



**LAKE TRAVIS
INDEPENDENT SCHOOL
DISTRICT**

2024 - 2025

**CAREER & TECHNICAL EDUCATION
PROGRAMS OF STUDY
GUIDEBOOK**

PRESENTED BY:
LTISD
Career and Technical Education





WELCOME

to

LAKE TRAVIS HIGH SCHOOL



The high school experience is an exciting step as you begin to explore the pathways that will take you on your life's journey after you graduate. LTHS provides students with amazing opportunities in academics, fine arts, athletics, and career & technical education.

Parents and students are urged to carefully review the information contained in this guide. This guidebook provides information about high school graduation requirements and descriptions of endorsements. It also highlights the Career & Technical Education (CTE) career clusters, programs of study, and courses. We have included career and technical education certifications and licensure options for various occupations. An 8th grade student and parent high school informational meeting will be held in the Spring semester before course registration to cover important information about high school, graduation plans, and course registration.

High school is about preparing for life after graduation. The experiences you gain through CTE courses will provide opportunities to obtain valuable knowledge about specific programs of study that interest you. Lake Travis ISD offers a wide variety of CTE course offerings that will help you explore your desired career opportunities and certification programs designed to prepare you for life after high school.

It is important to know that in our global society, and with your qualifications and experiences, you will no longer just be competing with your friends and neighbors here in Austin or Travis County. You need to be prepared to be compared and measured against competitors for jobs locally, across our nation, and from around the world. Our goal is to provide you with a world-class education that positions you for success beyond your senior year.

Explore the guidebook and ask questions of your parents, teachers, and counselors, so that you can find the program that will best fit your needs and help you meet your educational goals. Now is the time to dream and explore the possibilities that life holds. We wish you all the best of luck on this exciting time in your life.

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Lake Travis ISD’s Program of Study Guidebook is designed to help students and parents make informed decisions about planning for the future. What is included here is a great start to that process! An 8th grade student and parent high school informational meeting will be held in the Spring semester before course selection to cover important information about high school, graduation plans, and course registration.

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PLANNING YOUR HIGH SCHOOL PROGRAM



Planning a four-year high school program is a serious undertaking. The selection of your graduation plan is dependent on your interests and plans for future careers. Some questions to consider when making your plans are the following:

- Will you continue your education at a university, college or in a trade or technical school?
- Do you want to learn career skills in order to enter the full-time work force immediately after high school?
- Are you interested in mathematics, science, technology, engineering, or any other specialized field of study?
- Are you thinking of entering a profession that requires specialized education, such as veterinary science, medicine, or law?

The answers to these questions are extremely important when making decisions about your course selections for all four years in high school. Take some time to answer the questions above before you begin. Your interests and desire to work hard should also guide your answers. It is common for young people to change their minds about which course of study or career choice they are interested in. As you consider your options, immediate decisions regarding your graduation plans will affect your future career choices. For that reason, we recommend that you plan a diverse and challenging academic program. By taking the most diverse and most challenging academic program available to you, your options will remain open in the event your career plans should change.

Lake Travis ISD offers many ways to prepare for your future - to make certain that you have options. A wide range of programs prepare students for post-high school experiences, college, business school, technical school, military service, fine arts participation, and full-time employment.

The programs offered allow a student to choose the high school program best for him/her. Outlined on the following pages are the graduation requirements for each of the state's graduation programs. Counselors and teachers will be helpful in advising you more specifically about programs offered.

HIGH SCHOOL GRADUATION REQUIREMENTS

STUDENTS ENTERING HIGH SCHOOL IN 2024 - 2025

During each year in high school at LTISD, it is the expectation that all students enroll and complete the four core subject areas. This excludes courses taken for high school credit in middle school. Parents and students are encouraged to carefully consider college entrance requirements and career readiness standards set by institutions of higher education.

FOUNDATION WITH ENDORSEMENT PROGRAM

Foundation

Basic course credits that all students must complete.



Endorsement

Additional credits required to pursue college and career. It is our goal that all students will achieve a foundation plus endorsement graduation plan. Students can choose from

5 endorsement areas:

- Business and Industry
- Public Services
- Science, Technology Engineering and Mathematics (STEM)
- Arts and Humanities
- Multi-Disciplinary Studies

EXIT LEVEL TEST REQUIREMENTS

Students who entered 9th grade in 2011-2012 and thereafter will take the State of Texas Assessments of Academic Readiness (STAAR). Students take the assessments when they complete the course. For additional information on requirements for STAAR and End of Course, please visit www.tea.state.tx.us/studentassessment/staar.

