course 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 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. Standard professional dress is required when on "cooperating" school campuses. **Lab supply fee.**
Teacher Prep II (2) **(A) (CCMR)** 💻	12	**Required** Teacher Prep I	Educational Aide I * CFISD Letter of Intent to Interview	This course is the continuation of 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 this course mentor the students in Instructional Practices course and are assigned to an elementary and/or secondary "cooperating" school environment. Here, they continue to plan and direct individualized instruction and group activities, prepare instructional materials, assist with recordkeeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel. Background check required. **Lab supply fee.**

*NOTE: Students must be seniors and have successfully completed two (2) or more of the following courses (with at least one being advanced) for three (3) or more credits to be eligible to apply for their Educational Aide I certification: Principles of Education & Training, Communication and Technology in Education; Child Development; Teacher Prep I (advanced); Teacher Prep II (advanced). There is no certification fee for Educational Aide I, but standard state licensing fees apply.

One or more of the courses in this program of study may be available for dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

EDUCATION AND TRAINING
Endorsement: Public Service

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Early Learning Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Human Services (1)	7 - 8	**NONE**		This course will enable students to investigate careers in the Human Services Career Cluster, including counseling & mental health, early childhood development, family & community services, personal care and consumer services. Each student is expected to complete the knowledge and skills essential for success in high-wage or high-demand human services careers. **Lab supply fee.**
Principles of Education and Training (1)	9 - 11	**NONE**		This course is designed to introduce learners to the various careers and the basic knowledge and skills essential for success within the Education and Training career cluster. This course explores traditional and nontraditional education careers such as teaching, coaching, paraprofessional jobs, administrative, counseling, psychologist, social worker, corporate trainer and pediatrician, through hands-on activities. They will utilize labor market information, knowledge of technology, and societal or economic trends to forecast job profiles within the cluster. **Lab supply fee.**
Child Development (1)	10 - 12	**Recommended** Principles of Human Services **or** Principles of Education & Training		This popular, high interest course addresses knowledge and skills related to child growth and development from prenatal through school-age children. It equips future parents with child development skills to promote the well-being and healthy development of children. Also emphasized in the course are legislation and public policies affecting children. Careers in this area include early childhood educators, child care center employees, neonatal medical professions, and all future parents of children. **Lab supply fee.**
Early Learning I (2) **(A) (CCMR)** 💻	11 - 12 Declaration of Interest form may be required if demand exceeds capacity.	**Recommended** Principles of Human Svs **or** Principles Educ & Training **AND** Child Development	AHA Heartsaver CPR/First Aid Educational Aide I (seniors) * CFISD Letter of Intent to Interview (seniors)	In a "hands-on" laboratory setting, students work with three and four-year-old students in a preschool educational environment, applying knowledge and skills related to child growth and guidance. Background check required. **Lab supply fee.**
Early Learning II (2) **(A) (CCMR)** 💻	12 Declaration of Interest form may be required if demand exceeds capacity.	**Required** Early Learning I	Educational Aide I * CFISD Letter of Intent to Interview	This course continues the emphasis of laboratory experiences in a preschool setting. In this course, students mentor the Child Guidance students and continue participating in extended learning/teaching experiences with the three and four-year-old children in the preschools located in the high schools. They model ethical behaviors, comply with laws and regulations, and assist in establishing a physically and psychologically healthy environment to inspire client confidence in services provided. The students are expected to produce a professional portfolio. Background check required. **Lab supply fee.**

* NOTE: Students must be seniors and have successfully completed two (2) or more of the following courses (with at least one being advanced) for three (3) or more credits to be eligible to apply for their Educational Aide I certification:
Principles of Education & Training
Child Development
Early Learning I (formerly Child Guidance) (advanced)
Early Learning II (formerly Practicum in Early Learning) (advanced)
There is no certification fee for Educational Aide I, but standard state licensing fees apply.

EDUCATION AND TRAINING
Endorsement: Public Service

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

EDUCATION AND TRAINING Related Electives
(May be taken in addition to any program of study in this field.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
* Lifetime Nutrition and Wellness (0.5)	10 - 12 (9th graders may enroll after taking Principles of Human Services or Principles of Hospitality & Tourism in middle school.)	**Recommended** Principles of Hospitality & Tourism **or** Principles of Human Services **or** Principles of Education & Training **or** Principles of Health Science		This course will emphasize the principles of lifetime wellness and nutrition to assist them in making informed choices that promote good health, as well as pursue careers related to nutrition. Students study the principles of nutrition, digestion, calories, and metabolism, diet-related diseases, food allergies, therapeutic/fad dieting, and safety and sanitation in food preparation. Some food lab experiences may be included.
* Interpersonal Studies (0.5)	10 - 12 (9th graders may enroll after taking Principles of Human Services or Principles of Hospitality & Tourism in middle school.)	**Recommended** Principles of Hospitality & Tourism **or** Principles of Human Services **or** Principles of Education & Training **or** Principles of Health Science		This interesting, introspective course is a study of how the relationships between individuals and relationships in and out of the family significantly affect one's quality of life. Learners are exposed to strategies that promote physical, emotional, intellectual, and social development. The careers connected to this course are in the areas of counseling and mental health services as well as social work.

*NOTE: The courses may be used to gain background knowledge in this area, but will not count towards completing Education & Training programs of study.

ENGINEERING
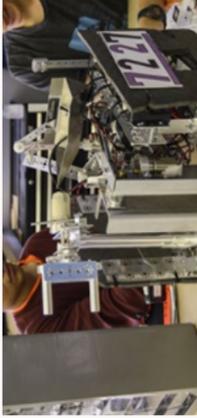
ENG 1 – Engineering Foundations

9TH GRADE
Principles of Applied Engineering (1)

10TH GRADE
Engineering Design & Presentation I (1)

11TH GRADE
*Engineering Design & Presentation II (1)
*Autodesk Inventor

12TH GRADE
*Engineering Design & Problem Solving K
(1-science)
OR
*Capstone - Engineering (1)
OR
*Practicum in STEM (2)

EXAMPLE OCCUPATIONS

Civil Engineering Tech
Median Wage: $61,138
Annual Openings: 765
10-year Growth: 11%

Aerospace Engineer
Median Wage: $115,694
Annual Openings: 483
10-year Growth: 18%

Mechanical Engineer
Median Wage: $99,937
Annual Openings: 1,755
10-year Growth: 19%

ENG 2 – Robotics – Engineering Focus

9TH GRADE
Principles of Applied Engineering (1)

10TH GRADE
Robotics I (1)

11TH GRADE
*Robotics II K (1-math)
*SACA Robotics Certification

12TH GRADE
*Engineering Design & Problem Solving K
(1-science)
OR
*Capstone - Engineering (1)
OR
*Practicum in STEM (2)

EXAMPLE OCCUPATIONS

CNC Tool Operator
Median Wage: $46,353
Annual Openings: 1,146
10-year Growth: 10%

Aerospace Engineer
Median Wage: $115,694
Annual Openings: 483
10-year Growth: 18%

Mechanical Engineer
Median Wage: $99,937
Annual Openings: 1,755
10-year Growth: 19%

The STEM Academy for Automation, Robotics, and Computer Science is no longer being offered as a stand-alone program of study at only one location.
Students interested in that industry field should take Computer Science I - IV and either the Engineering Foundations or the Robotics Program of Study at any CFISD high school.

CFISD.NET/CTE   * Advanced Course for Endorsement or Certification impacting 'Career ready' status as outlined by TEA Accountability for College, Career or Military Readiness (CCMR)   rev 9-2025

ENGINEERING
Endorsement: STEM

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Engineering Fundamentals Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Applied Engineering (1) 💻	7 - 10	**NONE**		Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields of engineering and will be able to make informed career decisions. **Lab supply fee.**
Engineering Design & Presentation I (1) 💻	9 - 12	**Required** Principles of Applied Engineering		Students will use multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes relating to the engineering design fields. Students will use a variety of computer hardware and software applications to complete assignments and projects. **Lab supply fee.**
Engineering Design & Presentation II (2) **(A) (CCMR)** 💻	10 - 12	**Required** Engineering Design & Presentation I	Autodesk Inventor	Students will work on a variety of projects that will help them develop design skills including those related to team building, problem-solving, time management, project design and development. Students will be encouraged to enter competitive events that lead to the completion of industry certifications, internships, and career opportunities. **Lab supply fee.**
Engineering Design & Problem Solving K (1-science) **(A)** 💻	11 - 12	**Required** Algebra II, Chemistry, Physics (or concurrent), Engineering Design and Presentation I or Robotics II K or Manufacturing Engineering Technology K (ARC)		Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems, moving from well-defined toward more open-ended, with real-world application. Students apply critical thinking skills to justify a solution from multiple design options. This course is intended to stimulate students' ingenuity, intellectual talents, and practical skills in devising solutions to engineering design problems in a project-based learning environment. Students use the engineering design process cycle to investigate, design, plan, create, and evaluate solutions. At the same time, this course fosters awareness of the social and ethical implications of technological development.
Capstone - Engineering (1) **(A)** 💻	12	**Required** Three (3) courses in this program of study and 12th grade		Career and Technical Education (CTE) Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students partner with mentor(s) or advisor(s) to develop a project. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts. **Lab supply fee.**
Practicum in STEM (2) **(A)**	12	**Required** Engineering Design I or Robotics I (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)		This course allows students to apply science, technology, engineering, and mathematic concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

