



SELECT COURSES FOR ENDORSEMENT



Cypress-Fairbanks ISD - The Endorsements

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

STEM <i>Science, Technology, Engineering, & Math</i>	Business & Industry	Public Services	Arts & Humanities	Multidisciplinary Studies
<p>Students may earn a STEM endorsement by selecting and completing the requirements from among these 5 options.</p> <p>Note: Algebra II, Chemistry, and Physics are required for the STEM endorsement regardless of the option the student selects from below.</p> <p>Option 1: Computer Science (Technology) Students take 4 computer science courses.</p> <ul style="list-style-type: none"> • Computer Science I K • Computer Science Principles AP • Computer Science II K • Computer Science III K • Project-based Research in Computer Science K <p>Option 2: CTE (Engineering) Students earn four (4) CTE credits by taking at least two (2) courses in the same cluster that lead to a final course in the STEM cluster. At least one (1) of the courses must be advanced CTE course (3rd year or higher course in a sequence).</p> <p>Option 3: Math Students take Algebra I, Geometry, and Algebra II AND two (2) of the following courses for which Algebra II is a prerequisite.</p> <ul style="list-style-type: none"> • Pre-Calculus • Calculus AB or BC • Statistics AP • AQR K • Advanced Algebra • College Algebra K <p>Option 4: Science Students take Biology, Chemistry, and Physics, AND two (2) of the following courses.</p> <ul style="list-style-type: none"> • 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 <p>Option 5: Combination Students take Algebra II, Chemistry, and Physics, an additional math 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.</p>	<p>Students may earn a Business & Industry endorsement by selecting and completing the requirements from among these 3 options.</p> <p>Option 1: CTE Students earn four (4) credits by taking at least two (2) courses in the same cluster in one of the following areas</p> <ul style="list-style-type: none"> • Agriculture, Food and Natural Resources • Architecture and Construction • Arts, Audio/Video Technology, and Communication • Business Management and Administration • Finance • Hospitality and Tourism • Information Technology • Manufacturing • Marketing • Transportation, Distribution, and Logistics <p>with at least one (1) advanced (3rd year or higher course in the sequence).</p> <p>Option 2: English Students take four (4) English elective credits that include three levels in one of the following areas</p> <ul style="list-style-type: none"> • Advanced Journalism: <ul style="list-style-type: none"> • Newspaper or Yearbook • Debate <p>Option 3: Combination Students take a coherent sequence of four (4) credits from Option 1 and 2. Combination plan must include one (1) advanced CTE course.</p>	<p>Students may earn a Public Services endorsement by selecting and completing the requirements from among these 2 options.</p> <p>Option 1: CTE Students earn four (4) credits by taking at least two (2) courses in the same career cluster in one of the following areas</p> <ul style="list-style-type: none"> • Education and Training • Health Science • Human Services <p>With a least one (1) advanced (3rd year or higher course in the sequence).</p> <p>Option 2: AFJROTC Student takes four (4) AFJROTC courses for (4) credits</p>	<p>Students may earn an Arts & Humanities endorsement by selecting and completing the requirements from among these 2 options.</p> <p>Option 1: Social Studies Students should earn five (5) social studies credits.</p> <p>Option 2: Languages Other Than English (Foreign Language) Students take four (4) levels of the same foreign language.</p> <p style="text-align: center;">OR</p> <p>Students take two (2) levels of one foreign language AND two (2) levels of a different foreign language (two levels in each of two different foreign languages for 4 credits).</p> <p>Option 3: Fine Arts Students take four (4) courses in the same fine arts area for 4 credits</p> <p style="text-align: center;">OR</p> <p>Students take two (2) courses in one fine arts area AND two (2) courses in a different fine arts area (two courses in each of two different fine arts areas for 4 credits).</p>	<p>Students may earn a Multidisciplinary Studies endorsement by selecting and completing the requirements from among these 2 options.</p> <p>Option 1: Four by Four (4 X 4) Students take four (4) courses in each of the four core content areas.</p> <ul style="list-style-type: none"> • Four (4) English credits including English IV • Four (4) math credits • Four (4) science credits including biology and chemistry and/or physics • Four (4) social studies credits <p>Option 2: AP / Dual Placement (AP) or four (4) Dual Credit courses for four (4) credits in English, math, science, social studies, foreign language, or fine arts.</p> <p style="text-align: center;">OR</p> <p>Students take a combination of Advanced Placement (AP) or Dual credit courses for four (4) credits in English, math, science, social studies, foreign language, or fine arts.</p>

