High School

Course Offerings and Descriptions

2019-2020
<table>
<thead>
<tr>
<th>High Schools</th>
<th>Address</th>
<th>City, State</th>
<th>Zip Code</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cy-Fair High School</td>
<td>22602 Hempstead Hwy.</td>
<td>Houston, TX</td>
<td>77429</td>
<td>281.897.4600</td>
</tr>
<tr>
<td>Bridgeland High School</td>
<td>10707 Mason Road</td>
<td>Cypress, TX</td>
<td>77433</td>
<td>832.349.7600</td>
</tr>
<tr>
<td>Cypress Creek High School</td>
<td>9815 Grant Rd.</td>
<td>Houston, TX</td>
<td>77070</td>
<td>281.897.4200</td>
</tr>
<tr>
<td>Cypress Falls High School</td>
<td>9811 Huffmeister Rd.</td>
<td>Houston, TX</td>
<td>77095</td>
<td>281.856.1000</td>
</tr>
<tr>
<td>Cypress Lakes High School</td>
<td>5750 Greenhouse Rd.</td>
<td>Katy, TX</td>
<td>77449</td>
<td>281.856.3800</td>
</tr>
<tr>
<td>Cypress Park High School</td>
<td>7425 Westgreen Blvd.</td>
<td>Cypress, TX</td>
<td>77433</td>
<td>346.227.6000</td>
</tr>
<tr>
<td>Cypress Ranch High School</td>
<td>10700 Fry Rd.</td>
<td>Cypress, TX</td>
<td>77433</td>
<td>281.373.2300</td>
</tr>
<tr>
<td>Cypress Ridge High School</td>
<td>7900 N. Eldridge Parkway</td>
<td>Houston, TX</td>
<td>77041</td>
<td>281.807.8000</td>
</tr>
<tr>
<td>Cypress Springs High School</td>
<td>7909 Fry Rd.</td>
<td>Cypress, TX</td>
<td>77433</td>
<td>281.345.3000</td>
</tr>
<tr>
<td>Cypress Woods High School</td>
<td>13550 Woods Spillane Blvd.</td>
<td>Cypress, TX</td>
<td>77429</td>
<td>281.213.1800</td>
</tr>
<tr>
<td>Jersey Village High School</td>
<td>7600 Solomon St.</td>
<td>Houston, TX</td>
<td>77040</td>
<td>713.896.3400</td>
</tr>
<tr>
<td>Langham Creek High School</td>
<td>17610 F.M. Rd. 529</td>
<td>Houston, TX</td>
<td>77095</td>
<td>281.463.5400</td>
</tr>
<tr>
<td>Windfern School of Choice</td>
<td>12630 Windfern Rd.</td>
<td>Houston, TX</td>
<td>77064</td>
<td>281.807.8684</td>
</tr>
</tbody>
</table>
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, or college courses taken for dual credit.

New Students

A senior high school student new to the school district should report to the registrars’ office with the following documents.

1. A birth certificate
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:

<table>
<thead>
<tr>
<th></th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polio</td>
<td>3 doses with one dose on or after the 4th birthday</td>
</tr>
<tr>
<td>DTP/DtaP</td>
<td>For 8-12th grades; 3 doses with one dose on or after the 4th birthday</td>
</tr>
<tr>
<td>TDAP booster</td>
<td>1 dose for 8th-12th graders; booster needed every 10 years</td>
</tr>
<tr>
<td>MMR (Measles, Mumps, Rubella)</td>
<td>2 doses; 1st dose on or after the 1st birthday</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>3 doses</td>
</tr>
<tr>
<td>Varicella (chicken Pox)</td>
<td>2 doses; with 1st dose on or after the 1st birthday or parent/physician statement of chicken pox illness</td>
</tr>
<tr>
<td>Quadrivalent Meningococcal</td>
<td>For 7-12th grades; 1 dose on or after 10th birthday</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>7-9th grades; 2 doses; 1st does on or after 1st birthday</td>
</tr>
</tbody>
</table>

   Proof of DT booster and/or second measles vaccine must be presented to the school nurse at the beginning of the semester in which they are 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.state.tx.us/immunize/school/default.shtm](http://www.dshs.state.tx.us/immunize/school/default.shtm)

3. 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.)

4. A copy of his/her STAAR Confidential Student Report for the most recent test administration (students enrolling from another Texas school)

5. Social Security number

6. Proof of residency in the district (lease agreement, proof of home ownership, etc.)

Returning Students

Students who have already registered but must have a schedule change due to the situations listed below must call the school 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.

A wide variety of electives are found among the courses offered. 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

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

Course Selection and Request for Changes

Students will select courses for the next school year during the spring semester. Factors to be considered in selecting courses are

• 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.

A decision of this nature should be considered with parental aid. All requests for changes must be submitted in writing by the last day of the spring semester. The following guidelines will be used in honoring changes/requests made after that date.

1. Changes will be made during the first three weeks (first 15 days) 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, 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 third week (first 15 days) of each semester.

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

If a student withdraws from a course during the first three weeks of either semester for the reasons listed on page 2, the course will not be shown on the student’s record. A student withdrawing from a course after the first three weeks will receive no credit for the course. The student’s record will show a “WD” for the semester in which the withdrawal is made. The course will count as one attempted with no credit or grade points allowed. This course will also be calculated in the grade point average and affect class rank.

“K” (Accelerated) and Advanced Placement Courses

K-level (accelerated level) 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 tested for the gifted program annually through the Open Referral Period beginning October 1 and ending the last school day in November. If you need more information about gifted students and the gifted program, please visit the HORIZONS website and view the PDF, “Should I Refer My Child?” 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

### English
- English I K or HORIZONS
- English II K or HORIZONS
- English III K, AP, or HORIZONS
- English IV K, AP, or HORIZONS

### Mathematics
- Geometry K or HORIZONS
- Algebra II K or HORIZONS
- College Algebra K or HORIZONS
- Pre-Calculus K or HORIZONS
- Calculus AP AB or HORIZONS
- Calculus AP BC or HORIZONS
- Statistics AP or HORIZONS
- Advanced Quantitative Reasoning K

### Social Studies
- World History K, AP, or HORIZONS
- World Geography K or HORIZONS
- World Area Studies K
- 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 K or HORIZONS
- Macro Economics AP or HORIZONS

### Science
- Biology K 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
- Earth and Space Science K or HORIZONS
- Engineering Design & Problem Solving K
- Forensics K
- Advanced Animal Science K
- Advanced Plant and Soil K
- Pathophysiology K

### Languages Other Than English
- Spanish III K
- Spanish IV-V K or AP
- Spanish VI K
- Spanish for Native Speakers III K
- Spanish for Native Speakers IV AP
- French III K
- 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

### Computer Science
- Computer Science Principles AP
- Computer Science I K
- Computer Science II K
- Computer Science III K
- Project-based Research in Computer Science 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 - Cy-Fair and Cypress-Fairbanks ISD

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

#### 2019-2020 Academic Courses

<table>
<thead>
<tr>
<th>DCollege Course</th>
<th>Credit Hours</th>
<th>Contact Hours</th>
<th>High School Credit Course Taken on High School Campus</th>
<th>Course Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGLISH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1301 (Comp and Rhet. 1)</td>
<td>3</td>
<td>48</td>
<td>English III K A (fall)</td>
<td>11</td>
</tr>
<tr>
<td>ENGL 1302 (Comp and Rhet 2)</td>
<td>3</td>
<td>48</td>
<td>English III K B (spring)</td>
<td>11</td>
</tr>
<tr>
<td>ENGL 1301 (Comp and Rhet. 1)</td>
<td>3</td>
<td>48</td>
<td>English IV K A (fall)</td>
<td>12</td>
</tr>
<tr>
<td>ENGL 1302 (Comp and Rhet. 2)</td>
<td>3</td>
<td>48</td>
<td>English IV K B (spring)</td>
<td>12</td>
</tr>
<tr>
<td>ENGL 2322 (Survey of British Lit)</td>
<td>3</td>
<td>48</td>
<td>AP English IV A (fall)</td>
<td>12</td>
</tr>
<tr>
<td>ENGL 2323 (Survey of British Lit)</td>
<td>3</td>
<td>48</td>
<td>AP English IV B (spring)</td>
<td>12</td>
</tr>
<tr>
<td><strong>MATHEMATICS</strong></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>MATH 1314 (College Algebra)</td>
<td>3</td>
<td>48</td>
<td>Independent Study in Math (College Algebra K) (full year)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>MATH 1342 (Statistics)</td>
<td>3</td>
<td>48</td>
<td>AP Statistics (full year)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>MATH 1316 (Trigonometry)</td>
<td>3</td>
<td>48</td>
<td>Pre-Calculus K A (fall)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>MATH 2412 (Pre-Calculus)</td>
<td>4</td>
<td>80</td>
<td>Pre-Calculus K B (spring)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>MATH 2413 (Calculus I)</td>
<td>4</td>
<td>80</td>
<td>AP Calculus AB (full year)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>MATH 2413 (Calculus I)</td>
<td>4</td>
<td>80</td>
<td>AP Calculus BC A (fall)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>MATH 2414 (Calculus II)</td>
<td>4</td>
<td>80</td>
<td>AP Calculus BC B (spring)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td><strong>SCIENCE</strong></td>
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<td></td>
<td></td>
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<tr>
<td>BIOL 1406 (Biology I)</td>
<td>4</td>
<td>96</td>
<td>AP Biology II (fall)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>BIOL 1407 (Biology II)</td>
<td>4</td>
<td>96</td>
<td>AP Biology II (spring)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>BIOL 2404 (Intro to A &amp; P)</td>
<td>4</td>
<td>96</td>
<td>Introduction to Anatomy &amp; Physiology (full year)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>CHEM 1411 (Chemistry I)</td>
<td>4</td>
<td>96</td>
<td>AP Chemistry (full year)</td>
<td>11 &amp; 12</td>
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<tr>
<td>ENGR 1201 (Introduction to Engineering)</td>
<td>2</td>
<td>32</td>
<td>Engineering Design and Problem Solving K (full year)</td>
<td>12</td>
</tr>
<tr>
<td>ENV 1401 (Environmental Science I)</td>
<td>4</td>
<td>96</td>
<td>AP Environmental Science (fall)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>ENV 1402 (Environmental Science II)</td>
<td>4</td>
<td>96</td>
<td>AP Environmental Science (spring)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>PHYS 1401 (General Physics I)</td>
<td>4</td>
<td>96</td>
<td>AP Physics I (full year)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>PHYS 1402 (General Physics II)</td>
<td>4</td>
<td>96</td>
<td>AP Physics II (full year)</td>
<td>12</td>
</tr>
<tr>
<td>PHYS 1401 (General Physics I)</td>
<td>4</td>
<td>96</td>
<td>AP Physics I (fall) (double-blocked)</td>
<td>12</td>
</tr>
<tr>
<td>PHYS 1402 (General Physics II)</td>
<td>4</td>
<td>96</td>
<td>AP Physics II (spring) (double-blocked)</td>
<td>12</td>
</tr>
<tr>
<td><strong>FINE ARTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTS 1303 (Art History: Prehistoric to Gothic)</td>
<td>3</td>
<td>48</td>
<td>AP Art History (fall)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>ARTS 1304 (Art History: Renaissance to Modern)</td>
<td>3</td>
<td>48</td>
<td>AP Art History (spring)</td>
<td>11 &amp; 12</td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>DCollege Course</th>
<th>Credit Hours</th>
<th>Contact Hours</th>
<th>High School Credit Course Taken on High School Campus</th>
<th>Course Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOREIGN LANGUAGE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COSC 1336 (Programming Fundamentals I)</td>
<td>3</td>
<td>80</td>
<td>Computer Science I K (full year) *Meets LOTE requirements for high school diploma</td>
<td>9-12</td>
</tr>
<tr>
<td>COSC 1337 (Programming Fundamentals II)</td>
<td>3</td>
<td>80</td>
<td>Computer Science II K (full year) *Meets LOTE requirements for high school diploma</td>
<td>10-12</td>
</tr>
<tr>
<td>SPAN 2311 (Int. Spanish I)</td>
<td>3</td>
<td>48</td>
<td>AP Spanish IV (spring)</td>
<td>9-12</td>
</tr>
<tr>
<td>SPAN 2312 (Int. Spanish II)</td>
<td>3</td>
<td>48</td>
<td>AP Spanish V (spring)</td>
<td>9-12</td>
</tr>
<tr>
<td><strong>SOCIAL STUDIES</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>ECON 2301 (Macroeconomics)</td>
<td>3</td>
<td>48</td>
<td>AP Macroeconomics (fall or spring)</td>
<td>12</td>
</tr>
<tr>
<td>GOVT 2305 (Government)</td>
<td>3</td>
<td>48</td>
<td>AP Government (fall or spring)</td>
<td>12</td>
</tr>
<tr>
<td>GOVT 2306 (Government)</td>
<td>3</td>
<td>48</td>
<td>Special Topics in Social Studies K (SPTSS) (fall or spring)</td>
<td>12</td>
</tr>
<tr>
<td>HIST 1301 (US History)</td>
<td>3</td>
<td>48</td>
<td>AP United States History A (fall)</td>
<td>11</td>
</tr>
<tr>
<td>HIST 1302 (US History)</td>
<td>3</td>
<td>48</td>
<td>AP United States History B (spring)</td>
<td>11</td>
</tr>
<tr>
<td>PSYC 2301 (Psychology)</td>
<td>3</td>
<td>48</td>
<td>AP Psychology (fall or spring)</td>
<td>11 &amp; 12</td>
</tr>
<tr>
<td>SOCI 1301 (Principles of Sociology)</td>
<td>3</td>
<td>48</td>
<td>Sociology K (fall or spring)</td>
<td>11 &amp; 12</td>
</tr>
</tbody>
</table>
Advanced Classes Entry/Exit Criteria

K-level classes have a more rigorous and in-depth content focus than L-level classes. Classes often move at a faster pace, include different types of assignments, and require additional outside reading. These classes are designed to challenge students beyond grade-level academic courses and prepare them for success in future advanced coursework. 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 or Advanced Placement (AP) Classes

Students who were scheduled in Level-1/K-level courses the previous year will be able to continue in the K-level course sequence if they maintained a 75+ average for the second semester.

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

1. the student earns a grade of 85+ yearly average in the previous on-level/L-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 or AP class.

Removal from K-level or AP Class

1. Students who receive an average of 74 or lower for the semester will be removed from the K-level class and placed in an appropriate L-level class for the following semester, if an L-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 L-level class for the following semester, if an L-level class is available. An average of 74 or lower does not meet the entry criteria for a K-level 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 L-level class for the remainder of the school year.

3. A student making below an 80 average at the end of the third week of a grading period in a K-level class may, upon his/her request and parent approval, be placed in an appropriate L-level class for the remainder of the school year. A student making below an 80 average at the end of the third week of the grading period in an AP class may, upon his/her request and parent approval, be placed in either a K-level or L-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 class.

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

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

Grade Adjustments

When a student changes from a K-level to an L-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. A detailed explanation of the K- to L-level grade adjustments is available through the counselors’ office.

Please note: Grade adjustments will not be made to grades of “B” or higher.
### First Time K-level Eligibility through STAAR/EOC Scores

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

*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 (L-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 (L-level) on the credit-by-exam will be placed on the student’s transcript and used in GPA and class rank calculations. A fee of $30.00 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, speech, math, science, social studies, physical education, health, career and technology, and art. All summer school courses, whether taken in or out-of-district, will earn L-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](http://www.txvsn.org) or at EHDE (board policy).
High School Course Work – Dual High School/College Credit

Cypress-Fairbanks ISD and Lone Star College have entered into an agreement allowing students who meet specified criteria to earn both high school credit and college credit for specific high school courses. Please see your counselor for dual credit eligibility requirements and course availability.

Note:
• Tuition is waived by Lone Star College
• Students are responsible for required fees.
• Students taking dual credit courses in the summer after their sophomore year must take the grade 11 dual credit course as a prerequisite to enrolling in the subsequent grade 12 dual credit course.

Approval for additional courses
• To take dual credit English III during the summer after the sophomore year, students must have passed the English II End-of-Course (EOC) assessment.
• Students taking dual credit U.S. History during the summer after the sophomore year will take the U.S. History End-of-Course (EOC) assessment the next December.

Note:
• Students taking dual credit courses in the summer at the Lone Star College Campus must purchase or rent the associated college textbook(s) and pay additional on campus fees.
• Online, hybrid, and mini-mester courses offered at Lone Star College are not an approved dual credit option.

College Course Work – Dual High School/College Credit

Cypress-Fairbanks ISD and Lone Star College-Cy Fair have entered into an agreement allowing students who meet specified criteria to earn both high school credit and college credit for specific high school courses.

A high school student may earn dual credit toward high school graduation and college credit through successful completion of approved 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.

A student who meets the following criteria is eligible to apply for the opportunity to earn high school credit through college courses:

1. The student must have an overall average for all courses of at least 80, or the student must have an average of at least 80 in the last course taken in the general subject-area of the college-level course.
2. The student must have successfully completed prerequisite courses as identified by district guidelines.
3. The student must have acceptable scores on college placement exams or alternative assessments. The Director of Advanced Academics, campus counselors, and College & Career Specialists will have this information as well as an updated list of dual credit courses.
4. The student must have completed a Lone Star College admissions application and received prior approval from a member of the campus dual credit team.
5. The student must have received approval for college admission through the exceptional admissions process completing all enrollment paperwork required by the college.

Specific requirements and procedures are available in the campus College & Career Center or the campus Counseling office.

• Students taking dual credit courses in the summer after their sophomore year must take the grade 11 dual credit course as a prerequisite to enrolling in the subsequent grade 12 dual credit course.
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 15 days of the 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 of the course unless they are exempt from the final exam due to the current exemption policy. The student’s academic performance in a pass/fail course will affect his/her eligibility to participate in extracurricular activities.

Correspondence Courses

A high school student may earn two credits toward graduation through correspondence courses. 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 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 course.
6. All course work 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.

Correspondence 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 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 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 course no later than March 1 and must have received all correspondence 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 June graduation ceremony.

Grade point averages for these mid-term graduates will be treated in the same manner as June 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 assistance, 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 fall 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.

<table>
<thead>
<tr>
<th>GRADE</th>
<th>LEVEL OR COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>K, AP, and HORIZONS Levels</td>
</tr>
<tr>
<td>A (90-100)</td>
<td>7 grade points</td>
</tr>
<tr>
<td>B (80-89)</td>
<td>6 grade points</td>
</tr>
<tr>
<td>C (75-79)</td>
<td>5 grade points</td>
</tr>
<tr>
<td>C- (70-74)</td>
<td>4 grade points</td>
</tr>
<tr>
<td>F (below 70)</td>
<td>0 grade points</td>
</tr>
</tbody>
</table>

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 L-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.
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.
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 student to complete registration.