English Language Arts

English I
English II

Math

Algebra 1

Science

Biology

Social Studies

U.S. History



HIGH SCHOOL GRADUATION REQUIREMENTS

| Foundation High School Program with Endorsement | Foundation High School Program with Endorsement Distinguished Level of Achievement |
|---|---|
| 26 Credits | 26 Credits (Algebra II required) |
| English - 4 Credits English I, English II, English III and one credit in any authorized English course.** | English - 4 Credits English I, English II, English III and one credit in any authorized English course.** |
| Math - 4 Credits Algebra I, Geometry, & two credits in any authorized Math courses.** | Math - 4 Credits Algebra I, Geometry, Algebra II & one additional Math course. ** |
| Science - 4 Credits Biology, **Chemistry, & two lab-based sciences | Science - 4 Credits Biology, **Chemistry, & two lab-based sciences |
| Social Studies - 3 Credits (4 recommended) World Geography or World History, US History, Government (.5), & Economics (.5) | Social Studies - 3 Credits (4 recommended) World Geography or World History, US History, Government (.5), & Economics (.5) |
| Languages other than English - 2 Credits In the same language – Spanish, French, American Sign Language, Latin, German, Computer Science | Languages other than English - 2 Credits In the same language – Spanish, French, American Sign Language, Latin, German, Computer Science |
| Physical Education - 1 Credit Athletics, Cheerleading, Dance 1 (Dance Aerobics), Drill Team (First Semester), Marching Band (First Semester), PE-Lifetime Fitness and Wellness Pursuits, PE-Individual Sports, PE-Team Sports, PE-Adventure/Outdoor Education, PE-Aerobic Activities, PE-Weight Training, PE Waiver | Physical Education - 1 Credit Athletics, Cheerleading, Dance 1 (Dance Aerobics), Drill Team (First Semester), Marching Band (First Semester), PE-Lifetime Fitness and Wellness Pursuits, PE-Individual Sports, PE-Team Sports, PE-Adventure/Outdoor Education, PE-Aerobic Activities, PE-Weight Training, PE Waiver |
| Fine Arts - 1 Credit AP Art History, Art 1, Choir 1, Dance 2-4, Drill Team, Band, Dual Credit Fine Arts w/ ACC., Music 1-2 Applied, Music & Media, Music Theory AP, Orchestra, Tech Theater 1, Theater Arts, World Dance | Fine Arts - 1 Credit AP Art History, Art 1, Choir 1, Dance 2-4, Drill Team, Band, Dual Credit Fine Arts w/ ACC., Music 1-2 Applied, Music & Media, Music Theory AP, Orchestra, Tech Theater 1, Theater Arts, World Dance |
| Electives - 7 Credits | Electives - 7 Credits |
| Credit requirements specific to at least one endorsement. | Credit requirements specific to at least one endorsement. |

** See counselor for specific graduation requirement options for English, Math, and Science. AP, Dual-Credit, or Dual-Enrollment courses may be substituted for requirements in appropriate areas; check with your counselor.

All students shall be required to take a minimum of four un-weighted credits during high school. These four un-weighted Regular credits shall be used in the calculation of class rank and of the top ten percent. A student shall complete three of the four required un-weighted Regular credits prior to the beginning of his or her senior year.

ENDORSEMENT CHOICES

Career and technical education programs of study offer a sequence of courses that provide students with coherent and rigorous content. CTE content is aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions. Endorsements with programs of study titled “CTE” must include four or more credits in CTE, completing two courses in the same career cluster and at least one advanced (level 3 or 4) CTE course.

Students will be able to earn one or more endorsements as part of their graduation requirements. Endorsements consist of a related series of courses that are grouped together by interest or skill set. They provide students with in-depth knowledge of a subject area.

- All endorsements require the completion of four (4) math and four (4) science credits.
- Endorsements are originally decided in 8th grade and must be declared in writing.
- Students may earn more than one endorsement
- Students may change endorsements

MULTI-DISCIPLINARY ENDORSEMENT

Allows students to enroll in courses from each of the endorsements areas.

Options include:

- 4 advanced CTE courses that prepare a student to enter the workforce
- 4 credits in each of the four foundation subject areas
- 4 credits in AP or Dual credit

ARTS & HUMANITIES ENDORSEMENT

Students will enroll in courses directly related to literature, language, culture, performing arts, and visual arts.

Options include:

- 5 Social Studies Credits
- 4 levels of same Languages other than English (LOTE)
- 2 levels of LOTE, 2 levels of LOTE in a different language
- 4 credits of fine arts in coherent sequence

BUSINESS & INDUSTRY ENDORSEMENT

Students will enroll in courses across various industries that relate to business and industry.

CTE Programs of Study Include:

- Animal Science
- Agricultural Technology & Mechanical Systems
- Environmental & Natural Resources
- Plant Science
- Architectural Drafting & Design (includes Interior Design)
- Graphic Design and Interactive Media (includes Fashion Design)

CTE Programs of Study Include:

- Digital Communications
- Accounting & Financial Services
- Business Management
- Entrepreneurship
- Marketing & Sales
- Lodging & Resort Management
- Travel, Tourism, and Attractions
- Robotics & Automation Technology

Other options:

- 3 levels of course in one of the following areas: debate, journalism, yearbook

PUBLIC SERVICES ENDORSEMENT

Students will enroll in courses directly related to health science, education, and law enforcement.

CTE Programs of Study Include:

- Teaching and Training
- Law Enforcement
- Legal Studies
- Exercise Science, Wellness, and Restoration
- Diagnostic & Therapeutic Services

STEM ENDORSEMENT

Students will enroll in courses directly related to science, computer science, engineering, and math. Algebra II, Chemistry, and Physics required for this endorsement.

CTE Programs of Study Include:

- Biomedical Science
- Engineering Foundations
- Cybersecurity
- Programming and Software Development

Other options:

- 2 Advanced Math Courses
- 2 Advanced Science Course

ACADEMIC RECOGNITIONS

DISTINGUISHED LEVEL OF ACHIEVEMENT

The Distinguished Level of Achievement (DLA) will:

- Allow a student to compete for Top 10% automatic admissions eligibility at any Texas public university, except University of Texas which has more stringent admission requirements
- Ensure the student is a more competitive applicant at the most selective colleges and universities

The Distinguished Level of Achievement Requires:

- A total of 26 graduation credits
- Algebra II
- Successful completion of at least one endorsement in the student's area of interest

PERFORMANCE ACKNOWLEDGEMENTS

There are five ways a student may earn a performance acknowledgement on their transcript for outstanding performance in:

- Dual Credit Courses.
- Bilingualism and Biliteracy
- College Board Advanced Placement Tests
- PSAT, ACT, SAT
- Earning an Industry Based Certification

The specific criteria required to earn a performance acknowledgement for the areas listed above can be found at

<https://bit.ly/perfack>

Grade Point Average (G.P.A.)

LTHS maintains a weighted GPA and an unweighted GPA.

The weighted is always and only on the 100-point scale. The unweighted is always and only on the 4-point scale.