Find your #1 Endorsement and Option and READ all requirements

2019 - 2020 High School Offerings

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Business & Industry

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

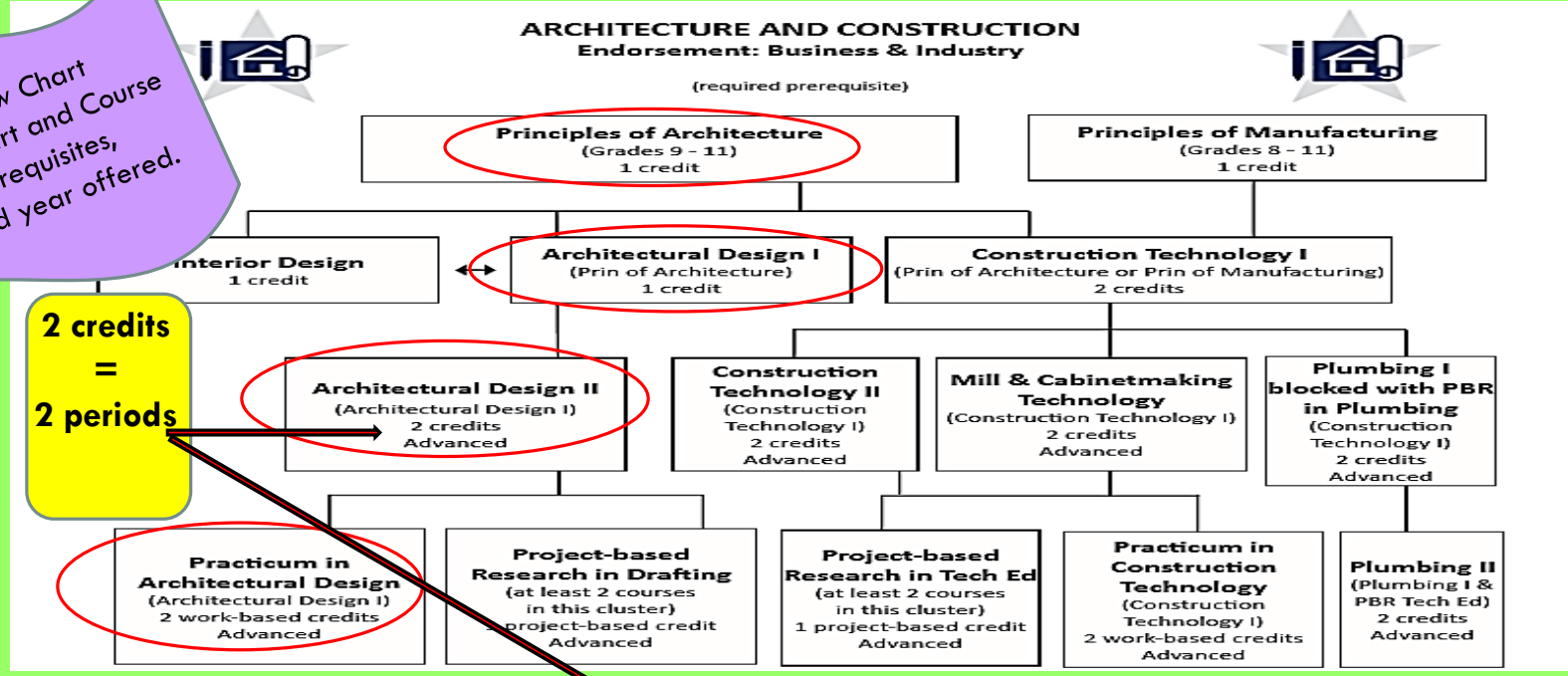
Option 1: CTE
Students earn four (4) credits by taking at least two (2) courses in the same cluster in one of the following areas:

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

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

Endorsement Chart pg. 7

Ex. - pg. 17
Career Cluster Flow Chart
-Review Flow Chart and Course Descriptions, prerequisites, credit value and year offered.