<table>
<thead>
<tr>
<th>Course</th>
<th>Foundation</th>
<th>+Endorsement</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td></td>
<td>• English I, II and III are required with options for the 4th credit.</td>
</tr>
<tr>
<td>PACE (Personal, Academic, &amp; Career Exploration) or PACE Plus</td>
<td>1/2 or 1</td>
<td></td>
<td>• One-half credit is required in grade 9.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• One credit is required for 9th-grade students who did not pass all 8th grade core academic classes (language arts, reading, math, science, and social studies) and who have not met the state standards on any 8th grade STAAR assessment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The state required speech TEKS are embedded in PACE and PACE Plus.</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>+ 1 additional advanced math course</td>
<td>• Algebra II must be taken to earn the Distinguished Level of Achievement.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Biology is required for all students.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Students may substitute AP Human Geography for World Geography, but may not earn credit for both courses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Health may be taken in any grade or through correspondence, summer school, or credit-by-exam.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Principles of Health Science satisfies the health requirement.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Students may earn a maximum of four (4) credits in PE toward graduation-including athletics.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Students may meet the PE requirement through after school participation in the fall semester of marching band and cheerleading, and both semesters of drill team and AFJROTC. Students may also meet the PE requirement if they participate in a district-approved Olympic caliber, off-campus training program.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• PE credit may be earned through approved correspondence courses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Approved fine arts courses include art, music, dance, theatre courses and floral design.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Students must take 2 sequential semesters of the same course to meet the Fine Arts credit requirement.</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
<td>+ 2 additional electives</td>
<td></td>
</tr>
<tr>
<td>Total Credits Required</td>
<td>22</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>STEM</th>
<th>Business &amp; Industry</th>
<th>Public Services</th>
<th>Arts &amp; Humanities</th>
<th>Multidisciplinary Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science, Technology, Engineering, &amp; Math</td>
<td>Students may earn a STEM endorsement by selecting and completing the requirements from among these 5 options.</td>
<td>Students may earn a Business &amp; Industry endorsement by selecting and completing the requirements from among these 3 options.</td>
<td>Students may earn a Public Services endorsement by selecting and completing the requirements from among these 2 options.</td>
<td>Students may earn a Multidisciplinary Studies endorsement by selecting and completing the requirements from among these 2 options.</td>
</tr>
<tr>
<td>Option 1: CTE (Engineering)</td>
<td>Students earn four (4) credits by taking at least two (2) courses in the same cluster in one of the following areas.</td>
<td>Option 1: CTE</td>
<td>Students earn four (4) credits by taking at least two (2) courses in the same career cluster in one of the following areas.</td>
<td>Option 1: Four by Four (4 X 4)</td>
</tr>
<tr>
<td>Option 2: CTE (Engineering)</td>
<td>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.</td>
<td>Option 2: AFJROTC</td>
<td>Students earn four (4) AFJROTC courses for (4) credits.</td>
<td>Students take four (4) foreign language AND two (2) levels of a different foreign language for 4 credits.</td>
</tr>
<tr>
<td>Option 3: Math</td>
<td>Students must complete the requirements of one (1) advanced CTE course.</td>
<td>Option 2: AFJROTC</td>
<td>Students take a combination of four (4) credits from Option 1 and two (2) courses in the same fine arts area.</td>
<td>Students take a combination of four (4) credits in English, math, science, social studies, foreign language, or fine arts.</td>
</tr>
<tr>
<td>Option 3: Combination</td>
<td>Students take a coherent sequence of four (4) credits from Option 1 and 2. Combination plan must include one (1) advanced CTE course.</td>
<td>Students take Algebra I, Geometry, and Algebra II AND two (2) of the following courses for which Algebra II is a prerequisite.</td>
<td>Students take a coherent sequence of four (4) credits from Option 1 and two (2) courses in a different fine arts area.</td>
<td>Students take a combination of four (4) credits in English, math, science, social studies, foreign language, or fine arts.</td>
</tr>
<tr>
<td>Option 4: Science</td>
<td>Option 5: Combination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students take Biology, Chemistry, and Physics, AND two (2) of the following courses.</td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| - 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 | - |
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, ACT ASPIRE, 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 the 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 one of the 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 English language learner (ELL 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, ACT-Aspire 10, 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. Achieve the college readiness benchmark score on at least 2 of the 4 subject tests on the ACT – Aspire 10 exam.
3. Earn a combination critical reading and mathematics score of at least 1250 on the SAT.
4. Earn a composite score on the ACT exam of 28 (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 or 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 and form.
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.

<table>
<thead>
<tr>
<th>English</th>
<th>Mathematics</th>
<th>Science</th>
<th>Social Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>English I</td>
<td>Algebra I</td>
<td>Biology</td>
<td>U.S. History</td>
</tr>
<tr>
<td>English II</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

§89.1070. Graduation Requirements. (Student Entering High School Starting in 2014-2015)

(a) Graduation with a regular high school diploma under subsections (b)(1), (b)(2) 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

(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) 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.

(e) A student receiving special education services who entered Grade 9 before the 2014-2015 school year may graduate and be awarded a high school diploma under the Foundation High School Program as provided in §74.1021 of this title (relating to Transition to the Foundation High School Program), if the student’s ARD committee determines that the student should take courses under that program and the student satisfies the requirements of that program. Subsection (c) of this section applies to a student transitioning to the Foundation High School Program under this subsection.

(f) Students Entering High School Prior to 2014-2015 (content omitted)

(g) 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) of this section.

(h) Students who participate in graduation ceremonies but who are not graduating under subsections (b)(2)(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 (g) of this section.

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

(j) For students who receive a diploma according to subsections (b)(2)(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.

(k) 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.
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 workplace. 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 Recommended 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 that are enrolled in Texas public two-year colleges. In addition to requirements above, student cannot be concurrently receiving a renewal TEXAS Grant.

Texas Public Education Grant Program (TPEG) provides grant assistance to students with financial need. Because public colleges or universities make TPEG awards from their own resources, only in-state colleges and universities may participate.

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
Tract sheet and links to other sources
Web Address: www.collegeforalltexas.com

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

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.

<table>
<thead>
<tr>
<th>Course</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>Credit</th>
<th>Type</th>
<th>Information/Prerequisites</th>
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<tr>
<td><strong>Language Arts</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>English I-IV</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>1-4</td>
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<td>Taken in sequence</td>
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<tr>
<td>English for Speakers of Other Languages</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>1-2</td>
<td>IS</td>
<td>May count only two credits for English requirements.</td>
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<td>Business English</td>
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<td></td>
<td>Touch Systems Data Entry recommended. May substitute English IV upon successful completion of English I-III and satisfactory performance of EOC English I and II.</td>
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<td>Research and Technical Writing</td>
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<td>IS</td>
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<td></td>
<td></td>
<td>May substitute English IV upon successful completion of English I-III and satisfactory performance of English I and II.</td>
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<tr>
<td>PACE (Personal, Academic, and Career Exploration) OR PACE Plus</td>
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<td></td>
<td></td>
<td>Required for all 9th graders Placement determined by district criteria</td>
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<td>ACT/SAT Preparatory Strategies</td>
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<td>IS</td>
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<td></td>
<td></td>
<td>May be taken for graduation credit or local credit</td>
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<tr>
<td>College Readiness &amp; Study Skills</td>
<td>E</td>
<td>1/2</td>
<td>I</td>
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<tr>
<td>Creative and Imaginative Writing</td>
<td>E</td>
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<td>E</td>
<td>E</td>
<td>1/2-1</td>
<td>IS</td>
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<td><strong>Reading</strong></td>
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<td>Reading I-III</td>
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<td>E</td>
<td>E</td>
<td>E</td>
<td>1/2-3</td>
<td>I</td>
<td>Counselor approval; recommended for students reading below grade level</td>
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<td><strong>Journalism</strong></td>
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<tr>
<td>Journalism I</td>
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<tr>
<td>Advanced Journalism I, II, III</td>
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<td>E</td>
<td>E</td>
<td>E</td>
<td>1-3</td>
<td>IS</td>
<td>Journalism I; Taken in sequence; Teacher approval for all levels</td>
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### Language Arts (continued)

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<th>Information/Prerequisites</th>
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<td>E</td>
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<td>I</td>
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<td>Tournaments required</td>
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<td>Debate II and III</td>
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<td>E</td>
<td>E</td>
<td>E</td>
<td>1-2</td>
<td>IS</td>
<td>Debate I; tournaments required; taken in sequence; Teacher approval for both levels</td>
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<tr>
<td>Independent Study/Speech or Debate IV</td>
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<td>1</td>
<td>IS</td>
<td>Debate I-III; tournaments required; Teacher approval</td>
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### Social Studies

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<tr>
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<td>Human Geography - AP</td>
<td>E</td>
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<td>E</td>
<td>E</td>
<td>1</td>
<td>IS</td>
<td>May substitute for World Geography</td>
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<tr>
<td>World History Studies</td>
<td>E</td>
<td>E</td>
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<td>1</td>
<td>IS</td>
<td>World History or World Geography is required in 9th or 10th grade</td>
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<tr>
<td>World History Studies - AP (K-level only)</td>
<td>E</td>
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<td></td>
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<td>IS</td>
<td>May substitute for World History</td>
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<tr>
<td>United States History</td>
<td>R</td>
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<td></td>
<td></td>
<td>IS</td>
<td>World Geography or World History</td>
</tr>
<tr>
<td>United States History - AP (K-level only)</td>
<td>E</td>
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<td>IS</td>
<td>May substitute for required U.S. History</td>
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<tr>
<td>United States Government</td>
<td>R</td>
<td>1/2</td>
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<td>U.S. History</td>
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<td>1/2</td>
<td>I</td>
<td>May substitute for required U.S. Government</td>
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<td>European History - AP</td>
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<td>Economics/Free-Enterprise</td>
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<td>U.S. History</td>
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<td>Macro Economics - AP (K-level only)</td>
<td>E</td>
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<td></td>
<td></td>
<td>1/2</td>
<td>I</td>
<td>May substitute for required Economics</td>
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<tr>
<td>Sociology</td>
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<td></td>
<td>1/2</td>
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<td>Personal Financial Literacy</td>
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<td>E</td>
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<td>1/2</td>
<td>I</td>
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<tr>
<td>Psychology</td>
<td>E</td>
<td>E</td>
<td></td>
<td></td>
<td>1/2</td>
<td>I</td>
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<tr>
<td>Psychology - AP (K-level only)</td>
<td>E</td>
<td>E</td>
<td></td>
<td></td>
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### Special Topics in Social Studies:

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<th>Type</th>
<th>Information/Prerequisites</th>
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<tr>
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<tr>
<td>Street Law</td>
<td>E</td>
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<td>1/2-1</td>
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### Mathematics

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<th>Information/Prerequisites</th>
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<tbody>
<tr>
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<tr>
<td>Geometry</td>
<td>E</td>
<td>R</td>
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<td>Algebra I</td>
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<td>Geometry</td>
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<tr>
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<td>Algebra II</td>
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<td>Statistics-AP</td>
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<td>Algebra II</td>
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<td>Geometry</td>
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<td>Mathematical Models with Applications</td>
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<td>Geometry</td>
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<tr>
<td>Independent Study in Math - College Algebra K (K-level only)</td>
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<td>IS</td>
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<tr>
<td>Independent Study in Mathematics Advanced Algebra (L-level only)</td>
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#### HORIZONS

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<th>Credit</th>
<th>Type</th>
<th>Information/Prerequisites</th>
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<tbody>
<tr>
<td>English I HORIZONS</td>
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<td>IS</td>
<td>Identified as Gifted</td>
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<tr>
<td>English II HORIZONS</td>
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<td>E</td>
<td>E</td>
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<td>IS</td>
<td>Identified as Gifted; see history prerequisite</td>
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<td>World History Studies HORIZONS</td>
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<td>E</td>
<td>E</td>
<td>1</td>
<td>IS</td>
<td>Identified as Gifted; see history prerequisite</td>
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<td>World History Studies AP/HORIZONS</td>
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<td>E</td>
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<td>IS</td>
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<td>IS</td>
<td>Identified as Gifted; see history prerequisite</td>
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<td>U.S. Government AP/HORIZONS</td>
<td>E</td>
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<td></td>
<td></td>
<td>1/2</td>
<td>I</td>
<td>Identified as Gifted; see history prerequisite</td>
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<tr>
<td>European History AP/HORIZONS</td>
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<td>IS</td>
<td>Identified as Gifted; see history prerequisite</td>
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<td>Macro Economics AP/HORIZONS</td>
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<td></td>
<td></td>
<td>1/2</td>
<td>I</td>
<td>Identified as Gifted; see history prerequisite</td>
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<tr>
<td>Psychology AP/HORIZONS</td>
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<td>1/2</td>
<td>I</td>
<td>Identified as Gifted; see history prerequisite</td>
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<td>Human Geography AP/HORIZONS</td>
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### 2019 - 2020 High School Offerings

#### HORIZONS (continued)

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<td>IS</td>
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#### Science

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<td>Physics C - AP (Engineering Focus)</td>
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### Languages Other Than English

#### Modern Languages: French, German, Spanish

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<tr>
<td>Spanish for Native Speakers II/III K</td>
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### Programming Language: Computer Science

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### Physical Education/Health

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<td>1/2-1 I</td>
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<td>Team Sports</td>
<td>E</td>
<td>E</td>
<td>1/2-1 I</td>
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<td>Individual Sports</td>
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<td>1/2-1 I</td>
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<tr>
<td>Outdoor Education</td>
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<td>1/2-1 I</td>
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<tr>
<td>Aerobic Activities</td>
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<td>E</td>
<td>1/2-1 I</td>
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<td>Off-Campus PE</td>
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<td>1/2-4 I</td>
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<td>Athletics I-IV</td>
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<td>1/2-4 I</td>
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<td>1/2 I</td>
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<td>Principles of Health Science</td>
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<td>** ACT/SAT Prep**</td>
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**Local credits do not count toward required credits for graduation.**

### Fine Arts

#### Visual Arts

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<tr>
<td>*** Art I S - Sculpture/Ceramics</td>
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<td>AP Art - Art History</td>
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*** Only one state credit may be earned at the Art I level.***
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<td>E</td>
<td>E</td>
<td>1-3</td>
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<tr>
<td>Vocal Ensemble I-IV</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>1-4</td>
<td>IS</td>
<td>Varsity Mixed Choir; audition; director approval</td>
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<tr>
<td><strong>Music Theory AP</strong></td>
<td>E</td>
<td>E</td>
<td>E</td>
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<td>Beginning with the class of 2019, a level I Music course is a required prerequisite.</td>
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<tr>
<td><strong>Instrumental Ensemble Band I-IV</strong></td>
<td>E</td>
<td>E</td>
<td>E</td>
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<td>1/2-4</td>
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<td>Concurrent enrollment in band and director approval required</td>
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<td><strong>Instrumental Ensemble Orchestra I-IV</strong></td>
<td>E</td>
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<td>1/2-4</td>
<td>I</td>
<td>Concurrent enrollment in orchestra and director approval required</td>
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<tr>
<td><strong>Dance</strong></td>
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<td>Dance I-IV</td>
<td>E</td>
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<td>One year’s participation in Drill team can substitute for 1 PE credit</td>
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<tr>
<td><strong>Agriculture, Food, and Natural Resources</strong></td>
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<tr>
<td>Principles of Ag, Food, and Natural Resources</td>
<td>E</td>
<td>E</td>
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<td>1</td>
<td>IS</td>
<td>Required of all 9th/10th graders wanting to take an Ag course</td>
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<tr>
<td>Livestock Production</td>
<td>E</td>
<td>E</td>
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<tr>
<td>Small Animal Management</td>
<td>E</td>
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<tr>
<td>Equine Science</td>
<td>E</td>
<td>E</td>
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<td>1/2</td>
<td>I</td>
<td>Required prerequisite (or concurrent) for 10th graders: Principles of Ag</td>
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<tr>
<td>Veterinary Medical Applications</td>
<td>E</td>
<td>E</td>
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<td>Required prerequisites: Principles of Ag and either Livestock Prod, Small Animal Mgmt, or Equine Science</td>
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<tr>
<td>Advanced Animal Science K (K-level only)</td>
<td>E</td>
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<td>Required prerequisite: Biology, Chemistry and Vet Med or at least 1 credit of Animal Science courses (Small Animal, Equine Science, Livestock Prod.)</td>
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<tr>
<td>Food Technology and Safety</td>
<td>E</td>
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<td>Required prerequisite: (or concurrent) for 10th graders: Principles of Ag</td>
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### Agriculture, Food, and Natural Resources (continued)

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<tr>
<td>Wildlife, Fisheries and Ecology Mgmt</td>
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<td>Advanced Plant and Soil Science K (K-level only)</td>
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<td>Agricultural Mechanics and Metal technologies</td>
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### Architecture and Construction

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<td>Construction Technology I</td>
<td>E</td>
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<td>Required prerequisite: Principals of Arch or Principles of Manufacturing</td>
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<td>Required prerequisite: Principles of Arch, Recommended prerequisite: Geometry</td>
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<td>Mill and Cabinetmaking Technology</td>
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<td>Plumbing I (blocked with Proj-based Plumbing)</td>
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<td>Required prerequisite: at least two credits in Architecture and Construction and/or Manufacturing</td>
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### Arts, A/V Technology, and Communications

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<td>Professional Communications</td>
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<td>Animation I</td>
<td>E</td>
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<td>Web Technologies I</td>
<td>E</td>
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<td>Project-based Research in Multimedia</td>
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<td>Fashion Marketing</td>
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<td>Fashion Design I</td>
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<td>Fashion Design II</td>
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<td>Digital Audio Technology I</td>
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<td>Audio/Video Production I</td>
<td>E</td>
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<td>Recommended prerequisite: Digital Media or Digital Audio Technology I</td>
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### Business Management and Administration

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<tr>
<td>Touch System Data Entry</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>1/2</td>
<td>IS</td>
<td>Recommended prerequisite: Touch System Data Entry</td>
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<td>Business Information Management I</td>
<td>E</td>
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<td>IS</td>
<td>Recommended prerequisite: Business Information Management I or prior working knowledge of Microsoft Office</td>
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<td>Business English</td>
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<td>Touch Systems Data Entry recommended. May substitute English IV upon successful completion of English I-III and satisfactory performance of EOC English I and I</td>
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<td>Global Business</td>
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## Education and Training

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<td>Interpersonal Studies</td>
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<td>Lifetime Nutrition and Wellness</td>
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<td>Child Development</td>
<td>E</td>
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<td>Recommended prerequisite: Principles of Human Services</td>
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## Finance

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## Government and Public Administration

See Social Studies section for options in this cluster.