A student's cumulative grade average begins at the end of the first semester of the 9th grade year and is recalculated at the end of each semester. Course grading weights shall be assigned to the student's semester grades for the calculation of a weighted numerical grade average in accordance with the following scale:

| <i>Category</i> | <i>Weight</i> |
|--|----------------------|
| Regular | multiplied by 1.0 |
| Honors (including Pre-AP) | multiplied by 1.1 |
| Advanced (including AP, Advanced Honors, and UT OnRamps courses) | multiplied by 1.2 |

All students shall be required to take a minimum of four un-weighted credits during high school. These four un-weighted Regular credits shall be used in the calculation of class rank and of the top ten percent. A student shall complete three of the four required un-weighted Regular credits prior to the beginning of his or her senior year.

CAREER & TECHNICAL EDUCATION (CTE)

EXPLORING YOUR CAREER OPTIONS

If you are considering college, technical training programs, or going straight into the workforce following graduation, you first need to complete your high school education and earn a high school diploma.

Participation in CTE programs increases wages, probability and consistency of employment, and leads to higher quality jobs. CTE WORKS!

While in high school, you will want to:

- Look at the five endorsements offered under the Foundation High School Program
- Look at the Career Clusters offered in CTE
- Determine your area of interest
- Complete a sequence of CTE courses in a program of study in a career cluster of interest
- Complete your selected endorsement along with the required foundation program to earn your high school diploma
- Learn about available jobs, and any required post-high school or technical training
- Explore new career opportunities
- Research wage and occupation information, required levels of education and training requirements
- Discover your interests and abilities, use labor market resources at

www.texasrealitycheck.com or <https://www.onetonline.org/>

CAREER CLUSTER INTEREST INVENTORY

Consider how you like to spend your time and what you think is interesting.

Rate each activity according to your interest level with a 0, 1, or 2:
0 (not interested), 1 (somewhat interested) or 2 (very interested).

Add the numbers in each section. The highest totals reveal the career fields in which you are most interested. Circle 3 boxes with the highest totals to research for specific jobs.

| | |
|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Provide medical care for sick or injured people <input type="checkbox"/> Learn/read about healthcare topics <input type="checkbox"/> Deal with bodily fluids <input type="checkbox"/> Work in a hospital, ER or clinical environment <input type="checkbox"/> Assist with medical procedures/operations <input type="checkbox"/> Perform first aid in an emergency situation | <ul style="list-style-type: none"> <input type="checkbox"/> Work with tools and equipment <input type="checkbox"/> Weld or build items/projects to standard code <input type="checkbox"/> Monitor occupational environmental regulations <input type="checkbox"/> Ranching/raising animals <input type="checkbox"/> Provide daily care for animals <input type="checkbox"/> Provide medical care for animals |
| <p><input type="checkbox"/> TOTAL FOR HEALTH SCIENCE CAREERS</p> | <p><input type="checkbox"/> TOTAL FOR AGRICULTURE CAREERS</p> |
| <ul style="list-style-type: none"> <input type="checkbox"/> Enjoys food prep, cooking, baking, serving <input type="checkbox"/> Manage a hotel/restaurant <input type="checkbox"/> Cosmetology, barbering or spa services <input type="checkbox"/> Plan and oversee recreation activities <input type="checkbox"/> Plan trips or services <input type="checkbox"/> Provide guided tours or lessons, or service | <ul style="list-style-type: none"> <input type="checkbox"/> Tutor, instruct and help others learn <input type="checkbox"/> Assist others with technology, academics & skills <input type="checkbox"/> Present information to a group <input type="checkbox"/> Manage a classroom or group <input type="checkbox"/> Work in a group or classroom setting <input type="checkbox"/> Plan curriculum and materials for a group |
| <p><input type="checkbox"/> TOTAL FOR HOSPITALITY & TOURISM CAREERS</p> | <p><input type="checkbox"/> TOTAL FOR EDUCATION & TRAINING CAREERS</p> |
| <ul style="list-style-type: none"> <input type="checkbox"/> Work in a creative/competitive environment <input type="checkbox"/> Budget, track, oversee funds and expenditures <input type="checkbox"/> Use information technology programs <input type="checkbox"/> In charge of committees and people <input type="checkbox"/> Develop and present information / campaigns <input type="checkbox"/> Provide customer service | <ul style="list-style-type: none"> <input type="checkbox"/> Learn about scientific events and topics <input type="checkbox"/> Study elements of numbers or computers <input type="checkbox"/> Perform experiments, or figure equations <input type="checkbox"/> Study space, motion, chemicals, elements <input type="checkbox"/> Learn about cybersecurity or computer systems <input type="checkbox"/> Develop or install computer programming |
| <p><input type="checkbox"/> TOTAL FOR BUSINESS/FINANCE/MARKETING CAREERS</p> | <p><input type="checkbox"/> TOTAL FOR INFORMATION TECHNOLOGY & ENGINEERING</p> |
| <ul style="list-style-type: none"> <input type="checkbox"/> Coordinate services or assistance for others <input type="checkbox"/> Provide counseling or guidance <input type="checkbox"/> Listen and care about others' difficulties <input type="checkbox"/> Provide solutions to others' difficulties <input type="checkbox"/> Learn about human behavior and life stages <input type="checkbox"/> Work with families and/or children | <ul style="list-style-type: none"> <input type="checkbox"/> Utilize computer animation and graphics <input type="checkbox"/> Create digital media projects, designs <input type="checkbox"/> Create and Edit Audio/Video productions <input type="checkbox"/> Utilize talents to communicate info to others <input type="checkbox"/> Design and create fashion <input type="checkbox"/> Create and Edit Digital Photography |
| <p><input type="checkbox"/> TOTAL FOR HUMAN SERVICES CAREERS</p> | <p><input type="checkbox"/> TOTAL FOR DIGITAL ARTS & AUDIO/VIDEO CAREERS</p> |