ENGINEERING
Endorsement: STEM or Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Robotics - Engineering Focus Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Applied Engineering (1) 💻	7 - 10	**NONE**		Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields of engineering and will be able to make informed career decisions. **Lab supply fee.**
Robotics I (1) 💻	9 - 12	**Required** Principles of Applied Engineering or Principles of Manufacturing		In Robotics I, students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry. **Lab supply fee.**
Robotics II K (1-math) **(A) (CCMR)** 💻	10 - 12	**Required** Robotics I	*SACA Robotics Certification*	In Robotics II K, students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs. **Lab supply fee.**
Engineering Design & Problem Solving K (1-science) **(A)** 💻	11 - 12	**Required** Algebra II, Chemistry, Physics (or concurrent), Engineering Design and Presentation I or Robotics II K or Manufacturing Engineering Technology K (ARC)		Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems, moving from well-defined toward more open-ended, with real-world application. Students apply critical thinking skills to justify a solution from multiple design options. This course is intended to stimulate students' ingenuity, intellectual talents, and practical skills in devising solutions to engineering design problems in a project-based learning environment. Students use the engineering design process cycle to investigate, design, plan, create, and evaluate solutions. At the same time, this course fosters awareness of the social and ethical implications of technological development.
Capstone - Engineering (1) **(A)** 💻	12	**Required** Three (3) courses in this program of study and 12th grade		Career and Technical Education (CTE) Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students partner with mentor(s) or advisor(s) to develop a project. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts. **Lab supply fee.**
Practicum in STEM (2) **(A)** (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	12	**Required** Engineering Design I or Robotics I		This course allows students to apply science, technology, engineering, and mathematic concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

HEALTH SCIENCE

HSCI 1–Diagnostic & Therapeutic Services

9TH GRADE
Principles of Health Science (1)
AHA CPR/First Aid

10TH GRADE
Medical Terminology (1)

11TH GRADE
***Health Science Theory/Clinicals (2)**
AHA Basic Life Support
OSHA 10-hr
*Certified EKG Technician

OR

***Anatomy & Physiology K (1-science)**
AND/OR
***Pathophysiology K (1-science)**

12TH GRADE
***Practicum in Health Science (2)**
*Certified Nursing Assistant
*Certified Pharmacy Technician
*Registered Dental Assistant
*Patient Care Technician

EXAMPLE OCCUPATIONS

Medical Assistant
Median Wage: $36,834
Annual Openings: 11,638
10-year Growth: 29%

Dental Hygienist
Median Wage: $79,633
Annual Openings: 1,352
10-year Growth: 32%

Physician Assistant
Median Wage: $127,332
Annual Openings: 974
10-year Growth: 41%

HEALTH SCIENCE
Endorsement: Public Service

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Diagnostic & Therapeutic Services Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Health Science (1-health)	9 - 11	**NONE**	AHA Heartsaver CPR/First Aid	This course is designed for students interested in medical and associated health careers. It gives an overview of the therapeutic, diagnostic, environmental, and informational systems of the healthcare industry. Topics include career requirements, medical history, trends in financing healthcare, ethical and legal responsibilities, human body systems as related to the healthcare profession, client care, safety, first aid, and CPR. This course prepares the student for the transition to clinical and/or work-based experiences available in the advanced health science courses.
Medical Terminology (1)	10 - 12	**Recommended** Principles of Health Science		This course allows students to develop a working knowledge of the language of medicine by introducing them to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. Comprehending this terminology will not only be beneficial in understanding other science and health science related courses taken in high school, but will also enhance their ability to secure employment or pursue further education in this industry.
Health Science Theory/ Clinicals (2) **(A) (CCMR)** 💻 (The training site may require placement requirements such as age, immunization, background check, and drug testing.)	11 - 12 Declaration of Interest form may be required if demand exceeds capacity.	**Required** Principles of Health Science **and** Medical Terminology **and** Biology	AHA Basic Life Support CPR OSHA-10 hour Certified EKG Technician	The Health Science Theory course is designed for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experience for continued knowledge and skill development. Key components of this course may include CPR and OSHA certification, standard precautions, and ethics. The students will apply the concepts being learned in Health Science Theory and practice entry-level occupational skills in the clinical setting such as hospitals or other medical-related agencies. **Lab supply fee.**
Anatomy & Physiology K (1-science) **(A)**	11 - 12	**Required** Biology **and** Chemistry **Recommended** Principles of Health Science **and** Med Term		Anatomy and Physiology is a college preparatory course designed to extend the student's knowledge and understanding of the human body in respect to its structure and function. A survey of each organ system is presented with initial emphasis upon its anatomy, followed by an in-depth study of its physiology. This course is lab oriented and teaches proper dissection techniques as well as various physiological phenomena. This course is recommended for students pursuing an education in the medical sciences.
Pathophysiology K (1-science) **(A)**	11 - 12	**Required** Biology **and** Chemistry **Recommended** Principles of Health Science **and** Med Term **and** Anatomy & Phys K (or concurrent with A&P)		In Pathophysiology, students conduct laboratory and field investigations, use scientific methods during investigations, make informed decisions using critical thinking and scientific problem-solving and demonstrate professional standards as related to business and industry. Students in Pathophysiology study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease. Students will differentiate between normal and abnormal physiology.
Practicum in Health Science (2) **(A) (CCMR)** 💻 The training site may require placement requirements such as age, immunization, background check, and drug testing. CNA also requires enrollment at Lone Star College.	12 Declaration of Interest form may be required if demand exceeds capacity at pharmacy training sites.	**Required** Principles of Health Science **and** one health science related advanced course. **Recommended** Med Term (Requires student-provided transportation to job shadowing sites.)	Cert Nursing Assistant **or** Registered Dental Assistant **or** Pharmacy Technician **or** Patient Care Technician	While earlier courses in health science provide students with an overview of the healthcare industry, this course allows students to select and pursue a specialization. Students will have the opportunity to gain knowledge and develop advanced clinical skills needed for a specific certification or licensure in an allied health career such as Pharmacy Technician, Certified Nursing Aide (CNA), Registered Dental Assistant, or Patient Care Technician. Because training requirements vary by specialization, a declaration of interest process is required to determine the most appropriate method(s) of instruction. These may include classes on a college campus, pre-employment labs in the classroom, clinical internships or employment (work-study), or a combination. **Lab supply fee.**

One or more of the courses in this program of study may be available for workforce dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

HEALTH SCIENCE
Endorsement: Public Service

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

HEALTH SCIENCE Related Electives
(May be taken in addition to any program of study in this field.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Lifetime Nutrition and Wellness (0.5) (9th graders may enroll after taking Principles of Human Services or Principles of Hospitality & Tourism in middle school.)	10-12	**Recommended** Principles of Hospitality & Tourism **or** Principles of Human Services **or** Principles of Education & Training **or** Principles of Health Science		This course will emphasize the principles of lifetime wellness and nutrition to assist them in making informed choices that promote good health, as well as pursue careers related to nutrition. Students study the principles of nutrition, digestion, calories, and metabolism, diet-related diseases, food allergies, therapeutic/fad dieting, and safety and sanitation in food preparation. Some food lab experiences may be included.
Interpersonal Studies (0.5) (9th graders may enroll after taking Principles of Human Services or Principles of Hospitality & Tourism in middle school.)	10-12	**Recommended** Principles of Hospitality & Tourism **or** Principles of Human Services **or** Principles of Education & Training **or** Principles of Health Science		This interesting, introspective course is a study of how the relationships between individuals and relationships in and out of the family significantly affect one's quality of life. Learners are exposed to strategies that promote physical, emotional, intellectual, and social development. The careers connected to this course are in the areas of counseling and mental health services, as well as social work.
** Forensic Science K (1-science)	11 -12	**Required** Biology **and** Chemistry **Recommended** Principles of Health Science **and** Med Term		Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprints analysis, ballistics, and blood spatter analysis. Students will learn the history, legal aspects, and career options for forensic science.

**NOTE: This course may be used to gain background knowledge in this area, but will NOT count towards completing a Health Science program of study.