## Health Science

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

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<td>Computer Science II K</td>
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<td>Computer Science III K</td>
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<td>Engineering Design and Presentation I</td>
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<tr>
<td>Engineering Design and Problem Solving K</td>
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<td>Robotics I</td>
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<tr>
<td>Robotics II</td>
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#### Transportation, Distribution, and Logistics

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<td>Automotive Technology II</td>
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#### Career and Technical Courses for Students in Special Education

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<td>CTED Lifetime Nutrition &amp; Wellness</td>
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## Vocational Training Courses for Students in Special Education

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<td>Commercial Food</td>
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<td>E</td>
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<td>IS</td>
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## Leadership

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<th>Type</th>
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<tbody>
<tr>
<td>LeadWorthy (formerly Teen Leadership)</td>
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<td>E</td>
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<td>Student Leadership</td>
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<td>For student leaders only</td>
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<td>Application and interview with teacher</td>
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<td>AFJROTC</td>
<td>E</td>
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</table>
This course concentrates on the fundamental language skills of reading, writing, conventions of written and oral language, research, and listening/speaking in an effort to build a foundation for student success in advanced high school English classes. Students practice both reading and writing as a process. Students learn to develop skills to enhance media literacy.

**English I SOL (for Speakers of Other Languages)**

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 advanced 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 refine their reading comprehension skills through the study of fiction, literary nonfiction, poetry, drama, and informational text throughout the year. Students learn to develop skills to enhance media literacy.

**English II**

This course emphasizes continuing development of oral language and composition skills. Included within the study are the identification of literary themes and forms, use of effective reading strategies, and development of speaking/listening skills. 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. Throughout the year, students develop skills to enhance media literacy.

**English II SOL (for Speakers of Other Languages)**

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 advanced 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 I.

**English III**

This course presents advanced work in composition and reading. Students practice both reading and writing as a process. The course provides an overview of American literature from the Colonial Period to the Contemporary Period, allowing students to examine samples of traditional, classic, and multi-ethnic selections that represent this country’s cultural diversity. Selections include poetry, drama, fiction, literary nonfiction, and informational texts. As students read, they are asked to focus on comprehension, analysis, and evaluation. As they write for varied audiences and purposes, students work to develop their ideas and apply effective voice, word choice, fluency, logical organization of material, and appropriate conventions of language. In addition to process pieces, students produce in-class, timed writings. The skills of listening/speaking and the enhancement of media literacy are addressed in the fabric of the course.

**English III SSL (for Speakers of Other Languages)**

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 student’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. Reading selections for this level include poetry, drama, fiction, literary nonfiction, and informational texts.
English III-Advanced Placement/HORIZONS  1 credit
English III H/AP engages students in becoming skilled readers of a variety of prose selections and skilled writers who compose for varied audiences and purposes. Students become adept at identifying and analyzing varied rhetorical features used in writing as these features contribute to purpose and meaning of a selection. The course provides an overview of American literature, including samples of traditional, classic, and multi-ethnic selections. Reading selections include fiction, poetry, drama, literary nonfiction, and informational texts. Fused with the study of literature is the refinement of composition skills, usage skills and research skills. Practice in listening/speaking and the enhancement of media literacy occur throughout the course. This course of study is equivalent to an introductory college English course and is available to the student interested in taking the Advanced Placement Examination in English Language and Composition.

English IV Academic  1 credit
This course continues an emphasis on fundamental reading strategies and composition techniques aligned with college learning outcomes. Selections include fiction, poetry, drama, literary nonfiction, and informational texts from selected British, World, and Contemporary literature. In conjunction with the study of literature is the refinement of composition skills, usage skills, and research skills. Emphasis is placed on students’ practice of reading and writing as a process. Opportunities to practice listening/speaking and an emphasis on media literacy are inherent in the course. Successful completion of English IV with a 75+ average and completion of an in-class, timed, cumulative writing assessment qualifies a student to enroll in Freshman Composition at Lone Star without taking the TSI reading and writing assessment or a developmental reading or writing course; students who qualify must enroll in Freshman Composition at Lone Star within two years after graduation.

- Successful completion of credits in English I, II, and III is required prior to enrolling in English IV.

Business English  1 credit
The Business English course allows students to enhance their reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students edit their work for clarity, engaging language, and the correct use of the conventions and mechanics of written English to produce final, error-free drafts for business reproduction. Having quality written and verbal communication is key to success in business as there is often no second chance to make a first impression. This course is designed for students graduating with an endorsement in Business and Industry.

- Grade 12
- Prerequisites: Successful completion of English I-III and satisfactory performance on STAAR English I and II End-of-Course; Touch System Data Entry recommended.
- This course may satisfy the 4th English credit required for graduation on the Foundation High School Program.
- Note: Students selecting this course as their fourth English will not be eligible for the TSI waiver.

Research and Technical Writing  1 credit
As an advanced English course option, college ready seniors who have completed English I-III and passed STAAR End-of-Course for English I and II may choose this technical writing course. Students will skillfully research a topic and present that information in a variety of media. Emphasis will be on the research process and writing persuasive and informative texts. Students will publish writers. This course falls under the Arts and Humanities Endorsement.

- Grade 12
- Prerequisites: Successful completion of English I-III and satisfactory performance on STAAR English I and II End of Course.
- This course may satisfy the fourth English Credit required for graduation on the Foundation High School Program.
- Note: Students selecting this course as their fourth English will not be eligible for the TSI waiver.

English IV SSL (for Speakers of Other Languages)  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.

- Successful completion of credits in English I, II, and III is required prior to enrolling in English IV. Students interested in taking the Advanced Placement Examination in English Language and Composition and/or English Literature and Composition.

English IV-Advanced Placement/HORIZONS  1 credit
English IV H/AP engages students in close reading and written analysis of literature. Students become adept at identifying and analyzing varied literary techniques as these techniques contribute to the purpose and meaning of a selection. Selected writings from the literature of other countries, with an emphasis on British literature from various time periods, serve as the basis for reading and for writing literary analysis. Selections include fiction, poetry, drama, literary nonfiction, and informational texts. Fused with the study of these selections is the continued refinement of composition skills, usage skills, and research skills. Students have opportunities to practice listening/speaking, and media literacy is emphasized. This course of study is equivalent to an introductory college English course and is available to the student interested in taking the Advanced Placement Examination in English Language and Composition and/or English Literature and Composition.
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, and career and life.
- Required in Grade 9
- The state required Speech TEKS are embedded 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 and life.
- The state required Speech TEKS are embedded 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. 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 Acknowledgement 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
- L-level only

Creative and Imaginative 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
**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.

**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.

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.

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, they learn how to work as leaders and as a team as they manage this production process.
- Students must have the recommendation of the publications teacher to enroll in this class.
- Courses must be taken in sequence.
- Prerequisite: Journalism I

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 the publications teacher to enroll in this class.
- Courses must be taken in sequence.
- Prerequisite: Journalism I

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.

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 evening and Saturday. Student fees for tournament competition 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.

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 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.

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 in 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 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

Macro Economics-Advanced Placement/HORIZONS 1/2 credit
The Economics Advanced Placement course focuses on the concepts of macroeconomics by providing students 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

Sociology 1/2 credit
Sociology is designed for students who are interested in enhancing their understanding of themselves and the society in which they live. The course deals with typical situations which people meet in their daily lives. Institutions, which are found in all societies, are studied, and emphasis is placed on the relationships people have within them. Study is also made of societal problems, including such topics as growing up, divorce, current events, etc.
- 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
MATHEMATICS

Algebra I 1 credit
In Algebra I, students will study linear, quadratic, and exponential functions and their associated solutions in both mathematical and real-world situations. Students will use technology, specifically the graphing calculator, 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 will 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 the graphing calculator, to collect and explore data.

Algebra II 1 credit
In Algebra II, students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will use technology, specifically the graphing calculator, to collect and explore data and analyze statistical relationships.

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 the graphing calculator, to build understanding, make connections between representations, and provide support in solving problems.

Statistics-Advanced Placement/HORIZONS 1 credit
This course follows the AP outline prescribed by the College Board. Distribution functions, and descriptive and inferential statistics will be studied. Students are encouraged to take the Statistics AP exam in May in order to earn college credit.
Mathematical Models with Applications 1 credit
Mathematical Models with Applications is designed to 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 select from tools such as physical objects; manipulatives; technology, including graphing calculators, data collection devices, and computers; and paper and pencil and from methods such as algebraic techniques, geometric reasoning, patterns, and mental math to solve problems.
- Prerequisite: Geometry

Statistics L 1 credit
In Statistics, students will build on the knowledge and skills for mathematics and will 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 the graphing calculator, to collect and explore data.
- Prerequisite: Geometry

Algebraic Reasoning 1 credit
In Algebraic Reasoning, students will build on the knowledge and skills for mathematics and, 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 the graphing calculator, to collect and explore data.
- Prerequisite: Geometry

Independent Study in Mathematics – College 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 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.
- Prerequisite: Algebra II
- K-level only

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 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 the graphing calculator, to collect and explore data.
- Grade 12
- Prerequisite: Algebra II
- L-level only
- Successful completion of this course with an A, B, or C (75 or higher) yearly average qualifies a student to enroll in College Algebra at Lone Star.

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.
- Prerequisite: Algebra II
- K-level only

Accounting II Certification: Quickbooks Certified User 1 credit
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
- Satisfies advanced course requirement for Business &Industry endorsement
- Quickbooks certification satisfies requirement to earn a performance acknowledgement.
- Lab supplies or fee may be required.
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 District 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
IP&C Students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. IP&C introduces basic concepts of physics and chemistry. The two disciplines are integrated in the topics of motion, waves, energy transformation, properties of matter, changes in matter, and solution chemistry. This course serves as a background for subsequent courses in chemistry and physics.
- Prerequisite: Biology

Biology 1 credit
Biology is the study of all living things. It is an investigation-oriented course which emphasizes cell structure and function, mechanisms of genetics, biological evolution and classification, biological processes and systems, and interdependence within environmental systems.
- Prerequisite: Biology

Chemistry 1 credit
In Chemistry, students conduct laboratory and field investigations, use of scientific methods 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 Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry. Students will investigate how chemistry is an integral part of our daily lives.
- Prerequisite: Biology and Algebra I

Physics 1 credit
In Physics, students conduct laboratory and field investigations, use scientific methods 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 conversion of energy and momentum; forces; thermodynamics; characteristics and behavior of waves; and atomic, nuclear, and quantum physics. Students who successfully complete Physics will acquire factual knowledge within a conceptual framework, practice experimental design and interpretation, work collaboratively with colleagues, and develop critical thinking skills.
- Prerequisites: Biology and completion of or concurrent with Algebra I
Aquatic Science 1 credit
In Aquatic Science, students study the interactions of biotic and abiotic components in aquatic environments, including impacts on aquatic systems. Investigations and field work in this course will emphasize fresh water and marine aspects of aquatic science. Students who successfully complete Aquatic Science will acquire knowledge about a variety of aquatic systems, conduct investigations and observations of aquatic environments, work collaboratively with peers, and develop critical-thinking and problem-solving skills.
- Prerequisite: Biology

Astronomy 1 credit
In Astronomy, students conduct laboratory and field investigations, use scientific methods, and make informed decisions using critical thinking and scientific problem solving. Students study the following topics: astronomy in civilization, patterns and objects in the sky, our place in space, the moon, seasons, gravity, spectroscopy, telescopes, planets, the sun, stars, galaxies, cosmology, and space exploration. Students who successfully complete Astronomy will acquire knowledge within a conceptual framework, conduct observations of the sky, work collaboratively, and develop critical-thinking skills.
- Prerequisite: Biology

Environmental Systems 1 credit
In Environmental Systems students study: native plants and animals, endangered species, worldwide disasters, natural events such as world population changes, human impact on the environment and alternative solutions for resolving and/or preventing environmental problems. Students conduct laboratory and field investigations using scientific methods and make informed decisions using critical thinking and scientific problem solving.
- Prerequisite: Completed Biology and Integrated Physics and Chemistry (IPC) or Chemistry

Earth and Space Science (ESS) 1 credit
ESS is a capstone course designed to build on students' prior scientific and academic knowledge and skills to develop an understanding of Earth's systems in space and time. Students will spend time studying the geosphere (solid Earth) hydrosphere (water), and atmosphere systems. Students will focus on how these systems interact with each other and how they interact with the biosphere (life). In addition, students will investigate how the Earth is part of the much larger solar and stellar systems.
- Prerequisite: Biology, Chemistry and completion or concurrent with 3rd Science

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 methods, 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. This course is the recommended science course for the Public Services endorsement.
- Grades 11-12
- Required prerequisite: Biology and Chemistry
- Recommended prerequisites: Medical Terminology and Principles of Health Science.
- K Level only

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.)
- K Level only

Advanced Plant and Soil Science K 1 credit
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 Horticulture Science
- K Level only

Pathophysiology K 1 credit
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.
- Grades 11-12
- Required Prerequisites: Biology and Chemistry
- Recommended prerequisites: Medical Terminology and Principles of Health Science
- K Level only
**Engineering Design and Problem Solving K** 1 credit

Engineering Design and Problem Solving reinvigorates 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
- K Level only

**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
- K Level only

**Biology-Advanced Placement** 1 credit

Biology AP is a college preparatory course designed to extend the understanding of biology concepts. Major emphasis is placed on the latest theories and concepts dealing with molecular biology, biochemistry, cellular processes, human genetics, and bioethics. Other topics include plant and animal taxonomy, ecology, and evolution. The course is also heavily lab-oriented to familiarize the student with some of the techniques and processes currently used in scientific research. This course is recommended for students planning to major in any area of science in college. Students who take the course will be prepared for the AP Biology exam.

- Prerequisites: Biology and Chemistry

**Chemistry-Advanced Placement** 1 credit

Comparable to a first-year college course, this course is an in-depth study of the principles and concepts in chemistry. Students are required to demonstrate an understanding of these principles through application in a laboratory situation. Content includes structure and bonding, stoichiometry, thermodynamics, kinetics, and quantitative analysis. This course is designed toward advanced placement for the college-bound student. Students who take the course will be prepared for the AP Chemistry exam.

- Prerequisite: Chemistry and Algebra II

**Environmental Science-Advanced Placement** 1 credit

This course will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Students who take the course will be prepared for the AP Environmental Science exam.

- Prerequisite: Biology and Chemistry

**Physics I-Advanced Placement** 1 credit

AP Physics I is the equivalent of a first semester college course in algebra based physics but it is designed to be taught over a full academic year to enable AP students to develop deep understanding of the content and to focus on applying their knowledge through inquiry labs. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It also introduces electric circuits. The course may substitute for Physics.

- Prerequisite: completion of or concurrent in Algebra II
- Medical Focus

**Physics II-Advanced Placement** 1 credit

In AP Physics II, students learn about the laws that govern the world around by studying Thermodynamics, Fluids, Electrostatics, Magnetism, and Modern Physics. Through inquiry-based learning, students will develop critical thinking and reasoning skills. AP Physics II is the equivalent of a second semester algebra-based physics college course; however, it is designed to be taught over a full academic year to enable AP students to develop deep understanding of the content and to allow for more time on inquiry labs. Students who take the course will be prepared for the AP Physics II exam.

- Prerequisite: AP Physics I and completion or concurrent enrollment in Precalculus
- Medical Focus

**Physics C-Advanced Placement** 2 credits

AP Physics C is a second year physics course. In AP Physics C students will explore the laws that govern the world around them in even more depth and with more emphasis on the mathematics. Students will study principles of mechanics, electricity, and magnetism. Considerable emphasis is placed on laboratory investigation and student research. AP Physics C is the equivalent of calculus-based college physics (often for engineers and science majors) and is designed toward advance placement for the college-bound student. Students who take the course will be prepared for the AP Physics C exams.

- Prerequisites: Physics or AP Physics I and completion of or concurrent enrollment in Calculus.
- Engineering Focus
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 the study of 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. 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 class, 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 a 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.

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 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:

- Computer Science Principles AP
- 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.
Computer Science Principles AP 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
- May not be taken post Computer Science II K
- Lab supplies or fee may be required.

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
- Lab supplies or fee may be required.

Computer Science II K (AP A Test Prep) 1 credit
Computer Science II K is a programming course designed to cover the Advance Placement (AP) 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
- Lab supplies or fee may be required.

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
- Satisfies advanced course requirement for STEM endorsement.
- Oracle Java SE 8 Programmer certification satisfies requirement to earn a performance Acknowledgment.
- Lab supplies or fee may be required.

Foundations of Personal Fitness 1/2 - 1 credit
This course enables students to incorporate health and physical behaviors into their lifestyles. Emphasis will be on giving students knowledge and skills in the following areas: components of physical fitness, consumer issues, biomechanical and physiological principles, safety practices, lifestyle assessment of individual fitness levels, and design of a personal fitness program.

Team Sports 1/2 - 1 credit
Instruction and skill development are offered in a variety of team sports. This instruction is planned to meet the needs of the individual students. The emphasis will be for students to develop and demonstrate physical skills, stamina, and an interest in physical activity and overall wellness. This curriculum framework will allow every student to become a physically-educated person.

Individual Sports 1/2 - 1 credit
Instruction and skill development are offered in a variety of individual, dual and leisure sports. This instruction is planned to meet the needs of the individual students. The emphasis will be for students to develop and demonstrate physical skills, stamina, and an interest in physical activity and overall wellness. This curriculum framework will allow every student to become a physically-educated person.

Outdoor Education 1/2 - 1 credit
Students enrolled in adventure outdoor education are expected to develop competency in outdoor education activities that provide opportunities for enjoyment and challenge. Emphasis is placed upon student selection of activities that also promote a respect for the environment and that can be enjoyed for a lifetime. Knowledge and skills will be gained through activities such as: camping, backpacking, canoeing, orienteering, basic first aid and CPR, casting and angling, participating in the challenge course and developing creative thinking with outdoor activities, and correlating nature and the environment with different subject areas.

Aerobic Activities 1/2 - 1 credit
This course is a comprehensive study of the components of aerobic fitness. Dance aerobics is an exercise that combines the rhythmic steps of aerobics with graceful dance movement. It can be broadly divided into four types high impact exercises, low impact exercises, step aerobics, and water aerobics all of which address the development of strength, endurance, flexibility, and the creation of a sense of well-being with the individual student. Dance is a natural method for learning and a powerful ally for developing the physical, emotional, social and cognitive attributes of students.
Off Campus PE
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 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. Students enrolled in athletics must have a current physical on file with the school.

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. One athletic competition may be held outside of school Monday through Thursday. 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.

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 health care industry. Topics include career requirements, medical history, trends in financing health care, ethical and legal responsibilities, human anatomy and physiology as related to the health care 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 10 – 12
- Completion of this course satisfies the health credit required for graduation.
- Lab supplies or fee may be required.

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.

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 that 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. Specific topics in the abstinence-based sex education curriculum include decision-making concerning dating, love, relationships, and marriage and family. Other issues addressed are the problems of teen pregnancy and parenthood, sexually transmitted diseases, sexual harassment and abuse, rape prevention and the failure rate of contraceptive methods when used either to prevent pregnancy or disease. Parents will have an opportunity to attend a preview night of the curriculum. Also, take-home assignments will provide avenues for parent/student communication. Because of the sensitive nature of these topics and the information about lifelong choices, students should consider their goals and maturity level when choosing the best time to take this course. With parent permission, this course may be delayed until grade 11 or 12, or taken by correspondence. The health requirement may also be met by successful completion of one credit of Health Science Technology Education, or students may take Anatomy and Physiology and receive credit for health upon successful completion of the health credit-by-exam.