| | |
|---|--|
| <input type="checkbox"/> Learn about city, state or federal laws/policies <input type="checkbox"/> Enforce / perform methods that serve the public <input type="checkbox"/> Protect and/or serve the public over yourself <input type="checkbox"/> Learn about historical court cases <input type="checkbox"/> Investigate criminal activity / crime scenes <input type="checkbox"/> Analyze criminal behavior <input type="checkbox"/> TOTAL FOR LAW & PUBLIC SERVICE CAREERS | <input type="checkbox"/> Work with hands-on tools and items <input type="checkbox"/> Set up or repair electrical controls/wiring <input type="checkbox"/> Build robots/electronic devices <input type="checkbox"/> Write code for mechanical devices <input type="checkbox"/> Troubleshoot problems and make repairs <input type="checkbox"/> Design robots to automate a process <input type="checkbox"/> TOTAL FOR MANUFACTURING CAREERS |
| <input type="checkbox"/> Remodel or build according to blueprints <input type="checkbox"/> Use computer software to create designs <input type="checkbox"/> Design creative spaces and buildings <input type="checkbox"/> Precise attention to given to details <input type="checkbox"/> Coordinating colors and textiles <input type="checkbox"/> Draw / sketch building exteriors <input type="checkbox"/> TOTAL ARCHITECTURE CAREERS | <input type="checkbox"/> Awareness of effects and causes of the energy industry market's status <input type="checkbox"/> Use physical labor to work on natural energy sites <input type="checkbox"/> Learn about energy equipment/processes <input type="checkbox"/> Comply with inspection requirements at sites <input type="checkbox"/> Manage a crew related to an energy site <input type="checkbox"/> Spend time caring for the environment <input type="checkbox"/> TOTAL FOR ENERGY NATURAL RESOURCES CAREERS |

Make sure you add the numbers in each section and write the total in the space provided.

List your three highest-ranking career fields below.

1. _____
2. _____
3. _____

GOAL SETTING

THINGS TO THINK ABOUT

- Review your results from all your inventories
- The reason I am interested in this career cluster is
- Research two career clusters using the charts and resources provided

CHOICE #1

Program of study: _____

Specific job in the future: _____

Does it match your values, strengths and interests?

___ Yes ___ No

Wage per year? _____

Will it provide the lifestyle you want?

___ Yes ___ No

How many job openings were in this career last year in the area you want to live in? _____

How many years/months of education is required after high school? _____

What college major or certificate will it require?

With whom can you talk to gain more information?

Where can you get this degree/certificate?

Other information: _____

FINAL REFLECTION

What are your next steps?

What are your goals?

CHOICE #2

Program of study: _____

Specific job in the future: _____

Does it match your values, strengths and interests?

___ Yes ___ No

Wage per year? _____

Will it provide the lifestyle you want?

___ Yes ___ No

How many job openings were in this career last year in the area you want to live in? _____

How many years/months of education is required after high school? _____

What college major or certificate will it require?

With whom can you talk to gain more information?

Where can you get this degree/certificate?

Other information: _____

FINAL REFLECTION

What are your next steps?

What are your goals?

CAREER & TECHNICAL EDUCATION
AGRICULTURE



The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, welder, and machinist.

CAREERS

SALARIES*

Veterinarians
\$113,722

Zoologists / Wildlife
Biologists
\$77,331

Welders
\$50,560

OPPORTUNITIES

Farm and Ranch Loan Officers

Agricultural Analyst

Biology Technician

Welding Technology

QUALIFICATIONS

4-Year Degree

Advanced Degree

Associates Degree

Technical / Trade Certificate

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.com>

AGRICULTURE, FOOD, AND NATURAL RESOURCES

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

| Level | Animal Science | Agricultural Technology & Mechanical Systems | Environmental & Natural Resources | Plant Science |
|--|---|---|--|---|
| 1 | Principles of Agriculture, Food, & Natural Resources | | | |
| 2 | Small Animal (Fall) *Equine Science (Spring) Entrepreneurship I | Ag Mechanics and Metal Technologies | *Wildlife, Fisheries, and Ecology Management | Greenhouse Operation & Production Entrepreneurship I |
| 3 | Livestock Production | *Ag Structures Design & Fabrication Ag Power Systems | Energy and Natural Resource Technology | *Floral Design |
| 4 | *Advanced Animal Science *Veterinary Medical Applications | Ag Equipment Design and Fabrication | | |
| | Practicum in Agriculture, Food, and Natural Resources (Honors) Scientific Research and Design (Honors) Career Preparation | | | |
| *Industry Based Certification (IBC) offered in class at LTHS | | | | |

Full course descriptions and prerequisites can be found in the LTHS Course Catalog (<https://bit.ly/lthscatalog>).

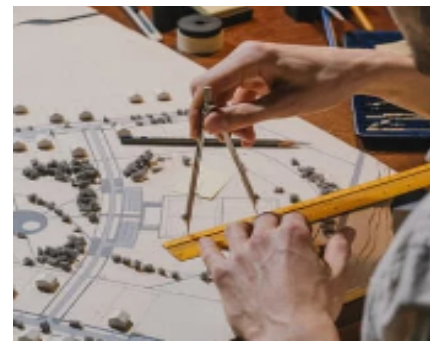


Specific course offerings and availability are subject to change due to interest and enrollment. It is the policy of Lake Travis Independent School District not to discriminate on the basis of race, color, national origin, sex, or handicap in career and technical education programs, services, or activities.

ARCHITECTURE & CONSTRUCTION



The Architectural Design Career Cluster explores the occupations and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study may also include exploration into collecting and interpreting geographic information, researching and preparing maps, and interior design.