HOSPITALITY & TOURISM

HOSP 1–Culinary Arts

8TH GRADE
Principles of Hospitality (1)

9th grade
Intro to Culinary Arts (1)
Food Handler

10TH GRADE
Culinary Arts (2)
Food Protection Manager

11TH GRADE
***Advanced Culinary Arts (2)**
OR
***Food Science K (1-science)**

12TH GRADE
***Practicum in Culinary Arts (2)**
OR
***Advanced Culinary Arts (2)**

EXAMPLE OCCUPATIONS

Baker
Median Wage: $29,466
Annual Openings: 2,942
10-year Growth: 26%

Chef or Head Cook
Median Wage: $44,761
Annual Openings: 950
10-year Growth: 37%

General and Operations Manager
Median Wage: $83,220
Annual Openings: 25,450
10-year Growth: 23%

HOSPITALITY & TOURISM
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Culinary Arts Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Hospitality & Tourism (1)	8	**NONE**		The Hospitality/Tourism cluster includes those careers in the culinary, hotel, and travel industries. Exposure to these careers will include hands-on experiences while providing the complete dining experience and planning that perfect vacation.
Introduction to Culinary Arts (1) 💻	9 - 10	**Recommended** Principles of Hospitality & Tourism	Food Handler (This certification is required to continue in this program of study.)	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. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills. This is an entry level course for students interested in pursuing a career in the food service industry. **Lab supply fee.**
Culinary Arts (2) **(CCMR)** 💻	10 - 12	**Required** Intro to Culinary Arts **and** Food Handler certification	Food Protection Manager	Culinary Arts is now available in all high schools as a two period laboratory FCS course, beginning with student instruction in the fundamentals and principles of the art of cooking and the science of baking, including management and production skills and techniques. Students are encouraged to pursue a national sanitation certification, a Texas culinary specialist certification or any other appropriate industry certification which would assist in immediate employment in a restaurant setting. This course would provide the foundation needed for students to progress to the Practicum in Culinary Arts the following school year. **Students MUST earn their Food Handler certification BEFORE enrolling in this course. Lab supply/uniform fee.**
Advanced Culinary Arts (2) **(A)** Students will take this course at Cy-Fair HS, Cypress Park HS, or Cypress Ridge HS.	11 - 12 Declaration of Interest form may be required if demand exceeds capacity.	**Required** Culinary Arts **and** Food Handler or Food Protection Manager certification		This advanced culinary course allows third-year culinary students the opportunity to gain additional real-world experience in a commercial kitchen. Instruction will be delivered through school-based laboratory training and through work-based arrangements such as practicum education, mentoring, and job shadowing. Lab supply/uniform fee.
Food Science K (1-science) **(A)**	11 - 12	**Required** Culinary Arts **and** three units of science (including Biology and Chemistry)		In Food Science, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem-solving. Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. Lab supply fee.
Practicum in Culinary Arts (2) **(A)** (Requires student-provided transportation to any off-campus work sites)	12 Declaration of Interest form may be required if demand exceeds capacity.	**Required** Culinary Arts **and** Food Handler or Food Protection Manager certification		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 with the goal of preparing students with a variety of skills in a fast changing workplace. The students are actually major participants in operating a restaurant, bakery and/or catering business. Lab supply/uniform fee. (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)

HUMAN SERVICES

Humsvs 1–Cosmetology

7TH/8TH GRADE
Principles of Human Services (1)
-related elective

9th grade
(take courses to meet other graduation requirements giving capacity to take block courses in later grades)

10TH GRADE
Intro to Cosmetology (1)
Cosmetology Permit

11TH GRADE
Cosmetology I (2)

12TH GRADE
*Cosmetology II (3)
*Cosmetology Operator License

EXAMPLE OCCUPATIONS

Hairdresser/ Cosmetologist
Median Wage: $27,286
Annual Openings: 8,014
10-year Growth: 25%

Skincare Specialist
Median Wage: $35,112
Annual Openings: 778
10-year Growth: 38%

Supervisor of Personal Svs Workers
Median Wage: $36,795
Annual Openings: 2,253
10-year Growth: 29%

HUMAN SERVICES
Endorsement: Public Service

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Cosmetology Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Human Services (1) related elective*	7 - 8	**NONE**		This course will enable students to investigate careers in the Human Services Career Cluster, including counseling & mental health, early childhood development, family & community services, personal care and consumer services. Each student is expected to complete the knowledge and skills essential for success in high-wage or high-demand human services careers.
Introduction to Cosmetology (1) 💻	10 May be taken in 11th grade if concurrent with Cos I	**NONE**	$25 permit fee is required and MUST be paid within 7 days of enrollment to remain in the class.	This exploratory course is required for students who are interested in a career in cosmetology, it also assists students who have an interest, but are unsure this is the career path they wish to follow. Learners explore areas such as bacteriology, sterilization and sanitation, hair styling, manicuring, shampooing, as well as the principles of hair cutting, hair coloring, skin care, and facial makeup. Connected to this is the study of careers in the personal care services industry. To be successful in this profession, students should possess skills/aptitudes relative to the industry, as well as academic knowledge and motivation. Good attendance is necessary as students earn credit hours toward state licensing requirements. **Lab kit/uniform fee.**
Cosmetology I (2) 💻	11 Declaration of Interest form may be required if demand exceeds capacity.	**Required (or concurrent)** Introduction to Cosmetology	Cosmetology kit materials recommended to earn your license and begin your career will be available for purchase.	This 2-hour block laboratory instructional sequence course continues the integration of academic, career, and technical knowledge and skills designed to provide job-specific training for employment in cosmetology careers. All the skills listed above in the Introduction course are continued for skill enhancement in this course. In addition, analysis of career opportunities, requirements, expectations, and development of workplace skills are included. Good attendance is necessary as students earn credit hours toward state licensing requirements. **Lab kit/uniform fee.**
Cosmetology II (3) **(A) (CCMR)** 💻	12	**Required** Cosmetology I	Cosmetology Operator's License	This course provides the final advanced training for employment in cosmetology careers (see list of trainings in the description of the Intro course). The course meets the Texas Department of Licensing and Regulation requirements for licensure upon completing the required credit hours of licensed instructor monitoring student classroom instruction/application and a passing grade on the state examination. Good attendance is necessary to be successful in this lucrative career path training. **Lab kit/uniform fee.**

*NOTE: Principles of Human Services is not a course within this program of study. It may be used to gain background knowledge in the human service industries, but will not count towards completing this program of study.

INFORMATION TECHNOLOGY

IT 1 – Programming & Software Dev

8TH GRADE
Principles of Computers & Coding (1)

9TH GRADE
AP Computer Science Principles (1-LOTE)
*College Credit via AP Exam
OR
Computer Science I K (1-LOTE)

10TH GRADE
Computer Science I K (1-LOTE)
OR
*Computer Science II K (1-LOTE)
*College Credit via AP Exam

11TH GRADE
*Computer Science II K (1-LOTE)
*College Credit via AP Exam
OR
*Computer Science III K (1-LOTE)
*IT Specialist-Java
*Oracle Java SE 8 Programmer

12TH GRADE
*Computer Science III K (1-LOTE)
*IT Specialist-Java
*Oracle Java SE 8 Programmer
OR
*Computer Science IV K (1)

EXAMPLE OCCUPATIONS

Computer User Support Specialist
Median Wage: $51,41
Annual Openings: 5,757
10-year Growth: 21%

Software Developer
Median Wage: $111,705
Annual Openings: 15,324
10-year Growth: 36%

Computer Programmer
Median Wage: $87,997
Annual Openings: 1,176
10-year Growth: 4%

IT 2 – Networking Systems

8TH GRADE
Principles of Computers & Coding (1)

9TH GRADE
Networking (1)
*CompTIA A+

10TH GRADE
Computer Science I K (1-LOTE)

11TH GRADE
Internetworking Technologies I (1)
*CompTIA Network+
*IT Specialist - Networking

12TH GRADE
*Internetworking Technologies II (1)
*Cisco CCNA
*CompTIA Server+

Dual Credit towards Lone Star College Networking/Cybersecurity Certificates/Degrees may be available on your campus

EXAMPLE OCCUPATIONS

Computer Network Support
Median Wage: $65,646
Annual Openings: 1,634
10-year Growth: 19%

Computer System Analyst
Median Wage: $101,716
Annual Openings: 4,985
10-year Growth: 19%

Network/Computer Systems Admin
Median Wage: $85,375
Annual Openings: 2,900
10-year Growth: 20%

IT 3 – Cybersecurity

8TH GRADE
Principles of Computers & Coding (1)

9TH GRADE
Networking (1)
*CompTIA A+

10TH GRADE
AP Computer Science Principles (1-LOTE)
*College Credit via AP Exam
OR
Computer Science I K (1-LOTE)
AND
Internetworking Technologies I (1)
*CompTIA Network+
*IT Specialist-Networking

11TH GRADE
*Internetworking Technologies II (1)
*Cisco CCNA
*CompTIA Server+

12TH GRADE
*Capstone - Cybersecurity (1)
*CompTIA Security+
AND/OR
*Practicum in Information Technology (2)

EXAMPLE OCCUPATIONS

Machinist
Median Wage: $48,732
Annual Openings: 3,385
10-year Growth: 23%

Industrial Engineering Tech
Median Wage: $62,096
Annual Openings: 787
10-year Growth: 17%