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.
<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td><strong>Art I Photography</strong></td>
<td>1</td>
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<tr>
<td>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. Having a 35 mm SLR film camera of their own is beneficial to students taking class.</td>
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<td>A student may only earn one Art I credit.</td>
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<td><strong>Art I Digital Art and Media</strong></td>
<td>1</td>
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<td>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.</td>
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<td>Having a Digital SLR camera of their own is beneficial to students taking this class.</td>
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<td>Prerequisite: Art I DP, Art I S, Art I P, or Art I DM</td>
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<tr>
<td>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.</td>
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<td><strong>Art II Drawing/Painting</strong></td>
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<td>Prerequisite: Art II Photography</td>
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<td>A 35 mm SLR film camera may be required.</td>
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<tr>
<td>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.</td>
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<td><strong>Art II Photography</strong></td>
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<td>Prerequisite: Art I DP, Art I S, Art I P, or Art I DM</td>
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<tr>
<td>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.</td>
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<tr>
<td><strong>Art III Photography</strong></td>
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<td>A 35 mm SLR film camera may be required.</td>
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<tr>
<td>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.</td>
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<tr>
<td>Prerequisite: Art II Sculpture</td>
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<td>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.</td>
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<tr>
<td><strong>Art III Design</strong></td>
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<td>Prerequisite: Art II Design</td>
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<tr>
<td>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.</td>
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</tbody>
</table>
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

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

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 best works and includes a written statement defining the student’s focus of concentration.

- Prerequisite: Students must have completed a Level II course
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

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

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
• Beginning with the class of 2019 (10th graders in 2016-17), Art I is a required prerequisite.

FLORAL DESIGN

Floral Design 1 credit
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.
• Lab supplies or fee may be required.

THEATRE ARTS

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.
• A course fee may be charged.

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 previous level theatre course required
• A course fee may be charged.

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
• A course fee may be charged.
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. Student may have the opportunity to participate in campus events and productions.

- Prerequisite: Teacher recommendation
- Completion of previous level theatre course required
- A course fee may be charged.

**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.

- A course fee may be charged.
- Students taking only one semester must be scheduled in the fall.

**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 previous level of theatre course required
- A course fee may be charged.

**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 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 in the fall semester of Band I and II.

- 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 placed 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

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
- Beginning with the Class of 2019, 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

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, 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.
- A course fee may be charged.

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, folk, character, and world dance.
- Prerequisite: Previous level Dance course
- A course fee may be charged.
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.

**Dance II-IV (Dance Team) 1 - 3 credits**

Instructional priorities of the high school dance program include development of dance techniques learned in Dance I, 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 II to IV more advanced techniques and skills are acquired. Placement of students in Dance II-IV (Dance Team) is determined by various criteria including a tryout. Dance Team will meet the requirement of 1 PE credit for after school participation.

Rehearsal and performance requirements vary from campus to campus. Dance teams generally practice 8 hours per week 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.
CAREER AND TECHNICAL EDUCATION

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 smocks for some health science classes).

Several of the CTE courses include training for industry-standard certifications, while students pay for the certification exam, the training is offered at no cost. Some of these certifications meet the requirements for a student to earn a Performance Acknowledgment. Certifications that relate to safety (such as CPR and OSHA) are required for all students in the course. See your teacher or counselor for more information.

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.

FREQUENTLY ASKED QUESTION ABOUT EARNING ENDORSEMENTS USING THE CTE OPTIONS

A variety of CTE course combo options are available. How do I know the group of courses I selected will satisfy the endorsement requirement?

Use the following checklist:

A. Will you earn 4 or more CTE credits from courses that fall within the same endorsement?
B. Are at least 2 of those courses from the same cluster?
C. Is at least 1 of the courses listed as including “advanced” topics?

| Student 1 - Student is interested in learning to be a chef, but also wants to own and run a food truck. |
|---|---|
| Intro to Culinary Arts (1 credit) | A-yes, all 4 credits are from the Business & Industry endorsement (1 from Business Mgmt cluster and 3 from Hospitality & Tourism cluster) |
| Culinary Arts (2 credits-advanced) | B-yes, Intro to Culinary Arts and Culinary Arts are both from same cluster |
| Business Management (1 credit) | C-yes, Culinary Arts |

Result: This combination of courses WILL SATISFY the CTE course credit requirement for an endorsement in Business & Industry.

| Example 2 - Student is interested in learning how to design and build houses. |
|---|---|
| Principles of Architecture (1 credit) | A-yes, 4 credits (all 4 from Architecture & Construction) |
| Architectural Design I (1 credit) | B-yes, 3 courses from Architecture & Construction |
| Construction Technology I (2 credits) | C-no |

Result: This combination of courses WILL NOT SATISFY the CTE course credit requirement for an endorsement in Business & Industry. This student has 4 credits but still needs to take an advanced CTE course. He/she has the prerequisites to take either Architecture Design II, Construction Technology II, Project-based Research in Drafting or Tech Ed, Practicum in Architecture or Construction. A course like BIM I to brush up on Microsoft Office, because it falls within the same endorsement as architecture.

| Example 3 - Student is interested in working with animals, taking Principles of Health Science to satisfy the health requirement for graduation |
|---|---|
| Principles of Health Science (1 credit) | A-no, only 3 of the 4 credits because not all 4 credits fall within the same endorsement (Prin of Health Sci is a CTE class but is in the Health Science Cluster which is in the Public Svcs Endorsement, while the other courses are in Ag cluster which is in the Business & Industry endorsement) |
| Principles of Ag (1 credit) | B-yes, 4 courses are from Ag cluster |
| Small Animal Management (1/2 credit) | C-yes, Vet Med Applications |
| Equine Science (1/2 credit) | |
| Vet Med Applications (1 credit-advanced) | |

Result: This combination of courses WILL NOT SATISFY the CTE course credit requirement for an endorsement in Business & Industry. This student has 4 credits, but only 3 of them fall within the same endorsement. He/she needs one more credit from any of the clusters that fall within the Business & Industry endorsement.
AGRICULTURE, FOOD AND NATURAL RESOURCES
Endorsement: Business & Industry
(required prerequisite)

Principles of Agriculture, Food and Natural Resources
(Required for Grades 9 and 10 only)
1 credit

Small Animal Management
1/2 credit

Equine Science
1/2 credit

Livestock Production
1 credit

Floral Design
1 fine arts credit

Agricultural Mechanics
1 credit

Wildlife, Fisheries & Ecology Mgmt
1 credit

Horticulture Science
1 credit

Food Tech & Safety
1 credit

Veterinary Med Applications
(Basic Animal and/or Equine Sci recommended, or Livestock Prod)
1 credit
Advanced

Advanced Animal Science K
(Biology, Chemistry and Vet Med or at least 1 credit from Small Animal, Equine Sci, Livestock Prod)
1 science credit
Advanced

Adv Plant & Soil Science K
(Biology, Chemistry and Horticulture Sci)
1 science credit
Advanced

Project-based Research in Ag
(at least 2 courses in ag cluster)
1 project-based credit
Advanced

Practicum in Agriculture, Food and Natural Resources
(at least two courses in ag cluster)
2 work-based credits
Advanced

SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)--see page on Endorsements in this document or your counselor for more information on graduation requirements.)

<table>
<thead>
<tr>
<th>Career Interest</th>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag Mechanics/Engineering</td>
<td>Principles of Ag</td>
<td>Ag Mechanics (1)</td>
<td>*Ag Equipment (1)</td>
<td>*Practicum in Ag (2) or Project-based Res (1) or Welding I (2)</td>
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<tr>
<td>Animal Science- Focus</td>
<td>Principles of Ag</td>
<td>Livestock Production (1)</td>
<td>Food Tech/Safety (1) or Wildlife (1)</td>
<td>*Adv Animal Sci (1-sci) or Practicum in Ag (2) or Project-based Res (1)</td>
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<tr>
<td>on Livestock/Wildlife Mgmt</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Science- Focus</td>
<td>Principles of Ag</td>
<td>Equine Science (1/2), and/or Small Animal Mgmt (1/2)</td>
<td>*Vet Med Applications (1)</td>
<td>*Adv Animal Sci (1-sci) or Practicum in Ag (2) or Project-based Res (1)</td>
</tr>
<tr>
<td>on Veterinary Science</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horticulture</td>
<td>Principles of Ag</td>
<td>Floral Design (1-fine arts)</td>
<td>Horticulture Science (1)</td>
<td>*Adv Plant/Soil Sci (1-sci) or Practicum in Ag (2) or Project-based Res (1)</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
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</tbody>
</table>
AGRICULTURE, FOOD AND NATURAL RESOURCES
Endorsement: Business & Industry

Principles of Agriculture, Food, and Natural Resources (AFNR) C 1 credit
Certification: Quality Counts
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.
- Grades 9 - 10
- Required of all 9th/10th graders wanting to take an Ag course
- Lab supplies or fee may be required

Livestock Production C 1 credit
Certification: Texas Beef Quality Assurance
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 an insight into livestock management include animal foods, nutrition and growth, reproduction, animal health, animal handling techniques, and livestock sales.
- Grades 10 - 12
- Required prerequisite (or concurrent): Principles of AFNR for 10th graders
- Lab supplies or fee may be required

Small Animal Management C 1/2 credit
Certification: Veterinary Nutritional Advocate
This course is designed for students preparing for careers in the field of animal science. Small animals which may be included in the course of study include, but are not limited to, small mammals, amphibians, reptiles, avian, dogs, and cats.
- Grades 10 - 12
- Required prerequisite (or concurrent): Principles of AFNR for 10th graders
- Lab supplies or fee may be required

Equine Science 1/2 credit
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.
- Grades 10 - 12
- Required prerequisite (or concurrent): Principles of AFNR for 10th graders
- Lab supplies or fee may be required

Veterinary Medical Applications A C P 1 credit
Certification: Certified Vet Assistant (CVA)
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.
- Grades 11 - 12
- Required prerequisites: Principles of AFNR and either Small Animal Management, Equine Science, or Livestock Production
- Satisfies advanced course requirement for Business & Industry endorsement.
- CVA certification satisfies requirement to earn a performance Acknowledgment.
- Lab supplies or fee may be required

Advanced Animal Science K A 1 credit (science)
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.
- Grades 11 - 12
- Required prerequisites: Biology, Chemistry and Veterinary Medical Applications OR at least 1 credit of animal science (Small Animal Management and Equine Science or Livestock Production)
- Satisfies advanced course requirement for Business & Industry endorsement.
- Completing this course satisfies a science credit required for graduation

Food Technology & Safety (an Ag course) 1 credit
Food Technology and Safety is designed to acquaint the student with world food production. Areas investigated will be marketing and transportation of food products, including preparation, processing, preservation and packaging for the consumer. Students learn about government regulations, sanitation, occupational opportunities, safety, and leadership development.
- Grades 10 - 12
- Required prerequisite (or concurrent): Principles of AFNR for 10th graders
- Lab supplies or fee may be required.
Wildlife, Fisheries and Ecology Management  
1 credit
Certification: Hunter & Boater 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. State certification in these areas is available to students who qualify (state-mandated fee required for certification). Wise use of our natural resources and career opportunities are also covered.
- Grades 10 - 12
- Required prerequisite (or concurrent): Principles of AFNR for 10th graders
- Lab supplies or fee may be required.

Floral Design  
1 credit (fine arts)
Certification: TSFA Floral Designer
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.
- Lab supplies or fee may be required.

Horticulture Science  
1 credit
This course is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production. Landscape design, turf maintenance, plant nutrition, plant use and identification, plant chemical uses and precautions are introduced along with tools and equipment used in the industry.
- Grades 10 - 12
- Required prerequisite (or concurrent): Principles of AFNR for 10th graders
- Lab supplies or fee may be required.

Advanced Plant & Soil Science K  
1 credit (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 Agriculture
- Satisfies advanced course requirement for Business & Industry endorsement.
- Completing this course satisfies a science credit required for graduation.

Agricultural Mechanics and Metal Technologies  
1 credit
Certification: OSHA, American Welding Society (AWS)
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.
- Grades 10 - 12
- Required prerequisite (or concurrent): Principles of AFNR for 10th graders
- Lab supplies or fee may be required.
Agriculture, Food and Natural Resources

Endorsement: Business & Industry

Course with “advanced” topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.

Course includes training for an industry-standard certification. While students pay for the certification exam, the training is offered at no cost.

Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it.

Agricultural Equipment Design & Fabrication

Certification: OSHA, American Welding Society (AWS)

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 the design stage through construction and completion. Projects might include items such as agricultural machinery and equipment, fences, corrals, or other agricultural enclosures.

- Grades 11 - 12
- Required prerequisites: Agricultural Mechanics and Metal Technologies
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Practicum in Agriculture, Food & Natural Resources

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 15 school days after enrollment in the course.

- Grades 11 - 12
- Required prerequisites: at least two (2) credits from ag cluster and age 16 if paid training site
- Recommended for students needing to complete the hour requirement required to earn their CVA certification (started in Vet Med) and a performance Acknowledgment.
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Project-based Research in Agriculture, Food & Natural Resources

This course is a supervised research study/project-based class where students will apply knowledge and skills from previous agriscience courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- Grades 11 - 12
- Required prerequisites: at least two (2) credits from ag cluster and age 16 if paid training site
- Recommended for students unable to complete all welding certifications available in Ag Mech and Ag Equipment.
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.
ARCHITECTURE AND CONSTRUCTION
Endorsement: Business & Industry
(required prerequisite)

Principles of Architecture
(Grades 9 - 11)
1 credit

Principles of Manufacturing
(Grades 8 - 11)
1 credit

Interior Design
1 credit

Architectural Design I
(Prin of Architecture)
1 credit

Construction Technology I
(Prin of Architecture or Prin of Manufacturing)
2 credits

Architectural Design II
(Architectural Design I)
2 credits
Advanced

Construction Technology II
(Construction Technology I)
2 credits
Advanced

Mill & Cabinetmaking Technology
(Construction Technology I)
2 credits
Advanced

Plumbing I
(blocked with PBR in Plumbing)
(Construction Technology I)
2 credits
Advanced

Practicum in Architectural Design
(Architectural Design I)
2 work-based credits
Advanced

Project-based Research in Drafting
(at least 2 courses in this cluster)
1 project-based credit
Advanced

Project-based Research in Tech Ed
(at least 2 courses in this cluster)
1 project-based credit
Advanced

Practicum in Construction Technology
(Construction Technology I)
2 work-based credits
Advanced

Plumbing II
(Plumbing I & PBR Tech Ed)
2 credits
Advanced

SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)--see page on Endorsements in this document or your counselor for more information on graduation requirements.)

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<tbody>
<tr>
<td>Architecture</td>
<td>Principles of Architecture (1)</td>
<td>Architecture Design I (1)</td>
<td>*Architecture Design II (2)</td>
<td>*Practicum in Arch Design (2) or *Project-based Research in Drafting (1)</td>
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<tr>
<td>Construction</td>
<td>Principles of Architecture (1) or Principles of Manufacturing (1)</td>
<td>Construction Technology I (2)</td>
<td>*Construction Technology II (2) or *Mill &amp; Cabinetmaking Technology (2)</td>
<td>*Practicum in Construction Tech (2) or *Project-based Research in Tech Ed (1)</td>
</tr>
<tr>
<td>Plumbing</td>
<td>Principles of Architecture (1) or Principles of Manufacturing (1)</td>
<td>Construction Technology I (2)</td>
<td>*Plumbing I blocked with *Project-based Research in Plumbing (2)</td>
<td>*Plumbing II (2)</td>
</tr>
<tr>
<td>Interior Design</td>
<td>Principles of Architecture (1)</td>
<td>Interior Design (1)</td>
<td>Architecture Design I (1)</td>
<td>*Architecture Design II (2)</td>
</tr>
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</table>
ARCHITECTURE AND CONSTRUCTION
Endorsement: Business & Industry

Principles of Architecture 1 credit
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.
- Grades 9 - 11
- Lab supplies or fee may be required.

Construction Technology I 2 credits
Students will gain knowledge and skills specific to those needed to enter the workforce 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.
- Grades 10 - 12
- Required prerequisite: Principles of Architecture or Principles of Manufacturing
- Lab supplies or fee may be required.

Construction Technology II 2 credits
Certification: OSHA 10-HR Card
In Construction Technology II, students will gain advanced knowledge and skills necessary 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.
- Grades 11 - 12
- Required prerequisite: Construction Technology I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Architectural Design I 1 credit
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.
- Grades 10 - 12
- Required prerequisite: Principles of Architecture
- Recommended prerequisite: Geometry
- Lab supplies or fee may be required.

Architectural Design II 2 credits
Certifications: 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.
- Grades 11 - 12
- Required prerequisite: Architectural Design I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Practicum in Architectural Design 2 credits (work-based)
An occupationally specific course designed to provide technical instruction in architectural design. Instruction may 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 15 school days after enrollment in the course.
- Grade 12
- Required prerequisite: Architectural Design I and age 16 if paid training site
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.
### Project-based Research in Drafting

1 credit (project-based)

This course is a supervised research study project-based class where students will apply knowledge and skills from previous drafting courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- Grades 11 - 12
- Required prerequisite: At least two credits from Architecture and Construction cluster
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

### Mill and Cabinetmaking Technology

2 credits

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.

- Grades 10 - 12
- Required prerequisite: Construction Technology I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

### Plumbing I (blocked with Project-based Research in Plumbing)

2 credits

Students will gain knowledge and skills needed to enter the industry as a plumbing apprentice, building maintenance technician, or supervisor or prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in industry workplace basics and employer/customer expectations including how to use a plumbing code book, how to identify and use power and hand tools, how to be safe on the jobsite and how to apply basic plumbing mathematics and plumbing drawing; and how to identify, fit and use plastic, copper, cast iron, carbon steel, and corrugated stainless steel pipe.

- Grades 11-12, with priority given to students planning to take Plumbing II
- Required prerequisite: Construction Technology I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.
- Course will transcript as 1 credit in Plumbing I and 1 credit in Project-based Research

### Plumbing II

2 credits

Students will gain knowledge and skills needed to enter the industry as a plumber, building maintenance technician, or supervisor or prepare for a postsecondary degree in mechanical engineering. Students will acquire knowledge and skills in plumbing code, industry workplace basics, and employer/customer expectations, including tool and jobsite safety, advanced plumbing mathematics, commercial drawings, basic electricity, hanger installation, supports and structural penetrations, roof drains, fixture installation, valves and faucets, and oxy-fuel safety.

- Grades 12
- Required prerequisite: Plumbing I and Project-based Research in Plumbing
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

### Practicum in Construction Technology

2 credits (work-based)

This course allows students to apply construction management 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 15 school days after enrollment in the course.