CAREERS

SALARIES*

Architect
\$90,901

Architectural / Civil Drafters
\$57,738

Interior Designer
\$59,365

OPPORTUNITIES

Civil Engineering

Architecture

Interior Design

QUALIFICATIONS

4-Year Degree

4-Year - Advanced Degree

Associates - 4-Year Degree

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.co>

ARCHITECTURE & CONSTRUCTION

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

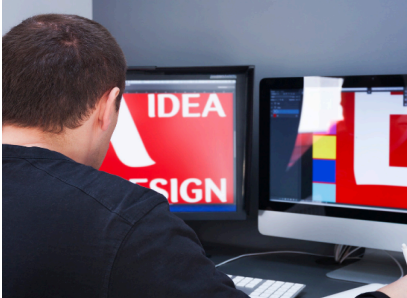
| Level | Architectural Drafting and Design (includes Interior Design) |
|--|---|
| 1 | Principles of Architecture |
| 2 | Architectural Design I Interior Design I |
| 3 | *Architectural Design II Interior Design II Civil Engineering & Architecture (Honors) |
| 4 | Practicum in Architectural Design (Honors) Practicum in Interior Design (Honors) Career Preparation |
| *Industry Based Certification (IBC) offered in class at LTHS | |

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ARTS, A/V TECHNOLOGY, & COMMUNICATIONS



The Arts, Audio/Video Technology and Communications (AAVTC) Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, fashion design, journalism, and entertainment services. Careers in the AAVTC career cluster require a creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication.



CAREERS

SALARIES*

Graphic Designers
\$50,919

Multimedia Artists &
Animators
\$61,157

Audio Video Equipment
Technicians
\$45,101

OPPORTUNITIES

Graphic Designer

Animation, Interactive
Technology, Video Graphics &
Special Effects

Radio Television Technician

Film Production

QUALIFICATIONS

4-Year Degree

Advanced Degree

Associates Degree

4-Year Degree

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.com>

ARTS, AUDIO VIDEO TECHNOLOGY, AND COMMUNICATIONS

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

| Level | Graphic Design & Interactive Media | Digital Communications |
|--|---|---|
| 1 | Principles of Arts, A/V Technology, & Communications (Middle School only) *Digital Media (MS and HS) | Principles of Arts, A/V Technology, & Communications (Middle School only) |
| 2 | *Graphic Design and Illustration I Animation I Fashion Design I Commercial Photography I Entrepreneurship I | *Audio Video Production I (MS and HS) Entrepreneurship I |
| 3 | *Graphic Design and Illustration II Animation II Fashion Design II Commercial Photography II | *Audio Video Production II (Television or Broadcast) |
| 4 | Practicum in Graphic Design and Illustration (Honors) Practicum in Animation (Honors) Practicum in Commercial Photography (Honors) Practicum in Fashion Design (Honors) Practicum in Entrepreneurship (Honors) Career Preparation Program of Study | Practicum in Audio Video Production (Honors) Practicum in Entrepreneurship (Honors) Career Preparation Program of Study |
| *Industry Based Certification (IBC) offered in class at LTHS | | |

Full course descriptions and prerequisites can be found in the LTHS Course Catalog (<https://bit.ly/lthscatalog>).

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Business, Marketing, and Finance

The Business, Marketing, and Finance Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. Skills students will learn include: performing financial services, preparing financial statements, creating business plans, managing daily business operations, and creating marketing campaigns.



CAREERS

SALARIES*

Accountant
\$85,857

Operations Manager
\$106,391

Retail Supervisors
\$46,664

OPPORTUNITIES

Marketing

Business Administration

Business / Commerce

Management Science

QUALIFICATIONS

4-Year Degree

4-Year Degree

Associates Degree

Advanced Degree

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.com>

BUSINESS, MARKETING, AND FINANCE

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

| Level | Accounting & Financial Services | Business Management | Entrepreneurship | Marketing & Sales |
|--|--|--|--|--|
| 1 | Principles Of Bus,Mkt,Finance Money Matters Business Info Management | Principles Of Bus,Mkt,Finance Business Info Management | Principles Of Bus,Mkt,Finance Business Info Management | Principles Of Bus,Mkt,Finance Digital Media |
| 2 | *Accounting I Financial Math Entrepreneurship I | Business Law Virtual Business Entrepreneurship I | Entrepreneurship I | Entrepreneurship I Marketing Sports Ent Mkt I Virtual Business |
| 3 | Accounting II | *Business Management Global Business | *Entrepreneurship II | *Social Media Mrkting Advertising Retail Management Sports Ent Mkt II |
| 4 | Securities and Investments Practicum in Business Management (Honors) | Statistics and Business Decision Making Practicum in Business Management (Honors) | Statistics and Business Decision Making Practicum in Business Management (Honors) | Statistics and Business Decision Making Advanced Marketing Practicum in Marketing (Honors) |
| | Practicum in Entrepreneurship (Honors) | | | |
| | Career Preparation Program of Study | | | |
| *Industry Based Certification (IBC) offered in class at LTHS | | | | |

Full course descriptions and prerequisites can be found in the LTHS Course Catalog (<https://bit.ly/lthscatalog>).

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EDUCATION & TRAINING



The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services. All parts of courses are designed to introduce learners to careers related to teaching, instruction. Students are introduced to a wide variety of student groups and their corresponding needs. It familiarizes them with the processes for developing curriculum, coordinating educational content, and coaching groups and individuals.



CAREERS

SALARIES*

| | |
|-------------------------|-----------------|
| Teacher K - 12 | \$59,507 |
| Education Administrator | \$88,718 |
| Education Counselor | \$59,565 |

OPPORTUNITIES

| |
|-------------------------|
| Teacher Aide |
| Teacher |
| Education Administrator |

QUALIFICATIONS

| |
|----------------------------|
| Certification & HS Diploma |
| 4-Year Degree |
| Advanced Degree |

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.com>

EDUCATION AND TRAINING

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

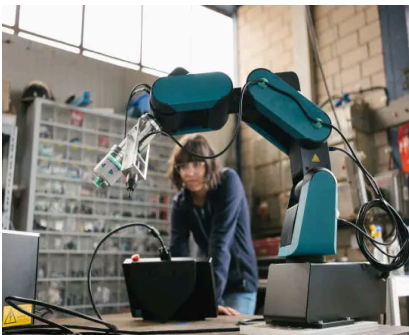
| Level | Teaching and Training |
|--|---|
| 1 | Principles of Education and Training |
| 2 | Child Development |
| 3 | *Instructional Practices (Educational Aide I Certification) |
| 4 | Practicum in Education and Training (Honors) Career Preparation Program of Study |
| *Industry Based Certification (IBC) offered in class at LTHS | |

Full course descriptions and prerequisites can be found in the LTHS Course Catalog (<https://bit.ly/lthscatalog>).