Mechanical Engineer
Median Wage: $99,937
Annual Openings: 1,755
10-year Growth: 19%

IT 4 – Web Development

8TH GRADE
Principles of Computers & Coding (1)

9TH GRADE
Computer Science I K (1-LOTE)
OR
Digital Media (1)
*Adobe Photoshop

10TH GRADE
Web Design (1)
*IT Specialist - HTML and CSS

11TH GRADE
*Web Game Development (1)

12TH GRADE
*Capstone - Web Development (1)

EXAMPLE OCCUPATIONS

Web Developer
Median Wage: $77,712
Annual Openings: 1,170
10-year Growth: 24%

Software Developer
Median Wage: $111,705
Annual Openings: 15,324
10-year Growth: 36%

Computer/Info Systems Manager
Median Wage: $155,593
Annual Openings: 3,064
10-year Growth: 26%

* Advanced Course for Endorsement or Certification impacting "Career ready" status as outlined by TEA Accountability for College, Career or Military Readiness (CCMR)
NOTE: Principles of Information Technology name changed to Principles of Computers & Coding

INFORMATION TECHNOLOGY
Endorsement: STEM

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Programming & Software Development Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Computers and Coding (1) (formerly Principles of Info Tech) 💻	7 - 8	**NONE**		Principles of Computers and Coding prepares students to adapt to emerging technologies. Students will enhance their reading, writing, computing, communication, and reasoning skills, and apply these skills to the information technology environment. Students will learn about careers in the technology field, computer hardware, appropriate software, network systems, and introductory programming.
AP Computer Science Principles (1-LOTE*) 💻	9 - 12	**Required** Algebra I This course may not be taken post Computer Science III K.	(AP Computer Science Principles Exam)	The AP Computer Science Principles course will introduce you to the essential ideas of computer science and show how computing and technology can influence the world around you. Students will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life.
Computer Science I K (1-LOTE*) 💻	9 - 12	**Required** Algebra I		Computer Science I K is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science II K.
Computer Science II K (AP A prep) (1-LOTE*) **(A)** 💻	10 - 12	**Required** Algebra II (or concurrent) **AND** Computer Science I K (or Geometry K **and** prior programming experience)	(Computer Science AP A Exam)	Computer Science II K is a programming course designed to cover the Advance Placement Computer Science AP A Exam topics. The curriculum will build upon the topics addressed in Computer Science I K. Object-oriented components in the language of Java will be stressed. Other topics include decision making, looping, arrays, inheritance, interfaces, abstract classes, Java collections, sorting, searching, and the AP Case Study.
Computer Science III K (1-LOTE*) **(A) (CCMR)** 💻	11 - 12	**Required** Computer Science II K	Oracle Java SE 8 Programmer IT Specialist - Java	Computer Science III K is a continuation of Computer Science II K and builds upon such topics as object-oriented programming, inheritance, and classes. Students go on to address advanced topics such as stacks, queues, advanced recursion, linked lists, binary trees, and advanced sorting, and searching topics in preparation for and alignment with college-level computer science.
Computer Science IV K (1) **(A)** 💻	11 - 12	**Required (or concurrent)** Computer Science III K		This course is a supervised research study/project-based class where students will apply knowledge and skills from previous Computer Science courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within two (2) weeks after enrollment in the course. The plan should specify the additional languages and/or technologies that will be studied and utilized, along with an overview of the culminating project.

* The following computer programming courses may satisfy the LOTE requirement for graduation:
AP Computer Science Principles, Computer Science I K, Computer Science II K, Computer Science III K
* Colleges and universities set their own entrance requirements. Consequently,
a student should verify admission requirements with the specific college/university.

One or more of the courses in this program of study may be available for dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

INFORMATION TECHNOLOGY
Endorsement: Business & Industry or STEM

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Networking Systems Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Computers and Coding (1) (formerly Principles of Info Tech) 💻	7 - 8	**NONE**		Principles of Computers and Coding prepares students to adapt to emerging technologies. Students will enhance their reading, writing, computing, communication, and reasoning skills, and apply these skills to the information technology environment. Students will learn about careers in the technology field, computer hardware, appropriate software, network systems, and introductory programming.
Networking (1) **(CCMR)** 💻	9 - 12	**Recommended** Principles of Computers and Coding (formerly Principles of Information Technology)	CompTIA A+ (Potential college credit for A+ certification)	Upon completion of this course, students will understand the fundamentals of computer hardware and software such that they can assemble a computer system, install an operating system, and troubleshoot any issues that arise. Other topics include preventative maintenance, networking and security. The goal of providing this training/certification is to assist students in becoming more marketable and desirable in the workplace.
Computer Science I K (1-LOTE) 💻	9 - 12	**Required** Algebra I		Computer Science I K is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science II K.
Internetworking Technologies I (1) **(CCMR)** 💻 **NOTE:** Internetworking Tech I no longer recognized by the state as an advanced course for endorsements.	10 - 12	**Recommended** Networking and Computer Science I	CCST-Networking, IT Specialist-Networking and Cisco CCNA CCST-Networking is not for CCMR in this program of study.	Internetworking Technologies I prepares students to install, operate and troubleshoot a home or small business enterprise branch network. The content of this course is in alignment with the Cisco certifications earned in Internetworking Technologies II. The goal of providing this training/certification is to assist students in becoming more marketable and desirable in the workplace.
Internetworking Technologies II 💻 **(A) (CCMR)**	11 - 12	**Required** Internetworking Technologies I	CompTIA Network+	Internetworking Technologies II prepares students to install, operate and troubleshoot a medium-sized business enterprise branch network. Completing both Internetworking Tech I and II prepares students to pass the CCNA exam, an industry-recognized certification in this field. The goal for providing this training/certification is to assist students in becoming more marketable and desirable in the workplace.

One or more of the courses in this program of study may be available for dual credit or workforce dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

INFORMATION TECHNOLOGY
Endorsement: Business & Industry or STEM

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Cybersecurity Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Computers and Coding (1) (formerly Principles of Info Tech) 💻	7 - 8	**NONE**		Principles of Computers and Coding prepares students to adapt to emerging technologies. Students will enhance their reading, writing, computing, communication, and reasoning skills, and apply these skills to the information technology environment. Students will learn about careers in the technology field, computer hardware, appropriate software, network systems, and introductory programming.
Networking (1) **(CCMR)** 💻	9 - 12	**Recommended** Principles of Computers and Coding (formerly Principles of Information Technology)	CompTIA A+ (Potential college credit for A+ certification)	Upon completion of this course, students will understand the fundamentals of computer hardware and software such that they can assemble a computer system, install an operating system, and troubleshoot any issues that arise. Other topics include preventative maintenance, networking and security. The goal of providing this training/certification is to assist students in becoming more marketable and desirable in the workplace.
AP Computer Science Principles (1-LOTE) 💻	9 - 12	**Required** Algebra I This course may not be taken post Computer Science III K.	(AP Computer Science Principles Exam)	The AP Computer Science Principles course will introduce you to the essential ideas of computer science and show how computing and technology can influence the world around you. Students will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life.
Computer Science I K (1-LOTE) 💻	9 - 12	**Required** Algebra I		Computer Science I K is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science II K.
Internetworking Technologies I (1) **(CCMR)** 💻	10 - 12	**Recommended** Networking and Computer Science I	CCST-Networking, IT Specialist-Networking and Cisco CCNA	Internetworking Technologies I prepares students to install, operate and troubleshoot a home or small business enterprise branch network. The content of this course is in alignment with the Cisco certifications earned in Internetworking Technologies II. The goal of providing this training/certification is to assist students in becoming more marketable and desirable in the workplace.
Internetworking Technologies II (2) **(A) (CCMR)** 💻	11 - 12	**Required** Internetworking Technologies I	CompTIA Network+	Internetworking Technologies II prepares students to install, operate and troubleshoot a medium-sized business enterprise branch network. Completing both Internetworking Tech I and II prepares students to pass the CCNA exam, an industry-recognized certification in this field. The goal for providing this training/certification is to assist students in becoming more marketable and desirable in the workplace.
Capstone - Cybersecurity (1) **(A) (CCMR)** 💻	12	**Required (or concurrent)** At least 2 technology courses with at least one being Networking or Internetworking Tech I ad 12th gd	CompTIA Security +	Career and Technical Education (CTE) Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students partner with mentor(s) or advisor(s) to develop a project. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts. **Lab supply fee.**
Practicum in Information Technology (2) **(A)** 💻 (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	12	**Required (or concurrent)** At least 2 technology courses with at least one being Networking or Internet Tech I.		This course allows students to apply and expand upon previously learned IT concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course.