- Grade 12
- Required prerequisite: Construction Technology I and age 16 if paid training site
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

### Project-based Research in Tech Ed

1 credit (project-based)

(also listed in Manufacturing cluster)

This course is a supervised research study project-based class where students will apply knowledge and skills from previous Technology Education courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- Grades 11 - 12
- Required prerequisite: At least two credits from Architecture and Construction and/or Manufacturing clusters
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.
ARTS, A/V TECHNOLOGY AND COMMUNICATIONS
Endorsement: Business & Industry
(required prerequisite)

Digital Audio Technology I
1 credit

Digital Media
From Info Tech cluster
1 credit

Professional Communications
1/2 credit

Principles of Business, Marketing & Finance
From Bus/Mktg/Fin clusters
(Grades 9 & 10)
1 credit

Audio Video Production I
2 credits

Animation I
1 credit

Web Technologies I
From Info Tech cluster
1 credit

Fashion Marketing
From Mktg cluster
1/2 credit

Fashion Design I
1 credit

Audio Video Production II
(Animation I)
2 credits
Advanced

Web Technologies II
(Web Tech I)
1 credit
Advanced

Fashion Design II
(Fashion Design I)
2 credits
Advanced

Practicum in Audio Video Production
(Digital Audio Tech II or Audio Video Prod II)
2 work-based credits
Advanced

Project-based Research in Multimedia
(Animation II or Web Tech II)
1 project-based credit
Advanced

Practicum in Marketing
From Mktg cluster/ Focus on Fashion Marketing
(at least 1 mktg course, 16 yrs old)
3 work-based credits
Advanced

SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)—see page on Endorsements in this document or your counselor for more information on graduation requirements.)

<table>
<thead>
<tr>
<th>Career Interest</th>
<th>9th Grade</th>
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<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animation 2D/3D</td>
<td>Digital Media (1)</td>
<td>Animation I (1)</td>
<td>*Animation II (2)</td>
<td>*Project-based Research in Multimedia (1)</td>
</tr>
<tr>
<td>Fashion Design</td>
<td>Principles of Business, Marketing &amp; Finance (1)</td>
<td>Fashion Design I (1)</td>
<td>*Fashion Design II (2)</td>
<td>*Project-based Research in Fashion Design (1) or *Practicum in Marketing (3)</td>
</tr>
<tr>
<td>Video Production</td>
<td>Digital Media (1) or Digital Audio Tech I (1)</td>
<td>Audio Video Production I (2)</td>
<td>*Audio Video Production II (2)</td>
<td>*Practicum in Audio Video Production (2)</td>
</tr>
<tr>
<td>Audio Production</td>
<td>Digital Audio Tech I (1)</td>
<td>Audio Video Production I (2)</td>
<td>*Digital Audio Tech II (1)</td>
<td>*Practicum in Audio Video Production (2)</td>
</tr>
</tbody>
</table>
ARTS, A/V TECHNOLOGY AND COMMUNICATIONS
Endorsement: Business & Industry

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

Animation I (also listed in Information Tech cluster) 1 credit
Certification: 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. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.
- Grades 9 - 12
- Lab supplies or fee may be required.

Digital Media (also listed in Information Tech cluster) 1 credit
Certification: 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. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.
- Grades 9 - 12
- Lab supplies or fee may be required.

Animation II (also listed in Information Tech cluster) 2 credits
Certification: 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.
- Grades 11 - 12
- Required prerequisite: Animation I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Web Technologies I (also listed in Information Tech cluster) 1 credit
Certification: Adobe Dreamweaver
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, Dreamweaver, Photoshop, Animate, Fireworks, digital cameras, and scanners. The emphasis will be on utilizing the features in Adobe Dreamweaver included in the corresponding industry-recognized certification. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.
- Grades 9 - 12
- Lab supplies or fee may be required.

Web Technologies II (also listed in Information Tech cluster) 1 credit
This course provides students the opportunity to expand upon the web tech knowledge and skills mastered in the Web Technologies I course. Students will focus on advanced web page concepts and applications, including the incorporation of web-based programming languages such as JavaScript, Perl or mySQL. Students are required to submit a formal project plan within 15 school days 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.
- Grades 10 - 12
- Required prerequisite: Web Technologies I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.
ARTS, A/V TECHNOLOGY AND COMMUNICATIONS
Endorsement: Business & Industry

Course with “advanced” topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.

Course includes training for an industry-standard certification. While students pay for the certification exam, the training is offered at no cost.

Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it.

Project-based Research in Multimedia (also listed in Information Tech cluster)

1 credit (project-based)
This course is a supervised research study project-based class where students will apply knowledge and skills from previous animation and/or web technologies courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- Grades 11 - 12
- Required prerequisite: Animation II or Web Technologies II
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Fashion Marketing
1/2 credit (also listed in Marketing cluster)
Fashion Marketing is designed to provide students with knowledge of the various business functions in the fashion industry. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, selling, visual merchandising, and career opportunities.

- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Lab supplies or fee may be required.

Fashion Design I
1 credit (also listed in Marketing cluster)
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.

- Grades 10 - 12
- Lab supplies or fee may be required.

Fashion Design II
2 credits
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.

- Grades 11 - 12
- Required prerequisite: Fashion Design I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Project-based Research in Fashion Design
1 credit (project-based)
This advanced course builds upon skills learned in Advanced Fashion Design II. Students will work on special projects such as HUNCH or utilize all advanced designing and sewing techniques in their projects to create a professional look. Students will make minor and advanced alterations and display their garments.

- Grade: 12
- Required prerequisite: Fashion Design II
- Lab supplies or fee may be required.

Practicum in Marketing I
3 credits (work-based)
(Also listed in Marketing cluster)
Certifications: A*S*K Marketing and Real Estate License
This course allows students to apply marketing concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain a working knowledge of marketing functions such as selling, advertising, display, the free enterprise system, inventory control systems, marketing mathematics, and resume writing. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 15 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course. Students in Fashion Design may pursue job in fashion industry. Students, age 17 and older, may opt to pursue their real estate license for an additional cost.

- Grades 11 - 12
- Required prerequisite: At least one course in Marketing cluster or related area and age 16 with reliable transportation
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.
- May be taken a second year (Practicum in Marketing II) for an additional 3 credits.
## ARTS, A/V TECHNOLOGY AND COMMUNICATIONS
### Endorsement: Business & Industry

| Course with "advanced" topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics. | Course includes training for an industry-standard certification. While students pay for the certification exam, the training is offered at no cost. | Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it. |

### Digital Audio Technology I
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.
- Grades 9 - 12
- Lab supplies or fee may be required.

<table>
<thead>
<tr>
<th>Digital Audio Technology II</th>
<th>1 credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Digital Audio Technology II, students build upon their basic skills learned in Digital Audio Technology I, and explore more advanced audio recording, editing, composition, and mixing. Students work on music composition, creating sound effects, and more advanced audio equipment. This course focuses on advanced audio production concepts, such as music production, as well as advanced issues involved in producing radio commercials for clients. Students will be expected to produce original music compositions and projects on a deadline in this course. This course will be administered with a project based strategy with an industry-focused pre-production, production, and post production audio system to create useful digital content. Students are expected to use innovative thinking to develop new ideas and processes for solving real-world issues and conveying those ideas to a global audience through a digital product. Issues will include current topics such as health care, government, business, and education. Methods and products will be created for audiences BEYOND the classroom such as school officials, non-profit organizations, higher education officials, government, or other stakeholders.</td>
<td></td>
</tr>
</tbody>
</table>
- Grades 11 - 12
- Required prerequisites: Digital Audio Technology I and Audio/Video Production I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

### Audio/Video Production I
**Certification: Adobe Premier Pro**
Students will produce videos using professional standards in the area of pre-production, production and post-production Public Services 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.
- Grades 10 - 12, with priority to grades 10 and 11
- Recommended prerequisite: Digital Media or Digital Audio Technology I
- Students may be required to work additional hours after school at the teacher’s discretion.
- Lab supplies or fee may be required.

### Audio/Video Production II
**Certification: 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 athletics, 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.
- Grades 11 - 12
- Required prerequisite: Audio/Video Production I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Students will be required to work additional hours after school at the teacher’s discretion.
- Lab supplies or fee may be required.
Practicum in Audio/Video Production

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. This course requires students to arrange their own transportation to produce a wide variety of media projects.

- Grade 12
- Required prerequisite: Audio/Video Production II or Digital Audio Technology II
- Students are required to have an approved training site/client within 15 school days of enrollment in the course.
- Lab supplies or fee may be required.
**BUSINESS MANAGEMENT AND ADMINISTRATION**

Endorsement: Business & Industry

(required prerequisite)

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**Principles of Business, Marketing & Finance**

(Grades 9 - 10)

1 credit

**Touch System Data Entry**

(Grades 7 - 12)

1/2 credit

**Global Business**

1/2 credit

**Virtual Business**

1/2 credit

**Business Information Management I**

1 credit

**Business Information Management II**

1 credit

**Business Management**

1 credit

**Human Resources Management**

1/2 credit

**Advanced Business Management**

1 credit

**Practicum in Business Management I/II**

(at least 1 credit in this cluster, 16 years-old)

3 work-based credits

**Business English**

(English III)

1 English credit

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**SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement**

(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)—see page on Endorsements in this document or your counselor for more information on graduation requirements.)

<table>
<thead>
<tr>
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<th>9th Grade</th>
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<th>11th Grade</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Business Manager</td>
<td>Principles of Business, Mktg &amp; Finance (1)</td>
<td>Business Info Mgmt I (1) or *Business Info Mgmt II (1)</td>
<td>Business Management (1)</td>
<td>Practicum in Business I (3)</td>
</tr>
<tr>
<td>Business Owner</td>
<td>Principles of Business, Mktg &amp; Finance (1)</td>
<td>Business Info Mgmt I (1) or *Business Info Mgmt II (1)</td>
<td>Human Resource Mgmt (1/2) and Global Business (1/2)</td>
<td>Practicum in Business I (3)</td>
</tr>
<tr>
<td>Office Manager</td>
<td>Principles of Business, Mktg &amp; Finance (1)</td>
<td>Touch System Data Entry (1/2) and Virtual Business (1/2)</td>
<td>Business Info Mgmt I (1) or *Business Info Mgmt II (1)</td>
<td>Practicum in Business I (3)</td>
</tr>
</tbody>
</table>
Principles of Business, Marketing, and Finance 1 credit
(also listed in Marketing and Finance clusters)
In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economics 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.
• Grades 9 - 10
• Lab supplies or fee may be required.

Touch System Data Entry 1/2 credit
The Touch System Data Entry course provides students the opportunity to improve their speed and accuracy on the keyboard. In addition, the course focuses on document formatting skills applicable in many personal, educational, and workplace settings. With an ever increasing focus on technology, these skills are valuable for all students.
• Grades 7 - 12
• Strongly recommended for all students.
• Lab supplies or fee may be required.

Business Information Management I (BIM I) 1 credit
(also listed in Information Tech cluster)
Certification: Microsoft Office
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. While an emphasis will be placed on simulations related to business, finance, and marketing, this introductory technology course is appropriate for students whose career interests fall within any of the 16 career clusters.
• Grades 8 - 12
• Recommended prerequisite: Touch System Data Entry (required for 8th graders)
• Microsoft Office Expert-Word and Microsoft Office Expert-Excel certifications each satisfy the requirement to earn a performance Acknowledgment.
• Students earning Word Expert, Excel Expert, Powerpoint, and Access certifications also earn the Microsoft Office Specialist-Master certification, which satisfies requirement to earn an additional performance Acknowledgment.
• Lab supplies or fee may be required.

Business Information Management II (BIM II) 1 credit
Certification: Microsoft Office
Students will complete this course with an advance level of proficiency in word processing, spreadsheet, database and presentation applications that is expected in the world of business. Lessons are aligned with the content on the Microsoft Office Specialist exams. This certification is globally recognized as the standard for demonstrating mastery of Microsoft Office Suite skills and may be a valuable addition to your credentials for current and future employment. On-site certification assessment is available at all campuses.
• Grades 10 - 12 (Students with credit for BIM I in 8th grade may enroll in 9th grade.)
• Recommended prerequisite: Business Information Management I or prior working knowledge of Microsoft Office.
• Satisfies advanced course requirement for Business & Industry endorsement.
• Microsoft Office Expert-Word and Microsoft Office Expert-Excel certifications each satisfy the requirement to earn a performance Acknowledgment.
• Students earning Word Expert, Excel Expert, Powerpoint, and Access certifications also earn the Microsoft Office Specialist-Master certification, which satisfies requirement to earn an additional performance Acknowledgment.
• Lab supplies or fee may be required.

Business English 1 credit (English)
The Business English course allows students to enhance their reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students edit their work for clarity, engaging language, and the correct use of the conventions and mechanics of written English to produce final, error-free drafts for business reproduction. Having quality written and verbal communication is key to success in business as there is often no second chance to make a first impression. This course is designed for students graduating with an endorsement in Business and Industry.
• Grade 12
• Prerequisites: Successful completion of English I-III and satisfactory performance on STAAR English I and II End-of-Course; Touch System Data Entry recommended.
• This course may satisfy the 4th English credit required for graduation on the Foundation High School Program.
• Note: Students selecting this course as their fourth English will not be eligible for the TSI waiver.
Global Business  
1/2 credit
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. Students taking this course should consider also taking Virtual Business and/or Human Resource Management and Business Management.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Lab supplies or fee may be required.

Virtual Business  
1/2 credit
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. Students taking this course should consider also taking Global Business and/or Human Resource Management and Business Management.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Lab supplies or fee may be required.

Human Resources Management  
1/2 credit
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.
- Grades 11 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Lab supplies or fee may be required.

Business Management  
1 credit
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. Students taking this course should consider also taking courses in the Finance cluster.
- Grades 11 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Strongly recommended for all students wanting to pursue a degree in Business.
- Lab supplies or fee may be required.

Practicum in Business Management I  
3 credits (work-based)
Certification: Microsoft Office
This course allows students to apply business concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain a working knowledge of office-related skills such as communication, ethics, office technology (Microsoft Office and Adobe applications), and resume writing. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 15 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.
- Grades 11 - 12
- Required prerequisite: At least one credit in Business, Marketing and Finance cluster and age 16 with reliable transportation
- Satisfies advanced course requirement for Business & Industry endorsement.
- Microsoft Office Expert-Word and Microsoft Office Expert-Excel certifications each satisfy the requirement to earn a performance Acknowledgment.
- Students earning Word Expert, Excel Expert, Powerpoint, and Access certifications also earn the Microsoft Office Specialist-Master certification, which satisfies requirement to earn an additional performance Acknowledgment.
- Lab supplies or fee may be required.
- May be taken a second year (Practicum in Business Management II) for an additional 3 credits.
EducaTion and training
Endorsement: Public Services
(required prerequisite)

Principles of Education & Training
(Grades 9-11)
1 credit

Child Development
From Human Services Cluster
1 credit

Lifetime Nutrition & Wellness
From Human Services Cluster
1/2 credit

Interpersonal Studies
From Human Services Cluster
1/2 credit

Instructional Practices
2 credits - student teaching
Advanced

Practicum in Education & Training
(Instructional Practices)
2 credits - student teaching
Advanced

Sample 4-Course Sequences that satisfy the CTE course requirement for a Public Services Endorsement
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)--see page on Endorsements in this document or your counselor for more information on graduation requirements.)

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<tr>
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<tbody>
<tr>
<td>K - 12 Education</td>
<td>Principles of Education &amp; Training (1)</td>
<td>Child Development (1) OR Lifetime Nutrition &amp; Wellness (1/2) and Interpersonal Studies (1/2)</td>
<td>*Instructional Practices (2)</td>
<td>*Practicum in Education &amp; Training (2)</td>
</tr>
</tbody>
</table>
**Principles of Education and Training**  
1 credit  
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.  
- Grades 9 - 11  
- Lab supplies or fee may be required

**Lifetime Nutrition and Wellness**  
1/2 credit  
(also listed in Human Services cluster) 
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 cooking lab experiences may be included.  
- Grades 10 - 12, 9th graders may enroll after taking Principles of Human Services or Principles of Hospitality or Tourism in middle school  
- Recommended prerequisite: Principles of Human Services  
- Lab supplies or fee may be required

**Child Development**  
1 credit  
(also listed in Human Services cluster) 
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 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.  
- Grades 10 - 12  
- Recommended prerequisite: Principles of Human Services  
- Lab supplies or fee may be required

**Instructional Practices**  
2 credits  
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.  
- Grades 11 - 12  
- Recommended prerequisites: Principles of Education and Training and either Child Development OR Lifetime Nutrition and Wellness and Interpersonal Studies  
- Satisfies advanced course requirement for Public Services endorsement  
- Lab/uniform fee may be required

**Interpersonal Studies**  
1/2 credit  
(also listed in Human Services cluster) 
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.  
- Grades 10 - 12, 9th graders may enroll after taking Principles of Human Services or Principles of Hospitality or Tourism in middle school  
- Recommended prerequisite: Principles of Human Services  
- Lab supplies or fee may be required
Practicum in Education and Training  A C  2 credits
Certification: CFISD 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.
- Grade 12
- Required prerequisite: Instructional Practices
- Satisfies advanced course requirement for Public Services endorsement
- Lab/uniform fee may be required
FINANCE
Endorsement: Business and Industry
(required prerequisite)

Principles of Business, Marketing & Finance
(Grades 9 - 10)
1 credit

Money Matters
1 credit

Securities & Investments
1 credit

Banking & Financial Services
1/2 credit

Global Business
From Business Cluster
1/2 credit

Accounting I
1 credit
Advanced

Financial Analysis
(Accounting I)
1 credit
Advanced

Accounting II
(Algebra II, Accounting I)
1 math credit
Advanced

SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)--see page on Endorsements in this document or your counselor for more information on graduation requirements.)

<table>
<thead>
<tr>
<th>Career Interest</th>
<th>9th Grade</th>
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<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>Principles of Business, Mktg &amp; Finance (1)</td>
<td>*Accounting I (1)</td>
<td>*Accounting II (1-math)</td>
<td>*Financial Analysis (1)</td>
</tr>
<tr>
<td>Banking</td>
<td>Principles of Business, Mktg &amp; Finance (1)</td>
<td>Banking &amp; Financial Srv (1/2) and Global Business (1/2)</td>
<td>*Accounting I (1)</td>
<td>*Financial Analysis (1)</td>
</tr>
<tr>
<td>Investments</td>
<td>Principles of Business, Mktg &amp; Finance (1)</td>
<td>Money Matters (1)</td>
<td>Securities &amp; Investments (1)</td>
<td>*Accounting I (1)</td>
</tr>
</tbody>
</table>
Principles of Business, Marketing, and Finance  1 credit
(also listed in Business and Marketing clusters)
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.
- Grades 9 - 10
- Lab supplies or fee may be required.

Money Matters  1 credit
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.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing, and Finance; Strongly recommended for all students
- Lab supplies or fee may be required.

Banking and Financial Services  1/2 credit
While most students are aware of, and many utilize, the multitude of banking and financial institutions in our neighborhoods, few students (and adults) have a real understanding of the products and services these institutions provide. This course allows students with the opportunity to take on the roles and responsibilities of those in the banking and financial industry. As a result, not only will students gain information on potential careers in this field, they will be better informed customers and able to make the most of the services available. Students taking this course should consider also taking Securities and Investments.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing, and Finance
- Lab supplies or fee may be required.