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ENGINEERING



The Engineering Career Cluster focuses on the planning, designing, testing, building, and maintenance of machines, structures, materials, systems, and processes using empirical evidence and science, technology, and math principles.

CAREERS

SALARIES*

- Mechanical Engineer
\$100,170
- Civil Engineers
\$85,920
- Electrical Engineers
\$129,010

OPPORTUNITIES

- Mechanical Engineer
- Electrical Engineer
- Structural Engineer
- Industrial Engineer

QUALIFICATIONS

- Associates / 4-Year Degree
- 4-Year Degree
- 4-Year Degree
- 4-Year Degree

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.com>

ENGINEERING

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

| Level | Engineering Foundations |
|---|--|
| 1 | <p>Principles of Applied Engineering (MS only, Formerly called Engineering I)</p> <p>*Introduction to Engineering Design</p> |
| 2 | <p>Manufacturing Engineering Technology I</p> <p>Robotics I (Honors)</p> |
| 3 | <p>*Engineering Science (Honors) (Formerly called Principles of Engineering)</p> <p>Robotics II (Honors)</p> <p>Digital Electronics (Honors)</p> <p>Civil Engineering and Architecture (Honors)</p> <p>Engineering and Design Development (Honors)</p> |
| 4 | <p>Scientific Research and Design (Honors)</p> <p>Practicum in Engineering (Honors)</p> <p>Career Preparation Program of Study</p> |
| <p>*Industry Based Certification (IBC) offered in class at LTHS</p> | |

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The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others. This career cluster includes a diverse spectrum of occupations, ranging from athletic trainers, physical therapists, hospital technicians, dentists, physicians, and nursing.

CAREERS

SALARIES*

Registered Nurse
\$79,121

Athletic Trainer
\$59,124

Nurse Practitioner
\$117,894

OPPORTUNITIES

Physical Therapist Assistant

Physical Therapist

Registered Nurse / BSN

Nurse Practitioner

QUALIFICATIONS

Associates Degree

Advanced Degree

Associates Degree / 4-Year Degree

Advanced Degree

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.co>

HEALTH SCIENCE

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

| Level | Biomedical Science | Exercise Science, Wellness, and Restoration | Diagnostic & Therapeutic Services |
|--|---|--|--|
| 1 | Principles of Biomedical Science Principles of Health Science | Principles of Exercise and Wellness Principles of Health Science | Principles of Health Science |
| 2 | Human Body Systems Medical Terminology | Kinesiology I Medical Terminology Entrepreneurship I | Medical Terminology |
| 3 | Medical Interventions (Honors) Anatomy and Physiology (Honors) | Kinesiology II Health Science Theory Anatomy and Physiology (Honors) | Health Science Theory Anatomy and Physiology (Honors) |
| 4 | Pathophysiology (Honors) Scientific Research and Design (Honors) | Practicum in Entrepreneurship (Honors) | Pathophysiology (Honors) |
| | *Practicum in Health Science (Honors) (CNA or CCMA Certification) Career Preparation Program of Study | | |
| *Industry Based Certification (IBC) offered in class at LTHS | | | |

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HOSPITALITY AND TOURISM

The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services. Students acquire knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success.



CAREERS

SALARIES*

Advertising/Promotion
Manager

\$112,687

Event Planner

\$50,596

Lodging Manager

\$76,132

OPPORTUNITIES

Tourism and Travel Services
Marketing

Sport Event and Tourism
Management

Hotel/Restaurant
Management

QUALIFICATIONS

Associates Degree

4-Year Degree

4-Year Degree

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.com>

HOSPITALITY AND TOURISM

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

| Level | Lodging and Resort Management | Travel, Tourism, and Attractions |
|-------|--|--|
| 1 | Principles of Hospitality and Tourism Principles of Business, Marketing and Finance | Principles of Hospitality and Tourism |
| 2 | *Travel and Tourism Management | *Travel and Tourism Management Entrepreneurship I Sports & Entertainment Marketing I |
| 3 | *Business Management | Global Business |
| 4 | | Practicum in Entrepreneurship (Honors) |
| | | Practicum in Hospitality Services (Honors) Career Preparation Program of Study |

*Industry Based Certification (IBC) offered in class at LTHS

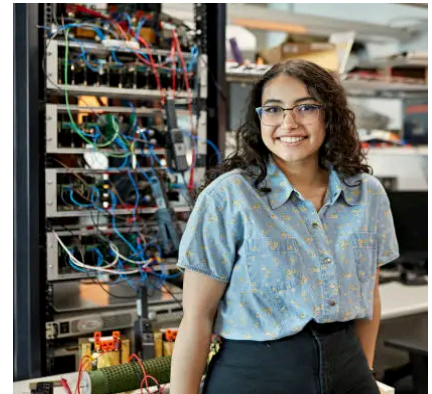
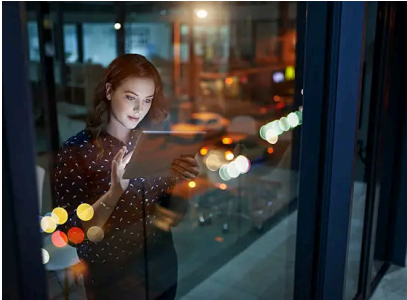
Full course descriptions and prerequisites can be found in the LTHS Course Catalog (<https://bit.ly/lthscatalog>).

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INFORMATION TECHNOLOGY

The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.