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Ex. - pg. 17
Sample Endorsement Course Sequence by Career Interest


Career Interest	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Architecture	Principles of Architecture	Architectural Design I	*Architectural Design II (2)	*Practicum in Architectural Design (2) <u>or</u> *Project-based Research in Drafting
Construction	Principles of Architecture <u>or</u> Principles of Manufacturing	Construction Technology I (2)	*Construction Technology II (2) <u>or</u> *Mill & Cabinetmaking Technology (2)	*Practicum in Construction Tech (2) <u>or</u> *Project-based Research in Tech Ed
Plumbing	Principles of Architecture <u>or</u> Principles of Manufacturing	Construction Technology (2)	*Plumbing I (2)	*Plumbing II (2)
Interior Design	Principles of Architecture	Interior Design	Architectural Design I	*Architectural Design II (2)




EXAMPLE – STEM, OPTION 2 – CTE (ENGINEERING); (CAREER INTEREST – ENGINEERING)




Periods	High School Credits Earned in Middle School	9 th Grade	10 th Grade	11 th Grade	12 th Grade
1		English I	English II	English III	English IV
2	Algebra I	Math: Geometry K	Math: Algebra II K	Math: Pre-calculus K	Math: Calculus AB AP
3		Biology K	Science: Chemistry K	Science: AP Physics I	Science: Eng. Design & Problem Solving K
4		PACE (.5) / Health (.5)	Engineering Design & Presentation I	US History	Government (.5) & Economics (.5)
5		Football I	Football II	Football III	Football IV
6	Spanish I	Spanish II	Spanish III K	Engineering Design & Presentation II	Practicum In STEM
7	Principles of Applied Engineering	World Geography	Art I D/P	(2 periods)	(2 Periods)

Engineering Design & Presentation II

(2 periods)

Practicum In STEM

(2 Periods)



EXAMPLE - BUSINESS & INDUSTRY, OPTION 1 – AG, FOOD, & NATURAL RESOURCES; (CAREER INTEREST – VETERINARY SCIENCE)

Periods	High School Credits Earned in Middle School	9 th Grade	10 th Grade	11 th Grade	12 th Grade
1		English I	English II	English III	English IV
2		Math: Algebra I	Math: Geometry	Math: Algebra II	Math: Adv. Algebra
3		Biology	Science: Chemistry	Science: Physics	Science: Advanced Animal Science K
4		PACE (.5)/ Health (.5)	World History	US History	Government (.5) & Economics (.5)
5		Football I	Football II	Football III	Football IV
6		Spanish I	Spanish II	Vet Med Appl.	Practicum in Ag (2 Periods) 
7		Principles of Ag	Equine Science (.5) & Small Animal (.5)	Floral Design	

Also counts as Fine Art credit

Floral Design



EXAMPLE - PUBLIC SERVICES, OPTION 1 – EDUCATION & TRAINING; (CAREER INTEREST – K-12 EDUCATION)

+ ARTS & HUMANITIES, OPTION 3 FINE ARTS-MUSIC (BAND)

+ MULTIDISCIPLINARY, OPTION 1 4 X 4

Periods	High School Credits Earned in Middle School	9 th Grade	10 th Grade	11 th Grade	12 th Grade
1		English I	English II	English III	English IV
2		Math: Algebra I	Math: Geometry	Math: Algebra II	Math: College Algebra K
3		Biology	Science: Chemistry	Science: Physics	Science: Earth & Space
4		PACE (.5)/ Health (.5)	Principles of Education & Training	US History	Government (.5) & Economics (.5)
5		Band I	Band II	Band III	Band IV
6	Spanish I	Spanish II	Spanish III K	Instructional Practices (2 Periods)	Practicum in Education & Training (2 Periods)
7		World Geography	World History		



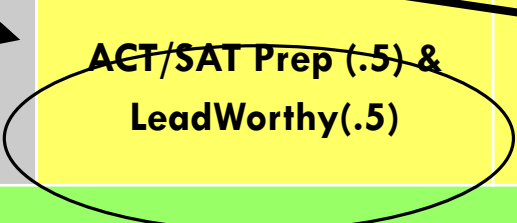
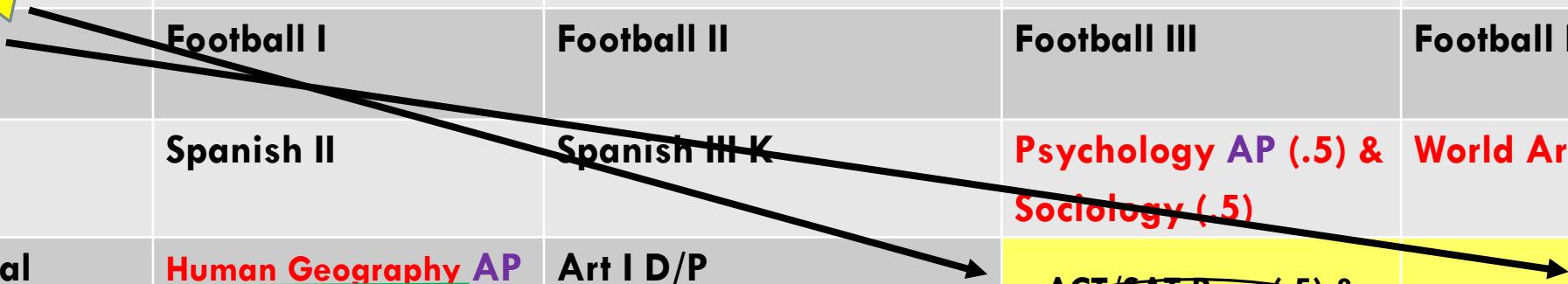
EXAMPLE - ARTS & HUMANITIES, OPTION 1 – SOCIAL STUDIES; (CAREER INTEREST – HISTORY OR LAW)