Global Business  1/2 credit
(also listed in Business cluster)
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. Students taking this course should consider also taking Virtual Business and/or Human Resource Management and Business Management.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Lab supplies or fee may be required.

Securities and Investments  1 credit
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. Students taking this course should consider also taking Banking and Financial Services.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing, and Finance
- Lab supplies or fee may be required.

Accounting I  A  1 credit
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.
- Grades 10 - 12
- Required prerequisite: Geometry
- Recommended prerequisite: Principles of Business, Marketing, and Finance; Strongly recommended for all students wanting to pursue a degree in Business
- Satisfies advanced course requirement for Business & Industry endorsement
- Lab supplies or fee may be required.
ACCOUNTING II

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
- Satisfies advanced course requirement for Business & Industry endorsement
- Completing this course satisfies a math credit required for graduation.
- Quickbooks certification satisfies requirement to earn a Performance Acknowledgment.
- Lab supplies or fee may be required.

FINANCIAL ANALYSIS

Part of managing a successful and solvent business is evaluating performance in areas such as income, profitability, liquidity, working capital, debt, cash flow, etc. Students will also analyze accounting systems to examine their contribution to the fiscal stability of a business. By the end of the course, students will be able to evaluate company case studies and discuss the financial stability and value of the company. Students taking this course should also consider taking Business Management.

- Grades 11 - 12
- Required prerequisite: Accounting I
- Satisfies advanced course requirement for Business & Industry endorsement
- Lab supplies or fee may be required
Government and Public Administration
Endorsement: Arts & Humanities

REQUIRED FOR ALL

*World Geography or Human Geography AP
Grade 9 or 10
1 credit

OR

*US History or US History AP
Grade 11
1 credit

*Government or Government AP
Grade 12
1/2 credit

AND

REQUARED FOR ENDORSEMENT

*World History or World History AP
Grade 9 or 10
1 credit

Students may earn an Arts & Humanities endorsement by completing at least five (5) social studies credits.

Suggested social studies courses to take in addition to the three (3) required credits:

- *World Geography or Human Geography AP (if not taken as 1 of the 3 required credits)
- *World History or World History AP (if not taken as 1 of the 3 required credits)
- European History AP (1 credit)
- World Area Studies (1 credit)
- *Psychology or Psychology AP (1/2 credit)
- Sociology (1/2 credit)
- Street Law (1/2 - 1 credit)

*Students may not take both the AP and non-AP versions of these courses.

Complete information on these courses, including course descriptions, may be found in the “Social Studies” section in this document.
HEALTH SCIENCE
Endorsement: Public Services
(required prerequisite)

**Medical Terminology**
(Grades 9-10 only)
1 credit

**Principles of Health Science**
1 credit that satisfies health requirement

**Health Science Theory/Clinicals**
(Prin of Health Science, Biology)
2 credits
Advanced

**World Health Research**
1 credit
Advanced

**Pathophysiology K**
(Biology, Chemistry)
1 science credit
Advanced

**Anatomy & Physiology K**
(Biology, Chemistry)
1 science credit
Advanced

**Forensic Science K**
(Biology, Chemistry)
1 science credit
Advanced

**Suggested science courses to take in addition to the 4+ health science credits required for an endorsement in this area.**
- Biology (grade 9)
- Chemistry (Algebra I)
- AP Physics I (Algebra II)
- AP Biology (Biology, Chemistry)
- AP Physics II (AP Physics I, Algebra II)
- AP Chemistry II (Chemistry I, Algebra II)

**Practicum in Health Science**
(Principles of Health Science and at least 1 Health Science Advanced Course)
Grade 12 only, age requirements may apply
2 credits - certification and/or work-based Advanced

**SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Public Services Endorsement**
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)--see page on Endorsements in this document or your counselor for more information on graduation requirements.)

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</table>
| **Careers with Direct Contact with Patients**
(such as Athletic Trainers, Medical or Clinical Technicians/Technologists, Nurses, Physicians, Surgeons, Therapists, Pharmacists, Opticians, Medical or Clinical Aids/Assistants) | Medical Terminology (1) | Principles of Health Science (1-health) | *Health Science Theory/Clinicals (2) | *Anatomy & Physiology K (1-science) or *Pathophysiology K (1-science) or *World Health Research (1) or *Practicum in Health Science (2) |
| **Careers with Indirect Contact with Patients**
(such as Medical Transcriptionists, Occupational Health and Safety Specialists, Speech Pathologist, Health Educators and Community Health Workers, Medical and Health Service Managers, Medical Coding and Billing, Epidemiologist, Medical Research) | Medical Terminology (1) | Principles of Health Science (1-health) | Choose two advanced health science-related courses based on the career you wish to pursue: |
| | | | - *Anatomy & Physiology K (1-science) or *Pathophysiology K (1-science) or *World Health Research (1) or *Forensic Science K (1-science) or *Practicum in Health Science (2) |
Medical Terminology  
1 credit
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.
- Grades 9 - 10
- Recommended to be taken prior to Principles of Health Science
- Lab supplies or fee may be required

Principles of Health Science  
1 credit (health)
Certification: 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 health care industry. Topics include career requirements, medical history, trends in financing health care, ethical and legal responsibilities, human anatomy and physiology as related to the health care 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 10 - 12
- Completing the course satisfies the required health credit.
- Lab supplies or fee may be required.

Health Science Theory/Clinicals  
2 credits
Certification: AHA Basic Life Support CPR
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.
- Grades 11 - 12, An application may be required if demand exceeds number of available slots.
- Required prerequisite: Principles of Health Science and Biology and verification of immunization requirements
- Satisfies advanced course requirement for Public Services endorsement
- Lab supplies or fee may be required.
- Background check and drug testing may be required.

Anatomy and Physiology K  
1 credit (science)
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 laboriented and teaches proper dissection techniques as well as various physiological phenomena. This course is recommended for students pursuing an education in the medical sciences.
- Grades 11 - 12
- Required prerequisites: Biology and Chemistry
- Recommended prerequisites: Medical Terminology and Principles of Health Science
- Satisfies advanced course requirement for Public Services endorsement
- Completing this course satisfies a science credit required for graduation.

Forensic Science K  
1 credit (science)
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.
- Grades 11 - 12
- Required prerequisites: Biology and Chemistry
- Recommended prerequisites: Medical Terminology and Principles of Health Science
- Satisfies advanced course requirement for Public Services endorsement
- Completing this course satisfies a science credit required for graduation.

Course with “advanced” topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
Course includes training for an industry-standard certification. While students pay for the certification exam, the training is offered at no cost.
Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it.
HEALTH SCIENCE
Endorsement: Public Services

Pathophysiology K **A** 1 credit (science)

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.

- Grades 11 - 12
- Required prerequisites: Biology and Chemistry
- Recommended prerequisites: Medical Terminology and Principles of Health Science
- Satisfies advanced course requirement for Public Services endorsement
- Completing this course satisfies a science credit required for graduation

World Health Research **A** 1 credit

The World Health Research course is designed to examine major world health problems and emerging technologies as solutions to these medical concerns. It is designed to improve students’ understanding of the cultural, infrastructural, political, educational, and technological constraints and inspire ideas for appropriate technological solutions to global medical care issues.

- Grades 11 - 12
- Recommended prerequisites: Biology, Chemistry, Medical Terminology and Principles of Health Science
- Satisfies advanced course requirement for Public Services endorsement
- Lab supplies or fee may be required.

Practicum in Health Science **A** **C** **P** 2 credits

Certification: EMT or CNA or PharmTech

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), or Emergency Medical Technician. Because training requirements vary by specialization, a program application 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, or a combination.

- Grade 12, An application may be required if demand exceeds number of available slots.
- Required prerequisites: Principles of Health Science and one advanced health science-related course.
- Admissions application to Lone Star College is required for students interested in EMT or CNA. If accepted, students will be responsible for their own transportation to attend these classes at Lone Star College.
- Satisfies advanced course requirement for Public Services endorsement
- EMT, CNA, and PharmTech certifications each satisfy requirement to earn a performance Acknowledgment.
- Lab supplies or fee may be required.
- Background check and drug testing may be required.
- Age requirements may also apply.
HOSPITALITY & TOURISM
Endorsement: Business & Industry
(required prerequisite)

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**Principles of Hospitality & Tourism**
(Grade 8)
1 credit

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**Introduction to Culinary Arts**
1 credit

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**Culinary Arts**
2 credits
Advanced

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**Advanced Culinary Arts**
(Culinary Arts)
2 restaurant/work-based credits at CFISD Culinary Academies
Advanced

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**Practicum in Culinary Arts**
(Advanced Culinary Arts, Grade 12)
2 restaurant/work-based credits at CFISD Culinary Academies
Advanced

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**SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement**
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)—see page on Endorsements in this document or your counselor for more information on graduation requirements.)

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<tbody>
<tr>
<td>Culinary</td>
<td>Principles of Hospitality (1-8th gd) and/or Introduction to Culinary Arts (1)</td>
<td>*Culinary Arts (2)</td>
<td>*Advanced Culinary Arts (2)</td>
<td>*Practicum in Culinary Arts (2)</td>
</tr>
</tbody>
</table>
Principles of Hospitality & Tourism  1 credit
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.
- Offered in middle school only

Introduction to Culinary Arts  1 credit
Certification: Food Handler
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.
- Grades 9 - 10
- Recommended prerequisite: Principles of Hospitality
- Lab supplies or fee may be required.

Culinary Arts  2 credits
Certification: ServSafe 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.
- Grades 10 - 12
- Recommended prerequisite: Principles of Hospitality & Tourism or Introduction to Culinary Arts
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies/uniform or fee may be required.

Advanced Culinary Arts  2 credits
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 fastchanging workplace. The students are actually major participants in operating a restaurant and catering business.
- Grades 11 - 12
- Required prerequisite: Culinary Arts
- Satisfies advanced course requirement for Business & Industry endorsement.
- An application may be required if demand exceeds number of available slots.
- Lab supplies/uniform or fee may be required.
- Students will take this course at Cy-Fair High School, Cypress Park High School, or Cypress Ridge High School.

Practicum in Culinary Arts  2 credits
This advanced culinary course allows 3rd year culinary students the opportunity to gain additional real world experience in a commercial kitchen. Instruction will be delivered through school-based laboratory training at Cy-Fair High School or Cypress Park High School and through work-based arrangements such as practicum education, mentoring, and job shadowing.
- Grade 12
- Required prerequisite: Advanced Culinary Arts
- Satisfies advanced course requirement for Business & Industry endorsement.
- An application may be required if demand exceeds number of available slots.
- Lab supplies/uniform or fee may be required.
- Students will take this course at Cy-Fair High School, Cypress Park High School, or Cypress Ridge High School.
SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Public Services Endorsement
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)—see page on Endorsements in this document or your counselor for more information on graduation requirements.)

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</thead>
<tbody>
<tr>
<td>Early Childhood</td>
<td>Principles of Human Services (1-grade 7 or 8 only)</td>
<td>Child Development (1) OR Lifetime Nutrition &amp; Wellness (1/2) and Interpersonal Studies (1/2)</td>
<td>*Child Guidance (2)</td>
<td>*Practicum in Human Services (2)</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>Principles of Human Services (1-grade 7 or 8 only)</td>
<td>Introduction to Cosmetology (1)</td>
<td>Cosmetology I (2)</td>
<td>*Cosmetology II blocked with Color Theory (total of 3 credits)</td>
</tr>
</tbody>
</table>
**Course with “advanced” topics** - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.

**Course includes training for an industry-standard certification.** While students pay for the certification exam, the training is offered at no cost.

**Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it.**

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**Principles of Human Services** 1 credit

This course will enable students to investigate careers in the Human Services Career Cluster, including counseling & mental health, early childhood development, family & community, 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.

- Offered in middle school only

---

**Interpersonal Studies** 1/2 credit

(also listed in Education & Training cluster)

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.

- Grades 10 - 12, 9th graders may enroll after taking Principles of Human Services or Principles of Hospitality and Tourism in middle school
- Recommended prerequisite: Principles of Human Services
- Lab supplies or fee may be required.

---

**Lifetime Nutrition and Wellness** 1/2 credit

(also listed in Education & Training cluster)

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 cooking lab experiences may be included.

- Grades 10 - 12, 9th graders may enroll after taking Principles of Human Services or Principles of Hospitality and Tourism in middle school
- Recommended prerequisite: Principles of Human Services
- Lab supplies or fee may be required.

---

**Child Development** 1 credit

(also listed in Education & Training cluster)

This popular, high interest course addresses knowledge and skills related to child growth and development from prenatal through school-age children, while equipping future parents with child development skills to promote the well-being and healthy development of children. Also emphasized 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.

- Grades 10 - 12
- Recommended prerequisite: Principles of Human Services
- Lab supplies or fee may be required.

---

**Child Guidance** 2 credits

Certification: AHA Heartsaver CPR/First Aid

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.

- Grades 11 - 12
- Recommended prerequisite: Principles of Human Services and either Child Development OR Lifetime Nutrition & Wellness and Interpersonal Studies
- Satisfies advanced course requirement for Public Services endorsement.
- An application may be required if demand exceeds number of available slots.
- Lab supplies/uniform or fee may be required.

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**Practicum in Human Services** 2 credits

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.

- Grade 12
- Required prerequisite: Child Guidance
- Satisfies advanced course requirement for Public Services endorsement.
- An application may be required if demand exceeds number of available slots.
- Lab supplies/uniform or fee may be required.
**Introduction to Cosmetology** 1 credit

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. Attendance is critical to the earning of the 1000 clock hours of supervised classroom instruction and demonstration needed before students qualify to take the state board test for licensing. Students in this course will begin to earn clock hours toward state licensing requirements.

- Grades 10 - 11
- May be taken concurrently with Cosmetology I if 11th grader.
- Students may opt to purchase lab kit and/or uniform.
- $25 permit fee is required and MUST be paid within 7 days of enrollment to remain in the class.

**Cosmetology I** 2 credits

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. Attendance is critical to the earning of the monitored 1000 clock hours required for qualification for taking the state examination for licensing.

- Grade 11
- Required prerequisite (or concurrent): Introduction to Cosmetology
- An application may be required if demand exceeds number of available slots.
- Purchase of lab kit and uniform may be required, depending on what was purchased in Introduction to Cosmetology.

**Cosmetology II/Color Theory** A C P 3 credits

**Certification: 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 1000 clock 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.

- Grades 12
- Required prerequisite: Cosmetology I
- Satisfies advanced course requirement for Public Services endorsement.
- Cosmetology Operator’s License satisfies requirement to earn a performance Acknowledgment.
- Purchase of lab kit and uniform may be required, depending on what was purchased in previous Cosmetology courses.
### INFORMATION TECHNOLOGY

**Endorsement: Business & Industry**

(required prerequisite)

- **Principles of Information Technology**  
  (Grades 8 only)  
  1 credit

#### Business Information Mgmt I
  From Business Cluster  
  1 credit

#### Networking
  1 credit

#### Internetworking Technologies I
  1 credit  
  Advanced

#### Internetworking Technologies II
  (Internetworking Tech I)  
  1 credit  
  Advanced

#### Networking
  1 credit

#### Digital Media
  1 credit

#### Animation I
  From Arts, A/V Cluster  
  1 credit

#### Web Technologies I
  1 credit

#### Animation II
  (Animation I)  
  2 credits  
  Advanced

#### Web Technologies II
  (Web Technologies I)  
  1 credit  
  Advanced

#### Internetworking Technologies II
  (Internetworking Tech I)  
  1 credit  
  Advanced

#### Project-based Research in Networking
  (Networking or Int Tech I)  
  1 credit  
  Advanced

#### Practicum in Information Technology
  (Networking or Int Tech I)  
  2 credits  
  Advanced

#### Project-based Research in Multimedia
  (Animation II or Web Technologies II)  
  1 credit  
  Advanced

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### SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement

(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)--see page on Endorsements in this document or your counselor for more information on graduation requirements.)

<table>
<thead>
<tr>
<th>Career Interest</th>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic Designer</td>
<td>Principles of Info Tech</td>
<td>Web Technologies I</td>
<td>Animation I</td>
<td>*Animation II (2) or *Web Technologies II (1)</td>
</tr>
<tr>
<td></td>
<td>(1/8th gd)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital Media (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web Designer</td>
<td>Principles of Info Tech</td>
<td>Digital Media (1)</td>
<td>*Web Technologies II (1)</td>
<td>*Project-based Research in Multimedia (1) or</td>
</tr>
<tr>
<td></td>
<td>(1/8th gd)</td>
<td></td>
<td></td>
<td>Animation I (1)</td>
</tr>
<tr>
<td></td>
<td>Web Technologies I (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Networking Technician</td>
<td>Business Info Mgmt I (1)</td>
<td>Networking (1)</td>
<td>*Internetworking Technologies I (1)</td>
<td>*Internetworking Technologies II (1)</td>
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<tr>
<td>IT Consultant</td>
<td>Business Info Mgmt I (1)</td>
<td>Networking (1)</td>
<td>*Project-based Research in Networking (1)</td>
<td>*Practicum in Information Technology (2)</td>
</tr>
<tr>
<td>Computer Programmer</td>
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</tr>
</tbody>
</table>

See STEM cluster in STEM endorsement
INFORMATION TECHNOLOGY
Endorsement: Business & Industry

Principles of Information Technology 1 credit
Principles of Information Technology prepares students to adapt to emerging technologies used in the global marketplace. Students will enhance their reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. The students will research careers in the technology field, computer hardware, appropriate software, and network systems. The applications used include word processing, spreadsheets, database, presentation, design, and web publishing.
- Lab supplies or fee may be required
- Offered in middle school only

Web Technologies I 1 credit
(Also listed in Arts, A/V Tech cluster)
Certification: Adobe Dreamweaver
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, Dreamweaver, Photoshop, Animate, Fireworks, digital cameras, and scanners. The emphasis will be on utilizing the features in Adobe Dreamweaver included in the corresponding industry-recognized certification. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.
- Grades 9 - 12
- Lab supplies or fee may be required

Web Technologies II 1 credit
(Also listed in Arts, A/V Tech cluster)
This course provides students the opportunity to expand upon the web tech knowledge and skills mastered in the Web Technologies I course. Students will focus on advanced web page concepts and applications, including the incorporation of web-based programming languages such as JavaScript, Perl or mySQL. Students are required to submit a formal project plan within 15 school days 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.
- Grades 10 - 12
- Required prerequisite: Web Technologies I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required
INFORMATION TECHNOLOGY
Endorsement: Business & Industry

Course with “advanced” topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.

Course includes training for an industry-standard certification. While students pay for the certification exam, the training is offered at no cost.

Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it.

Animation I (also listed in Arts, A/V Tech cluster) 1 credit
Certification: 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. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.
- Grades 10 - 12
- Recommended prerequisite: Digital Media
- Lab supplies or fee may be required.