CAREERS

SALARIES*

Computer Network Specialist
\$65,250

Computer Programmer
\$80,950

Information Security Analyst
\$101,795

OPPORTUNITIES

Computer Programmer

Computer Network Architect

Information Security Analyst

Database Administrator

QUALIFICATIONS

Associates / 4-Year Degree

2-Year Degree

4-Year Degree

4-Year Degree

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.com>

INFORMATION TECHNOLOGY

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

| Level | Cybersecurity | Programming and Software Development |
|--|---|--|
| 1 | Computer Science Essentials (Principles of IT, MS Only) | |
| | Fundamentals of Computer Science (MS and HS) | |
| | *Foundations of Cybersecurity (Honors) | |
| 2 | Computer Maintenance AP Computer Science Principles | AP Computer Science Principles Entrepreneurship I |
| 3 | *AP Computer Science A | *AP Computer Science A Introduction to C# Programming Applications (Adv Honors) |
| 4 | *Cybersecurity Capstone (Honors) | *Computer Science III (Adv Honors) Scientific Research and Design (Honors) |
| | Practicum in Information Technology (Honors) Career Preparation Program of Study | |
| *Industry Based Certification (IBC) offered in class at LTHS | | |

Full course descriptions and prerequisites can be found in the LTHS Course Catalog (<https://bit.ly/lthscatalog>).

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LAW AND PUBLIC SERVICE



The Law and Public Service Career Cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. Students will examine the roles and responsibilities of attorneys, police, courts, corrections, private security, and fire and emergency services. Students will learn how to appropriately and legally respond to breaches in the law according to statutory rules and regulations as well as investigate how and why the breaches occurred.

CAREERS

SALARIES*

Police Officer
\$66,893

Paralegal
\$56,027

Lawyer
\$150,350

OPPORTUNITIES

Legal Assistant / Paralegal

Corrections

Forensics

Lawyer

QUALIFICATIONS

Associates Degree

Associates Degree

4-Year Degree

Advanced Degree

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.com>

LAW AND PUBLIC SERVICE

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

| Level | Law Enforcement | Legal Studies |
|-------|--|---|
| 1 | Principles of Law, Public Safety, Corrections and Security | |
| 2 | Law Enforcement I Criminal Investigation | Court Systems and Practices Business Law |
| 3 | Counseling and Mental Health Forensic Psychology | Advanced Legal Skills and Professions (Honors) |
| 4 | Forensic Science Practicum in Law, Public Safety Corrections, and Security (Honors) Career Preparation Program of Study | |

Full course descriptions and prerequisites can be found in the LTHS Course Catalog (<https://bit.ly/lthscatalog>).

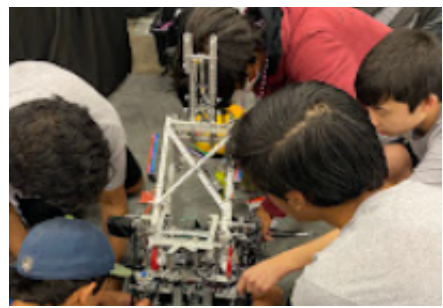
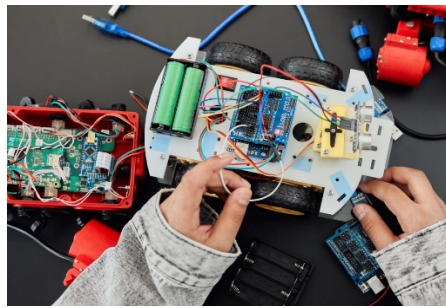
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CAREER & TECHNICAL EDUCATION
MANUFACTURING
(ROBOTICS)



The Manufacturing Career Cluster focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and manufacturing/process engineering. The Advanced Manufacturing and Machinery Mechanics program focuses on the assembly, operation, maintenance, automating processes with robotics, designing and building and robots.



CAREERS

SALARIES*

Industrial Machinery
Mechanic
\$59,784

Industrial Engineer
\$101,115

Mechanical Engineer
\$111,329

OPPORTUNITIES

Quality Technician

Industrial Engineering

Mechanical Engineering

QUALIFICATIONS

Associates Degree

4-Year Degree

4-Year Degree

* Texas Workforce Commission Labor Market and Career Information, 2022, Average Annual Wage, <https://texaslaboranalysis.com>

MANUFACTURING

PROGRAMS OF STUDY CORRELATED TO THE STATE STANDARDS

| Level | Robotics and Automation Technology |
|---|--|
| 1 | <p>Principles of Applied Engineering (MS only, Formerly called Engineering I)</p> <p>Principles of Manufacturing (MS only, formerly called Engineering II)</p> |
| 2 | <p>*Manufacturing Engineering Technology I</p> <p>Robotics I (Honors)</p> |
| 3 | <p>Manufacturing Engineering Technology II</p> <p>Robotics II (Honors)</p> |
| 4 | <p>Practicum in Manufacturing Honors (Honors)</p> <p>Career Preparation Program of Study</p> |
| <p>*Industry Based Certification (IBC) offered in class at LTHS</p> | |

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MIDDLE SCHOOL CTE COURSE OFFERINGS

| CAREER CLUSTER | COURSES | HIGH SCHOOL CREDITS |
|--|---|---|
| Engineering | Principles of Applied Engineering, (formerly called Engineering I - MS only) | Prior to 2023-2024 0.5 2023-2024 & after 1 |
| | Principles of Manufacturing, (formerly called Engineering II - MS Only) | Prior to 2023-2024 0.5 2023-2024 & after 1 |
| Information Technology | Fundamentals of Computer Science | 1 |
| | Computer Science Essentials (MS only) | 1 |
| Arts, Audio Video Technology, and Communications | Principles of Arts, A/V Technology, and Communications (MS only) | 1 |
| | Digital Media | 1 |
| | Audio Video Production I | 1 |