One or more of the courses in this program of study may be available for dual credit or workforce dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

INFORMATION TECHNOLOGY
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Web Development Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Computers and Coding (1) (formerly Principles of Info Tech) 💻	7 - 8	**NONE**		Principles of Computers and Coding prepares students to adapt to emerging technologies. Students will enhance their reading, writing, computing, communication, and reasoning skills, and apply these skills to the information technology environment. Students will learn about careers in the technology field, computer hardware, appropriate software, network systems, and introductory programming.
Computer Science I K (1-LOTE) 💻	9 - 12	**Required** Algebra I		Computer Science I K is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science II K.
Digital Media (1) **(CCMR)** 💻	9 - 12	**NONE**	Adobe Photoshop	Through the study of digital media and its application in information technology, students will design and create multimedia projects that address customer needs. Students will learn skills such as creating digital graphics, digital photography, using audio editing software, and creating video files. The emphasis will be on utilizing the features in Adobe Photoshop included in the corresponding industry-recognized certification.
Web Design (1) **(CCMR)** 💻	9 - 12	**NONE**	IT Specialist-HTML and CSS	Students will learn how to design, create, and maintain web pages including campus pages on the district website. Projects will incorporate tools such as HTML, Photoshop, Animate, Fireworks, digital cameras, and scanners. The emphasis will be on utilizing the features in HTML & CSS included in the corresponding industry-recognized certification.
Web Game Development (1) **(A)** 💻	10 - 12	**Required** Web Technologies I or Web Design		Web Game Development will allow students to demonstrate creative thinking, develop innovative strategies, and use digital and communication tools necessary to develop fully functional online games. Web Game Development has career applications for many aspects of the game industry, including programming, art principles, graphics, web design, storyboarding and scripting, and business and marketing.
Capstone - Web Development (1) **(A)** 💻	12	**Required** Three (3) courses in this program of study and 12th grade		Career and Technical Education (CTE) Project-Based Capstone is a course designed for students to develop and enhance essential skills while investigating real-world problems, issues, or interests. Students partner with mentor(s) or advisor(s) to develop a project. Students conduct research, compile findings, implement project activities appropriate to student contribution, and present their work to a relevant audience that may include industry experts. **Lab supply fee.**

One or more of the courses in this program of study may be available for dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

MANUFACTURING

MANUF 1 – Manufacturing Tech

9TH GRADE
Principles of Manufacturing (1)

10TH GRADE
Diversified Manufacturing I (1)
OSHA 10-hr

11TH GRADE
*Diversified Manufacturing II (1)
AWS D1.1 Structural Steel
OR
*Precision Metal Manufacturing I (2)

12TH GRADE
*Practicum in Manufacturing (2)
OR
*Precision Metal Manufacturing II (2)
AWS D1.1 Structural Steel

EXAMPLE OCCUPATIONS

Machinist
Median Wage: $48,732
Annual Openings: 3,385
10-year Growth: 23%

Industrial Engineering Tech
Median Wage: $62,096
Annual Openings: 787
10-year Growth: 17%

Mechanical Engineer
Median Wage: $99,937
Annual Openings: 1,755
10-year Growth: 19%

MANUF 2 – Welding

9TH GRADE
Principles of Manufacturing (1)

10TH GRADE
Welding I (2)
*OSHA 10-Hour
AWS D1.1 Structural Steel

11TH GRADE
*Welding II (2)
AWS D1.1 Structural Steel

12TH GRADE
*Practicum in Manufacturing (2)

EXAMPLE OCCUPATIONS

Welder, Cutter, Solderer, or Brazer
Median Wage: $48,117
Annual Openings: 6,792
10-year Growth: 23%

Supervisor of Production Workers
Median Wage: $62,584
Annual Openings: 5,926
10-year Growth: 17%

Industrial Production Manager
Median Wage: $119,691
Annual Openings: 1,296
10-year Growth: 19%

MANUF 3 – Robotics–Manufacturing Focus
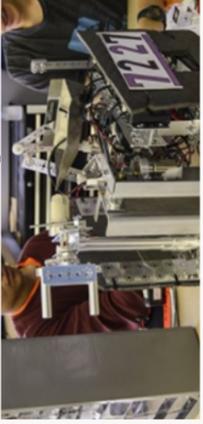
9TH GRADE
Principles of Applied Engineering (1)
OR
Principles of Manufacturing (1)

10TH GRADE
Robotics I (1)

11TH GRADE
*Robotics II K (1-math)
SACA Robotics Certification

12TH GRADE
*Practicum in Manufacturing (2)

EXAMPLE OCCUPATIONS

CNC Tool Operator
Median Wage: $46,353
Annual Openings: 1,146
10-year Growth: 10%

Semiconductor Processing Tech
Median Wage: $36,902
Annual Openings: 621
10-year Growth: 9%

Industrial Engineer
Median Wage: $100,000
Annual Openings: 1,898
10-year Growth: 26%

• Advanced Course for Endorsement or Certification impacting "Career ready" status as outlined by TEA Accountability for College, Career or Military Readiness (CCMR)

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MANUFACTURING
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
🖥	Course requires the use of technology.

Manufacturing Technology Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Manufacturing (1)	8 - 11	**NONE**		Principles of Manufacturing will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting, relevant activities and problems in a manufacturing setting. Students will design, produce, and assess products, services, and systems. They will use a variety of hand tools, power tools, machinery, computer hardware, and software applications to complete assignments and projects individually or with teams. **Lab supply fee.**
Diversified Manufacturing I (1) 🖥	9 - 12	**Required** Principles of Manufacturing	OSHA 10-hour	This course allows students to gain knowledge and skills in the application, design, production, and assessment of products, services, and industrial systems. Diversified Manufacturing I further allows students the opportunity to understand the process of mass production by using a wide variety of materials and manufacturing techniques. Knowledge about career opportunities, requirements, and employer expectations are emphasized in preparation for workplace success. **Lab supply fee.**
Diversified Manufacturing II (1) **(A) (CCMR)** 🖥	10 - 12	**Required** Diversified Manufacturing I	AWS D1.1 Structural Steel	This course builds on knowledge and skill developed in Diversified Manufacturing I. Students will continue to develop advanced skills related to the manufacturing sector through the use of design software, CNC programming and machining, as well as traditional fabrication tools. **Lab supply fee.**
Precision Metal Manufacturing I (2) **(A)** 🖥	11 - 12	**Required** Diversified Manufacturing I		This course will provide the knowledge, skills, and technologies required for employment in precision machining. While the course is designed to provide necessary skills in machining, it also provides a real-world foundation for any engineering discipline. This course may address a variety of materials such as plastics, ceramics, and wood in addition to metal. **Lab supply fee.**
Precision Metal Manufacturing II (2) **(A) (CCMR)** 🖥	12	**Required** Precision Metal Manufacturing I	AWS D1.1 Structural Steel	This course will provide students advanced knowledge, skills, and technologies required for employment in precision machining. While this course is designed to provide necessary skills in machining, it also provides a real-world foundation for any engineering discipline. This course addresses a variety of materials such as plastics, ceramics, and wood in addition to metal. Students will develop knowledge of the concepts and skills related to these systems and apply them to personal and career development. **Lab supply fee.**
Practicum in Manufacturing (2) **(A)**	12	**Required** Robotics I, Diversified Manufacturing I, Precision Metal Manufacturing I, or Welding I (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)		This course allows students to apply manufacturing concepts and principles learned in the classroom to the workplace. During the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

MANUFACTURING
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Welding Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles Manufacturing (1)	8 - 11	**NONE**		Principles of Manufacturing will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting, relevant activities and problems in a manufacturing setting. Students will design, produce, and assess products, services, and systems. They will use a variety of hand tools, power tools, machinery, computer hardware, and software applications to complete assignments and projects individually or with teams. **Lab supply fee.**
Welding I (2) **(CCMR)**	9 - 12	**Required** Principles of Manufacturing	OSHA 10-Hour AWS D1.1 Structural Steel	Welding I provides the knowledge, skills, and technologies required for employment in metal technology systems. Personal and industrial safety standards will be emphasized along with instruction of hand and power tool use. Basic surface/workplace preparation, Oxygen/Acetylene torch uses, and various metal arc welding processes will be covered. Knowledge about career opportunities, requirements, and expectations and the development of workplace skills prepare students for future success. **Lab supply fee.**
Welding II (2) **(A) (CCMR)**	10 - 12	**Required** Welding I	AWS D1.1 Structural Steel	This course builds on knowledge and skill developed in Welding I. Students will continue to develop advanced skills related to the fabricating industry through the use of CNC machines, hand and power tools, welding theory, symbols, and blueprint reading. Career options and employability will further be emphasized to prepare students for future success. **Lab supply fee.**
Practicum in Manufacturing (2) **(A)**	12	**Required** Welding I, Diversified Manufacturing I, Precision Metal Manufacturing I, or Robotics I (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)		This course allows students to apply manufacturing concepts and principles learned in the classroom to the workplace. During the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

One or more of the courses in this program of study may be available for workforce dual credit at a Lone Star CyFair College campus. See the Dual Credit section in this Course Description Book for more information.