Animation II (also listed in Arts, A/V Tech cluster) 2 credits
Certification: 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.
- Grades 11 - 12
- Required prerequisite: Animation I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Business Information Management I (BIM I) (also listed in Business cluster) 1 credit
Certification: Microsoft Office
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. While an emphasis will be placed on simulations related to business, finance, and marketing, this introductory technology course is appropriate for students whose career interests fall within any of the 16 career clusters.
- Grades 8 - 12
- Recommended prerequisite: Touch System Data Entry (required for 8th graders)
- Microsoft Office Expert-Word and Microsoft Office Expert-Excel certifications each satisfy the requirement to earn a performance Acknowledgment.
- Students earning Word Expert, Excel Expert, Powerpoint, and Access certifications also earn the Microsoft Office Specialist-Master certification, which satisfies requirement to earn an additional performance Acknowledgment.
- Lab supplies or fee may be required.

Project-based Research in Multimedia (also listed in Arts, A/V Tech cluster) 1 credit (project-based)
This course is a supervised research study project-based class where students will apply knowledge and skills from previous animation and/or web technologies courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the concluding project.
- Grades 11 - 12
- Required prerequisite: Animation II or Web Technologies II
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.
INFORMATION TECHNOLOGY
Endorsement: Business & Industry

Networking  1 credit
Certifications: CompTIA A+ and MTA Windows Operating System

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.
• Grades 10 - 12
• Recommended prerequisite: Business Information Management I or other technology course
• CompTIA and MTA certifications each satisfy the requirement to earn a performance Acknowledgment.
• Lab supplies or fee may be required.

Internetworking Technologies I  1 credit
Certification: MTA Networking Fundamentals

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.
• Grades 11 - 12
• Recommended prerequisite: Networking
• Satisfies advanced course requirement for Business & Industry endorsement.
• Lab supplies or fee may be required.
• CompTIA certifications satisfy the requirement to earn a performance Acknowledgment.

Internetworking Technologies II  1 credit
Certifications: Cisco CCENT/CCNA

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 both the CCENT and CCNA exams, both are industry-recognized certifications in this field. The goal for providing this training/certification is to assist students in becoming more marketable and desirable in the workplace.
• Grade 12
• Required prerequisite: Internetworking Technologies I
• Satisfies advanced course requirement for Business & Industry endorsement.
• Lab supplies or fee may be required.
• Cisco certifications satisfy the requirement to earn a performance Acknowledgment.

Project-based Research in Networking  1 credit (project-based)
Certifications: MTA Security Fundamentals and MTA Server Administration Fundamentals

This course is a supervised research study project-based class where students will apply knowledge and skills from previous networking courses in a related advanced/specialized field of study. Topics will include, but are not limited to, supporting network security and Windows operating system. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.
• Grades 11 - 12
• Required prerequisite: At least 2 technology courses with at least one being Networking or Internetworking Tech I
• Satisfies advanced course requirement for Business & Industry endorsement.
• Lab supplies or fee may be required.
• MTA certifications satisfy the requirement to earn a performance acknowledgment.

Practicum in Information Technology  2 credits (work-based)

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 15 school days after enrollment in the course.
• Grades 12
• Required prerequisite: At least 2 technology courses with at least one being Networking or Internetworking Tech I
• Satisfies advanced course requirement for Business & Industry endorsement.
• Lab supplies or fee may be required.
**MANUFACTURING**  
Endorsement: Business & Industry  
(required prerequisite)

**Principles of Manufacturing**  
(Grades 8-11)  
1 credit

**Diversified Manufacturing I**  
(Prin of Manufacturing)  
1 credit

**Diversified Manufacturing II**  
(Diversified Manufacturing I)  
1 credit  
Advanced

**Precision Metal Manufacturing**  
(Diversified Manufacturing I)  
2 credits  
Advanced

**Welding I**  
2 credits

**Welding II**  
(Welding II)  
2 credits  
Advanced

**Practicum in Manufacturing**  
(Diversified Manufacturing I, Precision Metal Manufacturing or Welding I)  
2 work-based credits  
Advanced

**Project-based Research in Tech Ed**  
(at least two courses from this cluster)  
1 project-based credit  
Advanced

**SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement**  
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)—see page on Endorsements in this document or your counselor for more information on graduation requirements.)

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<thead>
<tr>
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<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>Principles of Manufacturing (1)</td>
<td>Diversified Manufacturing I (1)</td>
<td>*Diversified Manufacturing II (1) or *Precision Metal Manuf (2)</td>
<td>*Practicum in Manufacturing (2) or *Project-based Research in Tech Ed (1)</td>
</tr>
<tr>
<td>Welding</td>
<td>Principles of Manufacturing (1)</td>
<td>Welding I (2)</td>
<td>*Welding II (2)</td>
<td>*Practicum in Manufacturing (2) or *Project-based Research in Tech Ed (1)</td>
</tr>
</tbody>
</table>
Principles of Manufacturing 1 credit
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.
- Grades 8 - 11
- Lab supplies or fee may be required.

Diversified Manufacturing I 1 credit
This course allows students to gain knowledge and skills in the application, design, production, and assessment of products, services, and systems and how those knowledge and skills are applied to manufacturing. Diversified Manufacturing I 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 expectations and the development of skills prepare students for workplace success.
- Grades 9 - 12
- Required prerequisite: Principles of Manufacturing
- Lab supplies or fee may be required.

Diversified Manufacturing II 1 credit
Certification: OSHA 10-HR Card
This course builds on knowledge and skill developed in Diversified Manufacturing I. Students will develop advanced skills related to the industry manufacturing through the use of machines and tools used in industry.
- Grades 10 - 12
- Required prerequisite: Diversified Manufacturing I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Precision Metal Manufacturing 2 credits
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.
- Grades 11 - 12
- Required prerequisite: Diversified Manufacturing I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Welding I 2 credits
Certification: OSHA, American Welding Society (AWS)
This Career and Technical course is for students interested in welding as a career. Training for employment with entry-level skills in welding trades will be emphasized. Instruction follows an industry-standard curriculum, and students’ certifications are listed in a national registry upon successful completion. Oxy-fuel welding and cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, flux cored arc welding, and gas tungsten arc welding will be covered. Hand and power tools, welding on various types of metals, reading blueprint welding symbols, metal characteristics, and equipment setup are other areas that students master. Safety, leadership, entrepreneurship, and career opportunities are included.
- Grades 10 - 12, priority given to 10th and 11th graders
- Recommended prerequisite: Principles of Manufacturing or Agricultural Mechanics and Metal Technologies
- An application may be required if demand exceeds number of available slots.
- Lab supplies or fee may be required.

Welding II 2 credits
Certifications: OSHA, American Welding Society (AWS), API Welding
This advanced level Career and Technical course is for students interested in welding as a career. Advanced Welding builds on knowledge and skills developed in the previous welding course. Training for employment with advance-level skills in welding trades will be emphasized. Instruction follows an industry-standard curriculum, and students’ certifications are listed in a national registry upon successful completion. Oxy-fuel welding and cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, flux cored arc welding, and gas tungsten arc welding will be covered. Hand and power tools, welding on various types of metals, reading blueprint welding symbols, metal characteristics, and equipment setup are other areas that students master. Safety, leadership, entrepreneurship, and career opportunities are included.
- Grades 11 - 12
- Required prerequisite: Welding I
- Satisfies advanced course requirement for Business & Industry endorsement.
- AWS/API certifications each satisfy requirement to earn a performance Acknowledgment. Certifications available: Flat, Horizontal, Vertical, Overhead and API.
- Lab supplies or fee may be required.
MANUFACTURING
Endorsement: Business & Industry

Course with “advanced” topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
Course includes training for an industry-standard certification. While students pay for the certification exam, the training is offered at no cost.
Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it.

Practicum in Manufacturing  
2 credits (work-based)
This course allows students to apply manufacturing 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 15 school days after enrollment in the course.
- Grades 11 - 12
- Required prerequisite: Welding I, Diversified Manufacturing I, or Precision Metal Manufacturing and age 16 if paid training site
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.

Project-based Research in Tech Ed  
1 credit (project-based)
(also listed in Architecture cluster) This course is a supervised research study project-based class where students will apply knowledge and skills from previous Technology Education courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.
- Grades 11 - 12
- Required prerequisite: At least two credits from Architecture and Construction and/or Manufacturing clusters
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.
MARKETING
Endorsement: Business & Industry
(required prerequisite)

Principles of Business, Marketing & Finance
(Grades 9-10 only)
1 credit

Available Courses:
- Fashion Marketing
  1/2 credit
- Fashion Design I
  From Arts, A/V Tech
  1 credit
- Sports & Entertainment Marketing
  1/2 credit
- Entrepreneurship
  1 credit
- Social Media Marketing
  1/2 credit

**Practicum in Marketing I**
3 work-based credits
Advanced

**Practicum in Marketing II**
(Practicum in Marketing I)
3 work-based credits
Advanced

**SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement**
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (*)--see page on Endorsements in this document or your counselor for more information on graduation requirements.)

<table>
<thead>
<tr>
<th>Career Interest</th>
<th>9th Grade</th>
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<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Goods &amp; Services</td>
<td>Principles of Business, Marketing &amp; Finance (1)</td>
<td>Entrepreneurship (1) and/or Social Media Mktg (1/2)</td>
<td>*Practicum in Marketing Dynamics I (3)</td>
<td>*Practicum in Marketing Dynamics II (3)</td>
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<tr>
<td>Fashion Marketing</td>
<td>Principles of Business, Marketing &amp; Finance (1)</td>
<td>Fashion Marketing (1/2) &amp; Social Media Mktg (1/2)</td>
<td>Fashion Design I (1)</td>
<td>*Practicum in Marketing Dynamics I (3)</td>
</tr>
<tr>
<td>Sports &amp; Entertainment</td>
<td>Principles of Business, Marketing &amp; Finance (1)</td>
<td>Sports/Entertain (1/2) &amp; Social Media Mktg (1/2)</td>
<td>*Practicum in Marketing Dynamics I (3)</td>
<td>*Practicum in Marketing Dynamics II (3)</td>
</tr>
</tbody>
</table>
Course with “advanced” topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.

Course includes training for an industry-standard certification. While students pay for the certification exam, the training is offered at no cost.

Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it.

### Marketing Endorsement: Business & Industry

#### Principles of Business, Marketing, and Finance 1 credit
(also listed in Business and Finance clusters)
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.
- Grades 9 - 10
- Lab supplies or fee may be required.

#### Fashion Marketing 1/2 credit
(also listed in Arts, A/V Tech cluster)
Fashion Marketing is designed to provide students with knowledge of the various business functions in the fashion industry. Students in Fashion Marketing will gain a working knowledge of promotion, textiles, merchandising, mathematics, selling, visual merchandising, and career opportunities.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Lab supplies or fee may be required.

#### Fashion Design I 1 credit
(also listed in Arts, A/V Tech cluster)
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.
- Grades 10 - 12
- Lab supplies or fee may be required.

#### Social Media Marketing 1/2 credit
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 new world of social media. Students will manage a successful social media presence for an organization, 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.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Lab supplies or fee may be required.

#### Sports and Entertainment Marketing 1/2 credit
Sports and Entertainment Marketing allows students to apply marketing principles and processes to the sports and 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.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Lab supplies or fee may be required.

#### Entrepreneurship 1 credit
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.
- Grades 10 - 12
- Recommended prerequisite: Principles of Business, Marketing and Finance
- Lab supplies or fee may be required.
MARKETING
Endorsement: Business & Industry

Practicum in Marketing I  
(Also listed in Arts, A/V Tech cluster)  3 credits (work-based)  
Certifications: A*S*K Marketing and Real Estate License

This course allows students to apply marketing concepts and principles in the classroom and the workplace. In the classroom portion of the course, students will gain a working knowledge of marketing functions such as selling, advertising, display, the free enterprise system, inventory control systems, marketing mathematics, and resume writing. Students will also receive industry-recognized training designed to make them more marketable and desirable in the workplace. Students are required to work 15 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course. Students in Fashion Design may pursue job in fashion industry. Students, age 17 and older, may opt to pursue their real estate license for an additional cost.

- Grades 11 - 12
- Required prerequisite: At least one course in Marketing cluster or related area and age 16 with reliable transportation
- Satisfies advanced course requirement for Business & Industry endorsement.
- Lab supplies or fee may be required.
- May be taken a second year (Practicum in Marketing II) for an additional 3 credits.
SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (STEM)  
Endorsement: Science, Technology, Engineering & Mathematics (STEM)  
(required prerequisite)

**Sample 4-Course Sequences that satisfy the CTE/Computer Science course requirement for a STEM Endorsement**

(Earn at least 4 credits from the STEM cluster, with at least one containing advanced topics in that field (*)—see page on Endorsements in this document or your counselor for more information on graduation requirements.)

<table>
<thead>
<tr>
<th>Career Interest</th>
<th>9th Grade</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Engineering</strong></td>
<td>Principles of Applied Engineering (1)</td>
<td>Engineering Design &amp; Presentation I (1)</td>
<td>*Engineering Design &amp; Presentation II (2)</td>
<td>*Eng Design &amp; Prob Sol K (1-sci) or *Practicum (2) or *Project-based (1)</td>
</tr>
<tr>
<td><strong>Engineering (PLTW)</strong></td>
<td>Introduction to Engineering (1)</td>
<td>Principles of Engineering K (1-science)</td>
<td>*Digital Electronics K (1-math) or *Aerospace (1)</td>
<td>*Eng Design &amp; Dev K (1) or *Eng Design &amp; Prob Sol K (1-sci)</td>
</tr>
<tr>
<td><strong>CyCreek/CyLakes</strong></td>
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<tr>
<td><strong>Robotics</strong></td>
<td>Principles of Applied Engineering (1)</td>
<td>Robotics I (1)</td>
<td>*Robotics II (1)</td>
<td>*Practicum in STEM (2) or *Project-based Research in STEM (1)</td>
</tr>
<tr>
<td><strong>Computer Science— including overview of computer technology</strong></td>
<td>Computer Science Principles AP (1-LOTE)</td>
<td>Computer Science I K (1-LOTE)</td>
<td>Computer Science II K (1-LOTE)</td>
<td>*Computer Science III K (1-LOTE)</td>
</tr>
<tr>
<td><strong>Computer Science— including project option such as mobile apps</strong></td>
<td>Computer Science I K (1-LOTE)</td>
<td>Computer Science II K (1-LOTE)</td>
<td>*Computer Science III K (1-LOTE)</td>
<td>*Project-based Research in Computer Science K (1)</td>
</tr>
<tr>
<td>Networking/IT Support</td>
<td>See Information Technology cluster in Business &amp; Industry endorsement</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM)
Endorsement: STEM

Course with "advanced" topics - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.

Course includes training for an industry-standard certification. While students pay for the certification exam, the training is offered at no cost.

Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it.

TECHNOLOGY (COMPUTER SCIENCE)

Computer Science Principles AP 1 credit (LOTE)
Potential College Credit via AP 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.
• Grades 9 - 12
• Required prerequisite: Algebra I
• May not be taken post Computer Science II K
• Lab supplies or fee may be required.

Computer Science I K 1 credit (LOTE)
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
• Lab supplies or fee may be required.

Computer Science II K (AP A Test Prep) 1 credit (LOTE)
Potential College Credit via AP Exam
Computer Science II K is a programming course designed to cover the Advance Placement (AP) 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
• Lab supplies or fee may be required.

Computer Science III K 1 credit (LOTE)
Certification: Oracle Java SE 8 Programmer
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
• Satisfies advanced course requirement for STEM endorsement.
• Oracle Java SE 8 Programmer certification satisfies requirement to earn a performance Acknowledgment.
• Lab supplies or fee may be required.

Project-based Research in Computer Science K 1 credit (project-based)
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 15 school days 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.
• Grades 11 - 12
• Required prerequisite: Computer Science III K or concurrent
• Satisfies advanced course requirement for STEM endorsement.
• Lab supplies or fee may be required

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

Computer Science Principles AP
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.
**SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM)**

**Endorsement: STEM**

- **Course with “advanced” topics** - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.
- **Course includes training for an industry-standard certification**. While students pay for the certification exam, the training is offered at no cost.
- **Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment** if they successfully earn it.

## ENGINEERING

### Principles of Applied Engineering 1 credit

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.

- Grades 7, 9 - 10
- Lab supplies or fee may be required

### Engineering Design and Presentation I 1 credit

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.

- Grades 9 - 12
- Required prerequisite: Principles of Applied Engineering
- Lab supplies or fee may be required

### Engineering Design and Presentation II 2 credits

**Certifications: Autodesk Inventor, Autodesk AutoCAD**

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.

- Grades 10 - 12
- Required prerequisite: Engineering Design and Presentation I
- Satisfies advanced course requirement for STEM endorsement.
- Lab supplies or fee may be required

### Engineering Design and Problem Solving K 1 credit (science)

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, Physics (or concurrent), Engineering Design and Presentation I
- Satisfies advanced course requirement for STEM endorsement.
- Completing this course satisfies a science credit required for graduation.

### Robotics I 1 credit

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.

- Grades 9 - 12
- Required prerequisite: Principles of Applied Engineering
- Lab supplies or fee may be required

### Robotics II 1 credit

In Robotics II, 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.

- Grades 10 - 12
- Required prerequisite: Robotics I
- Satisfies advanced course requirement for STEM endorsement.
- Lab supplies or fee may be required
SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM)
Endorsement: STEM

ENGINEERING continued

Practicum in STEM  A  2 credits (work-based)
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 15 school days after enrollment in the course.
- Grades 11 - 12
- Required prerequisite: Engineering Design I or Robotics I and age 16 if paid training site
- Satisfies advanced course requirement for STEM endorsement.
- Lab supplies or fee may be required.

Project-based Research in STEM  A  1 credit
This course is a supervised research study project-based class where students will apply knowledge and skills from previous STEM Education courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.
- Grades 11 - 12
- Required prerequisite: At least two (2) credits in the STEM cluster
- Satisfies advanced course requirement for STEM endorsement.
- Lab supplies or fee may be required.
TRANSPORTATION, DISTRIBUTION & LOGISTICS
Endorsement: Business & Industry
(required prerequisite)

Automotive Basics
(Grades 9-12)
1 credit

Automotive Technology I
2 credits

Automotive Technology II
(Automotive Technology I)
2 credits
Advanced

Practicum in Transportation Systems
(Automotive Technology I, Grade 12)
3 work-based credits
Advanced

SAMPLE 4-Course Sequences that satisfy the CTE course requirement for a Business & Industry Endorsement
(Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (* )—see page on Endorsements in this document or your counselor for more information on graduation requirements.)

<table>
<thead>
<tr>
<th>Career Interest</th>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Technician</td>
<td>Automotive Basics 1</td>
<td>Automotive Technology I (2)</td>
<td>*Automotive Technology II (2)</td>
<td>*Practicum in Transportation Systems (3)</td>
</tr>
</tbody>
</table>
## TRANSPORTATION, DISTRIBUTION & LOGISTICS
### Endorsement: Business & Industry

**Course with "advanced" topics** - Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.

**Course includes training for an industry-standard certification.** While students pay for the certification exam, the training is offered at no cost.