+ **MULTIDISCIPLINARY, OPTION 1 4 X 4**

+ **MULTIDISCIPLINARY, OPTION 2 AP**

Periods	High School Credits Earned in Middle School	9 th Grade	10 th Grade	11 th Grade	12 th Grade
1		English I K	English II K	English III AP	English IV AP
2		Math: Algebra I	Math: Geometry K	Math: Algebra II K	Math: Precalculus K
3		Biology K	Science: Chemistry K	Science: Physics K	Science: Forensic Science K
4		PACE (.5)/Health (.5)	<u>World History</u> AP	<u>US History</u> AP	<u>Government</u> AP (.5) & <u>Economics</u> AP (.5)
5		Football I	Football II	Football III	Football IV
6	Spanish I	Spanish II	Spanish III K	Psychology AP (.5) & Sociology (.5)	World Area Studies K
7	Professional Comm. (.5)	<u>Human Geography</u> AP	Art I D/P	ACT/SAT Prep (.5) & LeadWorthy(.5)	PALS I

See Other Electives Pg. 48



EXAMPLE - MULTIDISCIPLINARY STUDIES, OPTION 1 – 4 X 4; (CAREER INTEREST – FASHION DESIGN)

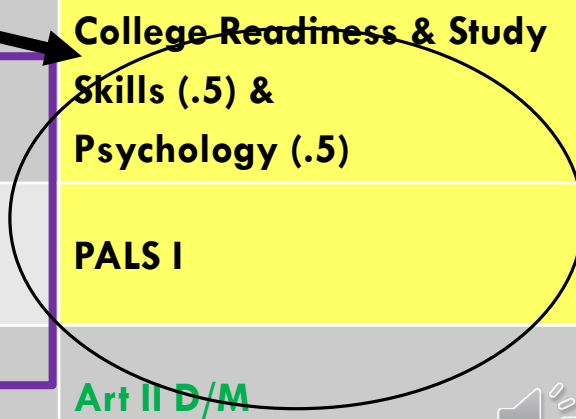
+ **ARTS & HUMANITIES, OPTION 3 FINE ARTS COMBO**

+ **BUSINESS & INDUSTRY, OPTION 1 ARTS, AV, & COMMUNICATION**

Periods	High School Credits Earned in Middle School	9 th Grade	10 th Grade	11 th Grade	12 th Grade
1		English I	English II	English III	English IV
2		Math: Algebra I	Math: Geometry	Math: Algebra II	Math: ISM Adv. Algebra
3		Biology	Science: Chemistry	Science: Astronomy	Science: Aquatic Sci.
4		PACE (.5)/ Health (.5)	World History	US History	Government (.5) & Economics (.5)
5		Aerobic Activities	Fashion Design I	Fashion Design II	College Readiness & Study Skills (.5) & Psychology (.5)
6	Spanish I & II	Theatre Arts I	Theatre Arts II	(2 Periods)	PALS I
7		World Geography	Audio/Video Production I	Art I D/M	Art II D/M

Required for Multidisciplinary Studies

Other Electives pg. 48



NOW IT'S YOUR TURN!

1. Use the **Endorsement Chart** (pgs 7-8), **flow charts** & **sample course sequences** in the Student Booklet to help you choose the courses you need to earn an Endorsement.
2. Start with your 1st Endorsement choice and enter the courses needed for the Endorsement. Next move on to your 2nd Endorsement (if you have one) and add those courses to your 4-Year Plan, etc.
3. After adding the required Endorsement courses, add any additional electives you would like **if you have spaces left on your 4-Year Plan.** (**suggestions on page 48**)

Remember:

Any course that is 2 credits = 2 class periods (2 pds.)

3 credits = 3 class periods (3 pds.)

A one semester (.5) course must be paired with another (.5) course & placed in the same box on the 4-Year Plan worksheet

It is OK to use abbreviations – just make sure you can remember what class it is when you go to the computer lab to enter your choices in Career Cruising!