MANUFACTURING
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Robotics - Manufacturing Focus Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Principles of Applied Engineering (1) 💻	7 - 10	**NONE**		Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields of engineering and will be able to make informed career decisions. **Lab supply fee.**
Principles of Manufacturing (1)	8 - 11	**NONE**		Principles of Manufacturing will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting, relevant activities and problems in a manufacturing setting. Students will design, produce, and assess products, services, and systems. They will use a variety of hand tools, power tools, machinery, computer hardware, and software applications to complete assignments and projects individually or with teams. **Lab supply fee.**
Robotics I (1) 💻	9 - 12	**Required** Principles of Applied Engineering or Principles of Manufacturing		In Robotics I, students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry. **Lab supply fee.**
Robotics II K (1-math) **(A) (CCMR)** 💻	10 - 12	**Required** Robotics I	SACA Robotics Certification	In Robotics II K, students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs. **Lab supply fee.**
Practicum in Manufacturing (2) **(A)**	12	**Required** Robotics I, Diversified Manufacturing I, Precision Metal Manufacturing I, or Welding I (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)		This course allows students to apply manufacturing concepts and principles learned in the classroom to the workplace. During the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

TRANSPORTATION, DISTRIBUTION & LOGISTICS

TRANS1 – Automotive Technician

9th grade
Automotive Basics (1)
Safety & Pollution Prevention(S/P2)

10TH GRADE
Automotive Technology I (2)
Safety & Pollution Prevention(S/P2)
and
*Automotive Service Excellence
Entry Level (ASE)

11TH GRADE
*Automotive Technology II (2)
Safety & Pollution Prevention(S/P2)
and
*Automotive Service Excellence
Entry Level (ASE)

12TH GRADE
*Practicum in Transportation (3)
Safety & Pollution Prevention(S/P2)
and
*Automotive Service Excellence
Entry Level (ASE)

POTENTIAL OCCUPATIONS

Auto Service Tech or Mechanic
Median Wage: $44,809
Annual Openings: 6,285
10-year Growth: 10%

Bus/Truck Mechanic, Diesel Specialist
Median Wage: $50,967
Annual Openings: 3,096
10-year Growth: 19%

Supervisor of Mechanics/Installers
Median Wage: $66,535
Annual Openings: 5,019
10-year Growth: 19%

TRANSPORTATION, DISTRIBUTION & LOGISTICS
Endorsement: Business & Industry

(A)	Course with **"advanced"** topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
(CCMR)	Course includes training and testing for a certification impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness.
💻	Course requires the use of technology.

Automotive Technician Program of Study
(Complete at least 3 or more courses for 4 or more credits with at least 1 advanced, plus earn at least 1 CCMR certification.)

Course (credits)	Grade Level(s)	Prerequisites	Certification	Description
Automotive Basics (1) **NOTE:** Should not be taken concurrently with or after Automotive Technology I.	9 - 12	**NONE**	Safety & Pollution Prevention (S/P2)	This introduction course will allow students to gain knowledge in the repair, maintenance, and servicing 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 safety, tool identification, proper tool use, and employability. **Lab supply fee.**
Automotive Technology I (2) **(CCMR)** 💻	10 - 12 (priority to 11th grade)	**NONE**	Safety & Pollution Prevention (S/P2) Multiple Entry Level Automotive Service Excellence (ASE) certs	In Automotive Technology I, students gain knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This course provides specific training for entry-level employment in the automotive technician career field. Areas covered include use of repair manuals and service and repair of basic components of an automobile such as fuel systems, engines, emission control, power trains, chassis, electrical systems, brakes, and heating and air conditioning. Entrepreneurship, safety, leadership, and career opportunities are included. **Lab supply fee.**
Automotive Technology II (2) **(A) (CCMR)** 💻	11 - 12	**Required** Automotive Technology I	Safety & Pollution Prevention (S/P2) Multiple Entry Level Automotive Service Excellence (ASE) certs	In Automotive Technology II, students gain advance knowledge and skills in the repair, maintenance, and diagnosis of vehicle systems. This course provides specific training for employment in the automotive technician career field. Areas covered include use of repair manuals and service and repair of basic components of an automobile such as fuel systems, engines, emission control, power trains, chassis, electrical systems, brakes, and heating and air conditioning. Entrepreneurship, safety, leadership, and career opportunities are included. **Lab supply fee.**
Practicum in Transportation Systems (3) **(A) (CCMR)** 💻	12	**Required** Automotive Technology I and 12th gd (The approved training site may require applicant to meet certain job requirements such as age, specific knowledge and physical ability to be considered for employment.)	Safety & Pollution Prevention (S/P2) Multiple Entry Level Automotive Service Excellence (ASE) certs	This course allows students to apply transportation, distribution, and logistics concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain knowledge of professional standards as required by business and industry. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 10 hours per week at an approved training site and must be employed at that site within two (2) weeks after enrollment in the course. **Lab supply fee.**

General Career Development

GENERAL CAREER DEVELOPMENT

9th Grade
Fundamentals of Business Communication (formerly BIM I) or other courses needed for graduation

10th Grade
General Employability Skills (1)

11th Grade
Student to Industry Connections (1)

12th Grade
*Career Preparation (2)

Certifications
Food Handler

Careers
Varies based on the industry. See information provided in the programs of study for specific industries provided on the pages preceding this one.

* Meets advanced course requirement for CTE-related endorsements.

For more information, see your counselor, CTE teachers, or www.cfisd.net/CTE

This program of study culminates with a supervised on-the-job training experience. If you are looking for a traditional unsupervised work site experience, consider enrolling in one of the many other programs of study listed on the pages preceding this one.

General Employability Skills   **1 credit**
This course will provide students with prerequisite skills for general employment and focuses on work-related decision making, working as a team, discovering job interests, appropriate personal grooming needs for the work place, and self-awareness of work environment preferences.
- Grades 10 - 12
- Lab supplies or fee may be required

Student to Industry Connections   **1 credit**
The Student to Industry Connection course provides students with the opportunity to develop professional relationships with experienced individuals within the student's chosen program of study and to demonstrate necessary skills. The central focus of this course is to prepare students to be 21st century career ready through interaction with a seasoned workplace mentor.
- Grades 11 - 12
- Recommended prerequisite: General Employability Skills
- Lab supplies or fee may be required

Career Preparation   **2 credits**
(supervised on-the-job training)
Certification: Food Handler
This career course will be taught in a two-hour block daily. It will provide students with on-campus activities that will develop employability skills leading to supported employment or internship in the community. On-campus training will be provided with in-class activities relating to students' actual occupations. On-the-job training will be provided by the business community. The students will be under the supervision of the teacher or teacher's assistant while undergoing on-the-job training that fits in with a student's ability and interest.
- Grades 11 - 12
- Recommended prerequisite: General Employability Skills
- Lab supplies or fee may be required

Advanced CTE Courses for Endorsements by Program of Study

(Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.)

Agriculture, Food, & Natural Resources

Agricultural Technology & Mechanical Systems (Ag Mech)
- Ag Equipment Design & Fabrication
- Capstone - Ag Mech
- Practicum in Ag, Food, & Natural Resources

Animal Science
- Advanced Animal Science K
- Practicum in Ag, Food, & Natural Resources
- Veterinary Medical Applications

Environmental and Natural Resources
- Practicum in Ag, Food, & Natural Resources
- Range Ecology Management

Plant Science
- Advanced Floral Design
- Advanced Plant & Soil Science K
- Capstone - Plant Science
- Practicum in Ag, Food, & Natural Resources

Architecture & Construction

Architectural Drafting & Design
- Architecture Design II
- Capstone - Architecture
- Practicum in Architectural Design
- Practicum in Architectural Design I Workforce
- Practicum in Architectural Design II Workforce

Construction
- Construction Technology II
- Mill & Cabinetmaking Technology
- Practicum in Construction Technology

Interior Design
- Architecture Design II
- Capstone - Interior Design

Arts, A/V Technology & Communications

Digital Communications - Video Focus
- Audio/Video Production II
- Practicum in Audio/Video Production

Digital Communications - Audio Focus
- Digital Audio Technology II
- Practicum in Audio/Video Production

Graphic Design & Interactive Media
- Animation II
- Practicum in Animation

Fashion Design
- Capstone - Fashion Design
- Fashion Design II

Business, Marketing & Finance

Accounting & Financial Services
- Accounting II K
- Practicum in Entrepreneurship I/II
- Securities & Investments

Business Management
- Business Management
- Practicum in Entrepreneurship I/II

Entrepreneurship
- Practicum in Entrepreneurship I/II

Marketing & Sales
- Advanced Marketing
- Practicum in Entrepreneurship I/II
- Social Media Marketing
- Sports & Entertainment Marketing II

Education & Training

Teaching & Training
- Teacher Prep I (Instructional Practices)
- Teacher Prep II (Practicum in Education & Training)

Early Learning
- Early Learning I (Child Guidance)
- Early Learning II (Practicum in Early Learning)

Engineering

Engineering Foundations
- Capstone - Engineering
- Engineering Design & Presentation II
- Engineering Design & Problem Solving K
- Practicum in STEM

Robotics - Engineering Focus
- Capstone - Engineering
- Engineering Design & Problem Solving K
- Practicum in STEM
- Robotics II K

Health Science

Diagnostic & Therapeutic Services
- Anatomy & Physiology K
- Health Science Theory/Clinicals (rotations)
- Pathophysiology K
- Practicum in Health Science

Hospitality & Tourism

Culinary Arts
- Advanced Culinary Arts
- Food Science K
- Practicum in Culinary Arts

Advanced CTE Courses for Endorsements by Program of Study

(Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.)