**Course includes training for a certification meeting the requirements for a student to earn a Performance Acknowledgment if they successfully earn it.**

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#### Automotive Basics

**1 credit**

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.

- Grades 9 - 12
- Lab supplies or fee may be required.

#### Automotive Technology I

**2 credits**

**Certifications: Safety & Pollution Prevention (S/P2), Automotive Service Excellence (ASE)**

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.

- Grades 10 - 12, priority to 11th graders
- Students may earn student ASE certifications in multiple areas and each satisfies the requirement to earn a separate performance Acknowledgment.
- Lab supplies or fee may be required.

#### Automotive Technology II

**2 credits**

**Certifications: Safety & Pollution Prevention (S/P2), Automotive Service Excellence (ASE)**

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.

- Grades 11 - 12
- Required prerequisite: Automotive Technology I
- Satisfies advanced course requirement for Business & Industry endorsement.
- Students may earn student ASE certifications in multiple areas and each satisfies the requirement to earn a separate performance Acknowledgment.
- Lab supplies or fee may be required.
- This course DOES NOT include a work-based component.

#### Practicum in Transportation Systems

**3 credits (work-based)**

**Certifications: Safety & Pollution Prevention (S/P2), Automotive Service Excellence (ASE)**

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 15 hours per week at an approved training site and must be employed at that site within 15 school days after enrollment in the course.

- Grade 12
- Required prerequisite: Automotive Technology I and age 16 if paid training site
- An application may be required if demand exceeds number of available slots.
- Satisfies advanced course requirement for Business & Industry endorsement.
- Students may earn student ASE certifications in multiple areas and each satisfies the requirement to earn a separate performance Acknowledgment.
- Lab supplies or fee may be required.
## Advanced CTE Courses by Endorsement

(Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.)

<table>
<thead>
<tr>
<th>Business &amp; Industry Endorsement</th>
<th>Architecture &amp; Construction</th>
</tr>
</thead>
</table>
| **Agriculture, Food, & Natural Resources** | • Veterinary Medical Applications  
• Advanced Animal Science K  
• Advanced Plant & Soil Science K  
• Ag Equipment  
• Project-based Research in Ag  
• Practicum in Ag, Food, & Natural Resources | • Architecture Design II  
• Mill & Cabinet making Technology  
• Project-based Research in Drafting  
• Plumbing I/Project-based Research in Plumbing  
• Plumbing II  
• Project-based Research in Tech Ed  
• Practicum in Architectural Design  
• Construction Technology II  
• Practicum in Construction Technology |

<table>
<thead>
<tr>
<th><strong>Arts, A/V Technology &amp; Communications</strong></th>
<th><strong>Business Management &amp; Administration</strong></th>
</tr>
</thead>
</table>
| • Animation II  
• Web Technologies II  
• Project-based Research in Multimedia  
• Digital Audio Technology II  
• Audio/Video Production III  
• Advanced Audio/Video Production  
• Practicum in Audio/Video Production  
• Fashion Design II  
• Project-based Research in Fashion Design  
• Practicum in Marketing I (Fashion emphasis) | • Business Information Management II (BIM II)  
• Business Management Practicum I/II |

<table>
<thead>
<tr>
<th><strong>Finance</strong></th>
<th><strong>Hospitality &amp; Tourism</strong></th>
</tr>
</thead>
</table>
| • Accounting I  
• Accounting II  
• Financial Analysis | • Culinary Arts  
• Advanced Culinary Arts  
• Practicum in Culinary Arts |

<table>
<thead>
<tr>
<th><strong>Information Technology</strong></th>
<th><strong>Manufacturing</strong></th>
</tr>
</thead>
</table>
| • Internetworking Technologies I  
• Internetworking Technologies II  
• Project-based Research in Networking  
• Practicum in Information Technology  
• Web Technologies II  
• Animation II  
• Project-based Research in Multimedia | • Welding II  
• Diversified Manufacturing II  
• Precision Metal Manufacturing  
• Project-based Research in Tech Ed  
• Practicum in Manufacturing |

<table>
<thead>
<tr>
<th><strong>Marketing</strong></th>
<th><strong>Transportation, Distribution, &amp; Logistics</strong></th>
</tr>
</thead>
</table>
| • Practicum in Marketing I/II | • Automotive Technology II  
• Practicum in Transportation Systems |
Advanced CTE Courses by Endorsement
(Students wishing to earn an endorsement by taking CTE courses must take at least one with advanced topics.)

<table>
<thead>
<tr>
<th>Public Services Endorsement</th>
<th>Health Science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education &amp; Training</strong></td>
<td><strong>Health Science</strong></td>
</tr>
<tr>
<td>• Instructional Practices</td>
<td>• Health Science Theory/Clinicals (rotations)</td>
</tr>
<tr>
<td>• Practicum in Education &amp; Training</td>
<td>• Pathophysiology K</td>
</tr>
<tr>
<td>• Practicum in Education &amp; Training</td>
<td>• World Health Research</td>
</tr>
<tr>
<td><strong>Human Services</strong></td>
<td>• Anatomy &amp; Physiology K/L</td>
</tr>
<tr>
<td>• Child Guidance</td>
<td>• Forensic Science K/L</td>
</tr>
<tr>
<td>• Practicum in Human Services</td>
<td>• Practicum in Health Science</td>
</tr>
<tr>
<td>• Cosmetology II/Color Theory</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STEM Endorsement</th>
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</thead>
<tbody>
<tr>
<td><strong>STEM (Engineering)</strong></td>
</tr>
<tr>
<td>• Engineering Design &amp; Presentation II</td>
</tr>
<tr>
<td>• Engineering Design &amp; Problem Solving K</td>
</tr>
<tr>
<td>• Robotics II</td>
</tr>
<tr>
<td>• Project-based Research in STEM</td>
</tr>
<tr>
<td>• Practicum in STEM</td>
</tr>
</tbody>
</table>

| **STEM (Technology - Computer Science)** |
|  • Computer Science III K |
|  • Project-based Research in Computer Science K |
## Industry Certifications by Endorsement

(* Performance Acknowledgment)

<table>
<thead>
<tr>
<th>Business &amp; Industry Endorsement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture, Food, &amp; Natural Resources</strong></td>
</tr>
<tr>
<td><em>AWS D9.1 Sheet Metal Welding - Flat, Horizontal, Vertical and Overhead (Ag Mechanics)</em></td>
</tr>
<tr>
<td><em>AWS D1.1 Structural Steel - Flat, Horizontal, Vertical, and Overhead (Ag Equipment)</em></td>
</tr>
<tr>
<td><em>Certified Veterinary Assistant-CVA (Vet Med Applications)</em></td>
</tr>
<tr>
<td>Boater Safety (Wildlife)</td>
</tr>
<tr>
<td>Hunter Safety (Wildlife)</td>
</tr>
<tr>
<td>Floral Designer Level 1 (Floral Design)</td>
</tr>
<tr>
<td>Quality Counts (Principles of Ag)</td>
</tr>
<tr>
<td>OSHA 10-hr card (Ag Mechanics)</td>
</tr>
<tr>
<td>Texas Beef Quality Assurance (Livestock Production)</td>
</tr>
<tr>
<td>Vet Nutrition (Small Animal Mgmt)</td>
</tr>
<tr>
<td><strong>Architecture &amp; Construction</strong></td>
</tr>
<tr>
<td>Autodesk Revit (Architectural Design II)</td>
</tr>
<tr>
<td>Autodesk AutoCAD (Architectural Design II)</td>
</tr>
<tr>
<td>OSHA 10-hr card (Construction Tech II)</td>
</tr>
<tr>
<td><strong>Arts, A/V Technology &amp; Communications</strong></td>
</tr>
<tr>
<td>Adobe Premier Pro (Audio/Video Production I)</td>
</tr>
<tr>
<td>Adobe After Effects (Audio/Video Production II)</td>
</tr>
<tr>
<td>Adobe Animate (Animation I)</td>
</tr>
<tr>
<td>Autodesk Maya (Animation II)</td>
</tr>
<tr>
<td>Adobe Dreamweaver (Web Technologies I)</td>
</tr>
<tr>
<td>ASK Marketing (Practicum in Marketing I-Fashion emphasis)</td>
</tr>
<tr>
<td><strong>Business Management &amp; Administration</strong></td>
</tr>
<tr>
<td><em>Microsoft Office Expert-Excel (BIM II, Practicum)</em></td>
</tr>
<tr>
<td><em>Microsoft Office Expert-Word (BIM I, BIM II, Practicum)</em></td>
</tr>
<tr>
<td><em>Microsoft Office Specialist Master (BIM II, Practicum)</em></td>
</tr>
<tr>
<td>Microsoft Word (BIM I)</td>
</tr>
<tr>
<td>Microsoft Excel (BIM I)</td>
</tr>
<tr>
<td>Microsoft PowerPoint (BIM I, II, Practicum)</td>
</tr>
<tr>
<td>Microsoft Access (BIM I, II, Practicum)</td>
</tr>
<tr>
<td><strong>Business Management &amp; Administration</strong></td>
</tr>
<tr>
<td><em>Microsoft Office Expert-Excel (BIM II, Practicum)</em></td>
</tr>
<tr>
<td><em>Microsoft Office Expert-Word (BIM I, BIM II, Practicum)</em></td>
</tr>
<tr>
<td><em>Microsoft Office Specialist Master (BIM II, Practicum)</em></td>
</tr>
<tr>
<td>Microsoft Word (BIM I)</td>
</tr>
<tr>
<td>Microsoft Excel (BIM I)</td>
</tr>
<tr>
<td>Microsoft PowerPoint (BIM I, II, Practicum)</td>
</tr>
<tr>
<td>Microsoft Access (BIM I, II, Practicum)</td>
</tr>
<tr>
<td><strong>Finance</strong></td>
</tr>
<tr>
<td><em>Quickbooks Certified User (Accounting II)</em></td>
</tr>
<tr>
<td><strong>Hospitality &amp; Tourism</strong></td>
</tr>
<tr>
<td>ServSafe Manager (Culinary Arts)</td>
</tr>
<tr>
<td>Food Handler (Intro to Culinary Arts)</td>
</tr>
<tr>
<td><strong>Information Technology</strong></td>
</tr>
<tr>
<td><em>Cisco Certified Entry Networking Tech (Internetworking Tech II)</em></td>
</tr>
<tr>
<td><em>Cisco Certified Network Associate-CCNA (Internetworking Tech II)</em></td>
</tr>
<tr>
<td><em>Comp TIA A Plus Certification (Networking)</em></td>
</tr>
<tr>
<td><em>MTA Windows Operating System (Networking)</em></td>
</tr>
<tr>
<td><em>MTA Networking Fundamentals (Internetworking Tech I)</em></td>
</tr>
<tr>
<td><em>MTA Security Fundamentals (Project-based Res in Networking)</em></td>
</tr>
<tr>
<td><em>MTA Server Administration Fundamentals (PBR in Networking)</em></td>
</tr>
<tr>
<td>Adobe Dreamweaver (Web Technologies I)</td>
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<tr>
<td>Adobe Photoshop (Digital Media)</td>
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<tr>
<td>Adobe Animate (Animation I)</td>
</tr>
<tr>
<td>Autodesk Maya (Animation II)</td>
</tr>
<tr>
<td>See also BIM I certifications listed with Business Mgmt &amp; Admin</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
</tr>
<tr>
<td><em>AWS D1.1 Structural Steel - Flat, Horizontal, Vertical, and Overhead (Welding I, II)</em></td>
</tr>
<tr>
<td><em>API Welding (Welding II)</em></td>
</tr>
<tr>
<td>OSHA 10-hr card (Diversified Manufacturing II)</td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
</tr>
<tr>
<td>ASK Marketing (Practicum in Marketing I/II)</td>
</tr>
<tr>
<td>Real Estate License (Practicum in Marketing I/II)</td>
</tr>
<tr>
<td><strong>Transportation, Distribution, &amp; Logistics</strong></td>
</tr>
<tr>
<td><em>ASE AirConditioning/Heating</em></td>
</tr>
<tr>
<td><em>ASE Auto Transmission</em></td>
</tr>
<tr>
<td><em>ASE Automobile Service Technology</em></td>
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<tr>
<td><em>ASE Brakes</em></td>
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<tr>
<td><em>ASE Electronic Systems</em></td>
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<tr>
<td><em>ASE Engine Performance</em></td>
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<tr>
<td><em>ASE Engine Repair</em></td>
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<tr>
<td><em>ASE Maintenance Light Repair</em></td>
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<tr>
<td><em>ASE Manual Drive Train</em></td>
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<tr>
<td><em>ASE Suspension &amp; Steering</em></td>
</tr>
<tr>
<td><em>ASE Mechanical &amp; Electrical Components</em></td>
</tr>
<tr>
<td><em>ASE Structural Analysis &amp; Damage Repair</em></td>
</tr>
<tr>
<td><em>ASE Non-Structural Analysis &amp; Damage Repair</em></td>
</tr>
<tr>
<td>Safety &amp; Pollution Prevention-S/P2 (Auto I, II, Practicum)</td>
</tr>
</tbody>
</table>

Students earn 2 - 3 ASE certifications in each of the following: Auto I, Auto II, and Auto Practicum.
## Industry Certifications by Endorsement

(* Performance Acknowledgment)

<table>
<thead>
<tr>
<th>Public Services Endorsement</th>
<th>Health Science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education &amp; Training</strong></td>
<td><em>Certified Nurse Aide-CNA (Practicum in Health Science)</em></td>
</tr>
<tr>
<td>CFISD Letter of Intent to Interview (Prac in Education/Train)</td>
<td><em>Emergency Medical Technician-EMT (Practicum in Health Sci)</em></td>
</tr>
<tr>
<td></td>
<td><em>Pharmacy Technician (Practicum in Health Science)</em></td>
</tr>
<tr>
<td></td>
<td>AHA Heartsaver CPR/First Aid (Principles of Health Science)</td>
</tr>
<tr>
<td></td>
<td>AHA Basic Life Support-BLS (Health Science Theory/Clinicals)</td>
</tr>
<tr>
<td></td>
<td>OSHA 10-hr card (Health Science Theory/Clinicals)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Human Services</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><em>Cosmetology Operator License (Cosmetology II)</em></td>
<td></td>
</tr>
<tr>
<td>AHA Heartsaver CPR/First Aid (Child Guidance)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>STEM Endorsement</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>STEM (Engineering)</strong></td>
<td><em>Oracle Certified Assoc Java SE 8 Programmer (Comp Sci III K)</em></td>
</tr>
<tr>
<td>Autodesk Inventor (Engineering Design &amp; Presentation II)</td>
<td><em>Comp Sci III K</em></td>
</tr>
<tr>
<td>Autodesk AutoCAD (Engineering Design &amp; Presentation II)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>All Endorsements</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Food Handler (CTED Career Preparation)</td>
<td></td>
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</tbody>
</table>
CAREER AND TECHNICAL EDUCATION
FOR STUDENTS IN SPECIAL EDUCATION

Business Information Management I (BIM I) CTED 1 credit
This career education course allows students with disabilities to implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.
• Grades 9 - 12
• Recommendation by the IEP committee required
• Recommended prerequisite: Touch System Data Entry
• Lab supplies or fee may be required

Digital Media CTED 1 credit
This career education course allows students with disabilities to implement personal and interpersonal skills to strengthen individual performance in the workplace and in society. Through the study of digital and interactive media and its application in information technology, students will design and create multimedia projects that address customer needs. Although multiple technologies will be explored, the emphasis will be on utilizing the features in Adobe Photoshop included in the corresponding industry-recognized certification. The goal of providing this training (and potential certification) is to assist students in becoming more marketable and desirable in the workplace.
• Grades 10 - 12
• Recommendation by the IEP committee required
• Recommended prerequisite: BIM I CTED
• Lab supplies or fee may be required

Lifetime Nutrition and Wellness CTED 1 credit
This career education course allows students with disabilities to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness, as well as pursue careers related to nutrition. Topics include the role of nutrients in the body, principles of digestion and metabolism, nutritionally balanced diets, safety and sanitation, and food management principles. Some cooking lab experiences may be included.
• Grades 10 - 12
• Recommendation by the IEP committee required
• Lab supplies or fee may be required

Career Preparation CTED 2 credits
Certification: Food Handler
This career course for students with disabilities 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 inclass 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 he instructor or instructional assistant while undergoing on-the-job training that fits in with a student’s ability and interest.
• Grades 11 - 12
• Recommendation by the IEP committee required
• Lab supplies or fee may be required
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 - 10 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 (formerly Teen Leadership) 1/2 credit
LeadWorthy is a class in which students develop leadership, professional, and business skills. Students learn to foster a healthy self-concept, healthy relationships, and learn to understand the concept of personal responsibility including social media’s impact on image. Students will develop an understanding of Emotional Intelligence and the skills it measures, which include self-awareness, self-control, self-motivation, and social skills. Students also develop skills in public speaking and communication. They will have an understanding of the concept of principle-based decision-making and learn to make responsible financial decisions. Students will develop an understanding of the effects of peer pressure, skills to counteract those effects, bullying prevention and defending skills, and problem-solving skills. Throughout the class, students will employ various technologies to support and empower them to take their skills to the next level. Students will acquire an understanding of the principles of parenting, enabling them to become better family members and citizens. As members of a community, students also develop leadership skills practiced in the form of community service. They will also develop an understanding of the need for vision in goal-setting, both personally and professionally.
- Grades 9 - 12

Student Leadership 1/2-1 credit
This course provides an opportunity to study, practice, and develop group and individual leadership and organization skills. These skills include, but are not limited to leadership roles, interpersonal relations, civic responsibility, decision making, problem solving and communication. Students enrolled in this course apply these skills by working with peers, school administration and the community. This course is a hands-on, lab-oriented approach to leadership by involving students in participatory leadership through project planning and implementation. It is customized to meet the needs of a student council officer or members in club/organization leadership roles.
- Grades 11 - 12
- Must be student leaders
**Peer Assistance Leadership (PALs) I-II**  
1 - 2 credits

The Peer Assistance and Leadership Program (PALs) is a peer mentoring program in which selected high school students in grades 11 and 12 are trained to work as peer mentors with students on their own campus, or at feeder middle and elementary schools. The PALs program is a carefully designed course to train a student to become a mentor. Students have a chance to learn more about themselves while helping others have a more positive and productive school experience, to clarify their values, to strengthen their caring about others, and to make a difference in someone else's life. PALs students have demonstrated the potential to be good listeners, and are trustworthy, empathetic, caring, and responsible. 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, followship, 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.
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, Dan McIlduff, at 10300 Jones Road, Houston, TX 77065, 281-897-4000.

Comunicado público sobre la no discriminación en los programas de educación profesional y técnica 2017- 2018

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, Dan McIlduff, en el 10300 Jones Road, Houston, TX 77065, 281-897-4000.