Human Services	**Information Technology**
Cosmetology	*Programming & Software Development*
• Cosmetology II	• Computer Science II K
	• Computer Science III K
	• Computer Science IV K
	Networking Systems
	• Internetworking Technologies II
	Cybersecurity
	• Capstone - Cybersecurity
	• Internetworking Technologies II
	• Practicum in Information Technology
	Web Development
	• Capstone - Web Development
	• Web Game Development
Manufacturing	**Transportation, Distribution, & Logistics**
Manufacturing Technology	*Automotive Technician*
• Diversified Manufacturing II	• Automotive Technology II
• Practicum in Manufacturing	• Practicum in Transportation Systems
• Precision Metal Manufacturing I	
• Precision Metal Manufacturing II	
Welding	
• Welding II	
• Practicum in Manufacturing	
Robotics - Manufacturing Focus	
• Robotics II K	
• Practicum in Manufacturing	

CTE Certifications by Program of Study

*Industry-Based Certification IBC impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness. **(CCMR)**

Agriculture, Food, & Natural Resources
Agricultural Technology and Mechanical Systems (Ag Mech)
*AWS D9.1 Sheet Metal Welding - (Ag Mechanics)
*AWS D1.1 Structural Steel - (Ag Equipment, Capstone-AgMech)
OSHA 10-hr card (Ag Mechanics)
Quality Counts (Principles of Ag)

Animal Science
*Certified Veterinary Assistant I-CVA I (Vet Med Applications)
Certified Veterinary Assistant II-CVA II (Practicum in Ag)
*Elanco Fundamentals of Animal Science (Livestock Production)
*Elanco Veterinary Med Applications Cert (Vet Med Applications)
*Equine Mgmt & Evaluation Certification - Equine (Equine Science)
Quality Counts (Principles of Ag)
TX Beef Quality Assurance (Livestock Production)

Environmental and Natural Resources
Angler Safety (Wildlife)
*Ducks Unlimited (Forestry)
Boater Safety (Wildlife)
Hunter Safety (Wildlife)
Quality Counts (Principles of Ag)

Plant Science
*BASF Plant Science Certification (Adv Plant & Soil Science K)
*Benz Principles of Floral Design (Capstone-Plant Science)
Quality Counts (Principles of Ag)
*TSFA Knowledge-based Floral Cert (Floral Design)
*TSFA Level I Floral Cert (Floral Design)
TSFA Level II Floral Cert (Advanced Floral Design)

Architecture & Construction
Architectural Drafting and Design
*Autodesk AutoCAD (Architectural Design II)
*Autodesk Revit (Architectural Design II)

Construction
OSHA 10-hr card (Construction Tech I)
*NCCER CORE (Construction Tech I)
*NCCER Carpentry Level 1 (Construction Tech II)

Interior Design
*Autodesk AutoCAD (Architectural Design II)
*Autodesk Revit (Architectural Design II)

Arts, A/V Technology & Communications
Digital Communications - Video Focus
Adobe After Effects (Audio/Video Production II)
*Adobe Premiere Pro (Audio/Video Production I)
FAA Remote Drone Pilot (Practicum in Audio Video Production)

Digital Communications - Audio Focus
*Adobe Premiere Pro (Audio/Video Production I)
FAA Remote Drone Pilot (Practicum in Audio Video Production)

Fashion Design
*Adobe Photoshop (Digital Media)

Graphic Design and Interactive
*Adobe After Effects (Practicum in Animation)
Adobe Animate (Animation I)
*Adobe Photoshop (Digital Media)
*Autodesk Maya (Animation II)

Business, Marketing & Finance
Accounting & Financial Services
*Microsoft Excel Expert (Fundamentals of Bus Com Tech-BIM I)
Microsoft Word Expert (Fundamentals of Bus Com Tech-BIM I)
*NOCTI Accounting Foundations (Accounting I)
*QuickBooks Certified User (Accounting II K)

Business Management
*Microsoft Access Expert (Bus Com Tech-BIM II)
*Microsoft Excel Expert (Fundamentals of Bus Com Tech-BIM I)
*Microsoft Word Expert (Fundamentals of Bus Com Tech-BIM I)
*PMI Project Management Ready (Bus Com Tech-BIM II)

Entrepreneurship
*Entrepreneurship & Small Business (Entrepreneurship)
Microsoft Excel Expert (Fundamentals of Bus Com Tech-BIM I)
Microsoft Word Expert (Fundamentals of Bus Com Tech-BIM I)

Marketing & Sales
Adobe Photoshop (Digital Media)
*Entrepreneurship & Small Business (Entrepreneurship)
*Real Estate Sales Agent License (Practicum in Entrepreneurship)
Stukent Social Media Certification (Social Media Marketing)

Education & Training
Teaching & Training
CFISD Letter of Intent to Interview (Senior in Teacher Prep I/II)
*Educational Aide I (Senior in Teacher Prep I/II)

Early Learning
AHA Heartsaver CPR/First Aid (Early Learning I)
CFISD Letter of Intent to Interview (Senior in Early Learning I/II)
*Educational Aide I (Senior in Early Learning I/II)

Engineering
Engineering Foundations
*Autodesk Inventor (Engineering Design & Presentation II)

Robotics - Engineering focus
*SACA Robotics Certification (Robotics II K)

CTE Certifications by Program of Study

*Industry-Based Certification IBC impacting "career ready" status as outlined by the TEA Accountability System for **C**ollege, **C**areer or **M**ilitary **R**eadiness. **(CCMR)**

Health Science
Diagnostic & Therapeutic Services
AHA Basic Life Support-BLS (Health Science Theory/Clinicals)
AHA Heartsaver CPR/First Aid (Principles of Health Science)
*Certified EKG Technician (Health Science Theory/Clinicals)
*Certified Nurse Aide-CNA (Practicum in Health Science)
OSHA 10-hr card (Health Science Theory/Clinicals)
*Patient Care Technician (Practicum in Health Science)
*Pharmacy Technician (Practicum in Health Science)
*Registered Dental Assistant (Practicum in Health Science)

Hospitality & Tourism
Culinary Arts
Food Handler (Intro to Culinary Arts)
*Food Protection Manager (Culinary Arts)

Human Services
Cosmetology
Cosmetology Permit (Intro to Cosmetology)
*Cosmetology Operator License (Cosmetology II)

Information Technology
Cybersecurity
CCST-Networking (Internetwkng Tech I)
*Cisco Certified Network Associate-CCNA (Internetwkng Tech I)
*Comp TIA A+ (Networking)
*Comp TIA Network+ (Internetworking Technologies II)
*Comp TIA Security+ (Capstone-Cybersecurity)
*IT Specialist - Networking (Internetworking Technologies I)

Networking Systems
CCST-Networking (Internetwkng Tech I)
*Cisco Certified Network Associate-CCNA (Internetwkng Tech I)
*Comp TIA A+ (Networking)
*Comp TIA Network+ (Internetworking Technologies II)
*IT Specialist - Networking (Internetworking Technologies I)

Programming & Software Development
*IT Specialist - Java (Computer III K)
*Oracle Certified Assoc Java SE 8 Programmer (Comp Sci III K)

Web Development
*Adobe Photoshop (Digital Media)
*IT Specialist - HTML and CSS (Web Design)

Manufacturing
Manufacturing Technology
*AWS D1.1 Structural Steel - (Diversified Manufacturing II, Precision Metal Manufacturing II)
OSHA 10-hr card (Diversified Manufacturing I)

Welding
*AWS D1.1 Structural Steel - (Welding I & II)
OSHA 10-hr card (Welding I)

Robotics - Manufacturing Focus
*SACA Robotics Certification (Robotics II K)

Transportation, Distribution, & Logistics
Automotive Technician
*ASE Air Conditioning/Heating
*ASE Auto Transmission
*ASE Automobile Service Technology
*ASE Brakes
*ASE Electronic Systems
*ASE Engine Performance
*ASE Engine Repair
*ASE Maintenance Light Repair
*ASE Manual Drive Train
*ASE Suspension & Steering
*ASE Mechanical & Electrical Components
*ASE Structural Analysis & Damage Repair
*ASE Non-Structural Analysis & Damage Repair
Safety & Pollution Prevention-S/P2 (Auto Basics, Auto I, II, Practicum)

> Students earn 2 - 3 ASE certifications in each of the following: Auto I, Auto II, and Auto Practicum. All certifications are Entry Level.

General Career Development
Food Handler (Career Preparation)

VOCATIONAL TRAINING COURSES FOR STUDENTS IN SPECIAL EDUCATION

LEADERSHIP

Business Media Production Systems   2 - 4 credits
Business Media Production Systems is a two-hour block course for students with disabilities that provides training in following safety procedures, operating equipment, maintaining orders, taking and filling orders. This course includes career opportunities and work experience related to printing, silk screening, embossing, and laminating.
- Recommendation by the IEP committee required

Commercial Foods   2 - 4 credits
This vocational course for students with disabilities provides instruction in the use of maintenance equipment, production of foods, job opportunities, and tasks involved in restaurant-type facilities. This course encompasses on-site training at the Carlton Center and community-based instruction opportunities.
- Recommendation by the IEP committee required

Vocational Adjustment Class (VAC)   1- 8 credits
The VAC class, or supervised employment, is a work/study program designed to transition students with disabilities into the world of work. Vocational training and job experience are combined with academic courses that lead to development of employment potential. VAC students must enroll in courses that prepare them for state required assessments. Once the testing requirements are satisfied, the student may enroll in VAC full-time as the IEP committee deems appropriate. The decision is based upon the student's age and individual needs; however, the student should be at least sixteen years old. Occupational Training is recommended as a prerequisite, concurrent enrollment, or as determined by an IEP committee.
- Prerequisite: Occupational Training or concurrent enrollment
- Recommendation by the IEP committee required

Occupational Training   1 - 2 credits
Occupational Training is a course to help special education students use knowledge, educational, and career information to set and achieve career goals. The course emphasizes the job application process, the interview, the employer, social skills, and practical consumer life skills. This course is intended to be a prerequisite for VAC or the student should be enrolled concurrently.
- Recommendation by the IEP committee required

Leadworthy
1/2 credit
Leadworthy The Course is designed to develop personal responsibility, leadership, and professional skills through explicit character building participatory learning experiences. The course provides students the opportunity to develop an awareness of personal image, a healthy self-concept, and healthy relationships. Students learn the concepts of consequential thinking and principal-based decision making. Students examine their awareness of social media, the effects of peer pressure and bullying, along with the effective strategies to counteract those effects. This course will provide students opportunities to improve their public speaking and communication skills and their personal vision, mission statement, and goals. They will develop an understanding of what it means to be an effective member of the community through community service.
- Grades 9 - 12

Student Leadership   1/2-1 credit
Student Leadership is a course for students who seek opportunities to expand and deepen their group and individual leadership skills to positively impact their own lives and community. Building on collaborative skills and habits of mind, students gain knowledge and expertise in leadership skills including goal setting, effective communication, organization, time management, and collaborative strategies. The course prepares students not only for active participation in school but also in their community. Students solve relevant and current school and community issues by working collaboratively and independently on high-level, real-world tasks such as project proposals, portfolios, and presentations.
The course is adaptable across various student needs and student populations. In some schools, the course is customized to meet the needs of formal student organizations such as student council.
- Grades 11 - 12
- Must be student leaders

Peer Assistance Leadership (PALs) I-II   1-2 credits

The Peer Assistance and Leadership (PAL) program focuses on working with elementary, middle, and high school age youth. Participants receive effective training in resiliency strategies. Course content and interactive activities combat issues like school violence, drug use/abuse, teen pregnancy, gang participation, school dropouts, and/or behavior problems.

PAL began in 1980 as a peer mentoring program, commonly referred to as "peer helping", by combining peer assistance and peer leadership strategies originally developed in the 1970's. PAL applies these basic prevention strategies by implementing the program as informal extra-curricular activities, or as structured, evidence/curriculum-based programs. The outcomes identified through implementation of the PAL program in a school setting are a reduction in substance use/abuse, an increase in academic performance, a reduction of absences/truancy, a reduction of discipline referrals to the school office, and an increase in positive decision-making skills and risk resiliency. Parents and school administrators note a favorable perception of the program effectiveness. Students selected for PALs must complete an application, submit recommendations, and schedule an interview with the PALs sponsor.

- Grades 11-12

Air Force Junior ROTC   1 - 4 credits

Air Force Junior Reserve Officer Training Corps (AFJROTC) is a voluntary program for motivated students. The mission of AFJROTC is to develop citizens of character dedicated to serving their nation and community. The objectives of AFJROTC are to educate and train high school cadets in citizenship, promote community service, instill responsibility, character, and self-discipline, and provide instruction in air and space fundamentals. The program is divided into three courses of instruction, Aerospace Science, Leadership Education, and Health and Wellness. Aerospace Science (AS) acquaints students with the elements of aerospace and the aerospace environment. Aerospace Science (AS) introduces them to the principles of aircraft flight and navigation, the history of aviation, development of air power, contemporary aviation, human requirements of flight, cultural and global awareness, the space environment, space programs, space technology, rocketry, propulsion, the aerospace industry, astronomy, and survival. Leadership Education (LE) develops leadership skills and acquaints students with the practical application of life skills. Leadership Education emphasizes discipline, responsibility, leadership, followership, citizenship, customs and courtesies, cadet corps activities, study habits, time management, communication skills, career opportunities, life skills, financial literacy, management skills, and drill and ceremonies. The Wellness Program objective is to motivate cadets to lead healthy, active lifestyles beyond program requirements and into their adult lives. The exercise programs are focused upon individual base line improvements with the goal of achieving a national standard as calculated by age and gender.

- Grades 9-12
- Lab supplies or fee may be required.

Students in AFJROTC may participate in drill competitions or performances requiring up to 8 hours of after school practice weekly.

Team Sport Officiating   1 credit

Students enrolled in Team Sport Officiating learn rules and regulations of selected team sports. Skills students will develop aiding in team sport competitions include communication, decision making, and conflict management. Students will be introduced to the rules of the games and officiating mechanics based on approved University Interscholastic League (UIL) association specifications which will form a foundation for a lifetime avocation in officiating. Additional time, outside of classroom instruction, may be required to fulfill officiating completion for specific sports. Students will develop a personal fitness plan and safety plan that directly relates to the needs of an official. Students will apply time management skills and adhere to professional responsibilities and standards including the Sports Officials Code of Ethics.

Public Notification of Nondiscrimination in Career and Technical Education Programs

Cypress-Fairbanks ISD offers support to school district for career and technical education programs in agriculture, architecture, arts/communication, business, education & training, finance, health science, hospitality, human services, information technology, manufacturing, marketing, STEM, and transportation. Admission to these programs is based on enrollment in Cypress-Fairbanks ISD secondary schools.

It is the policy of Cypress-Fairbanks ISD not to discriminate on the basis of race, color, national origin, sex or handicap in its CTE 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.

It is the policy of Cypress-Fairbanks ISD not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended.

Cypress-Fairbanks ISD will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and CTE programs.

For information about your rights or grievance procedures, contact the Title IX Coordinator, Deborah Stewart, and/or the Section 504 Coordinator, Assistant Superintendent of Education Support Services, at 11440 Matzke Road, Cypress, TX 77429, 281-897-4000.

Comunicado público sobre la no discriminación en los programas de educación profesional y técnica

Cypress-Fairbanks ISD ofrece programas de educación profesional y técnica para la agricultura, arquitectura, bellas artes/comunicaciones, negocios, educación y capacitación, finanzas, ciencias de la salud, hospitalidad, servicios humanos, tecnología, manufactura, mercadeo, STEM y transporte. La admisión a estos programas se basa en el número de estudiantes inscritos en las escuelas secundarias de Cypress-Fairbanks ISD.

Es norma de Cypress-Fairbanks ISD no discriminar por motivos de raza, color, origen nacional, sexo o impedimento en sus programas, servicios o actividades de CTE, tal como lo requieren el Título VI de la Ley de Derechos Civiles de 1964, en su forma enmendada; el Título IX de las Enmiendas en la Educación de 1972 y la Sección 504 de la Ley de Rehabilitación de 1973, en su forma enmendada.

Es norma de Cypress-Fairbanks ISD no discriminar por motivos de raza, color, origen nacional, sexo, impedimento o edad, en sus procedimientos de empleo, tal como lo requieren el Título VI de la Ley de Derechos Civiles de 1964, en su forma enmendada; el Título IX de las Enmiendas en la Educación, de 1972, la ley de Discriminación por Edad, de 1975, en su forma enmendada, y la Sección 504 de la Ley de Rehabilitación de 1973, en su forma enmendada.

Cypress-Fairbanks ISD tomará las medidas necesarias para asegurar que la falta de habilidad en el uso del inglés no sea un obstáculo para la admisión y participación en todos los programas educativos y CTE.

Para información acerca de sus derechos o sobre los procedimientos de quejas, comuníquese con la Coordinadora del Título IX, Deborah Stewart, y/o el Coordinador de la Sección 504, Superintendente Asistente de la Services de Apoyo Educativo, en el 11440 Matzke Road, Cypress, TX 77429, 281-897-4000.

Notes Page