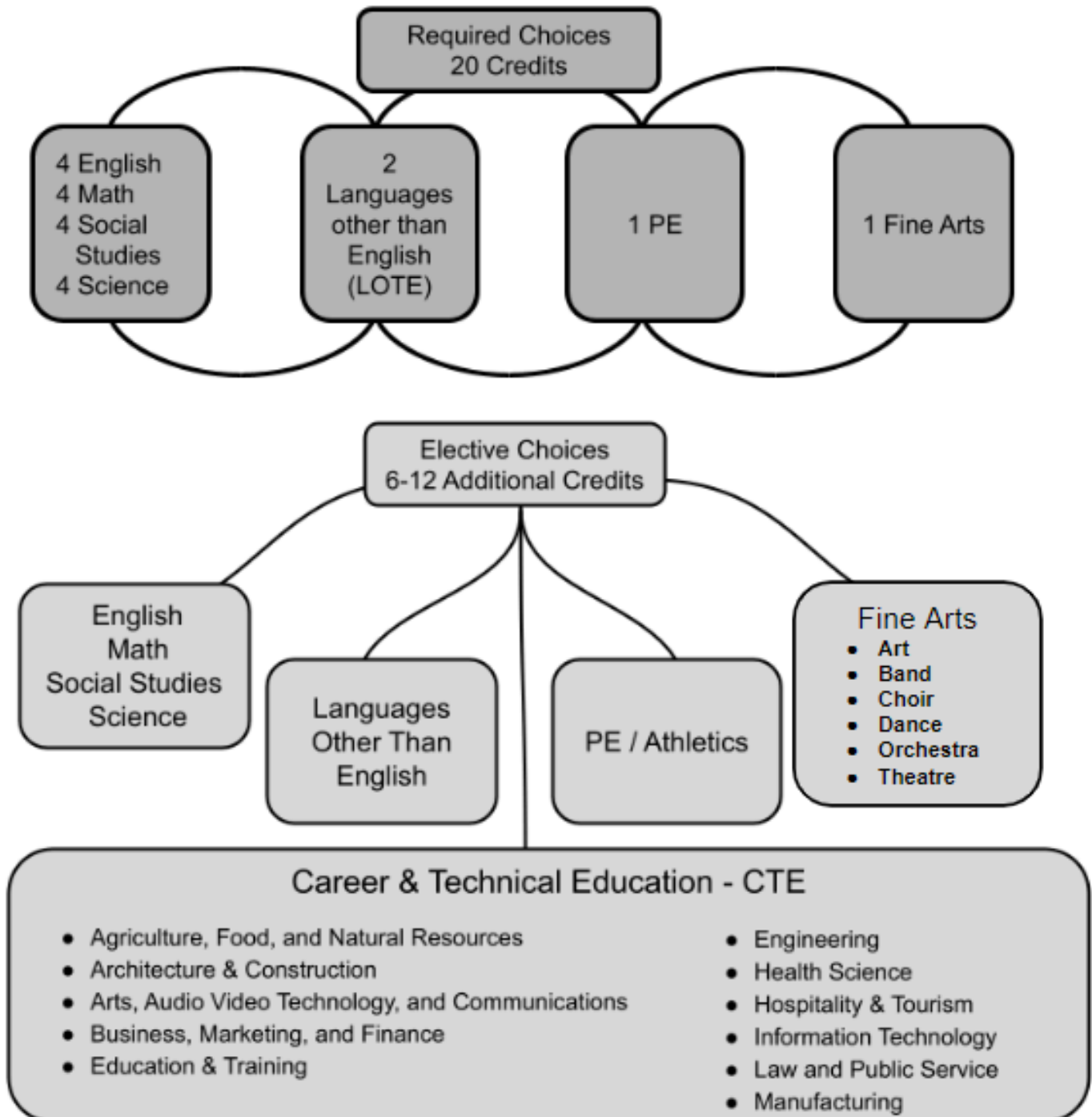
Full course descriptions and prerequisites can be found in the LTISD Middle School Course Catalog (<https://bit.ly/ltisdmscatalog>).

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HIGH SCHOOL COURSE CHOICES



26 Credits Required



LAKE TRAVIS HIGH SCHOOL

PERSONAL GRADUATION PLAN



Student Name: _____ Date: _____

Student ID: _____ Graduation Year: _____

| Graduation Plan Type |
|--|
| _____ Foundation with Endorsement = at least 26 credits |
| _____ Distinguished |
| Endorsement: |
| _____ Business and Industry |
| _____ Public Service |
| _____ STEM |
| _____ Arts and Humanities |
| _____ Multidisciplinary Studies |

| Post High School Plans |
|----------------------------|
| (Number in order of goals) |
| _____ Two Year College |
| _____ Four Year College |
| _____ Technical Training |
| _____ Employment |
| _____ Military |

| STAAR EOC |
|------------------|
| _____ English I |
| _____ English II |
| _____ Algebra I |
| _____ US History |
| _____ Biology |

Review course descriptions and prerequisites in the LTHS Course Catalog (<https://bit.ly/lthscatalog>)

| 8th Grade | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
|-----------|-----------------|---------------|---------------------|----------------------|
| | English I | English II | English III | English IV |
| | Math | Math | Math | Math |
| | Biology | Chemistry | Physics/3rd Science | 4th Science |
| | World Geography | World History | US History | US Gov't / Economics |
| | LOTE | LOTE | Elective | Elective |
| | PE | Fine Art | Elective | Elective |
| | Elective | Elective | Elective | Elective |
| | Elective | Elective | Elective | Elective |

Notes: 26 total credits required. Student must take 4 years of English, Math, Science, and Social Studies,* plus 2 years minimum of the same LOTE (Language Other Than English), 1 credit of PE/Athletics, 1 credit of Fine Arts, and 6 credits of electives. Additional credits can be earned by a student's choice of courses.

*3 social studies are required (WGeo or WHist, USHist, USGov't/Econ); all 4 are recommended in LTISD.

Student Signature: _____ Parent / Guardian Signature: _____

Counselor Signature: _____ Date: _____



LAKE TRAVIS

INDEPENDENT SCHOOL DISTRICT

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Public Notification of Nondiscrimination in Career and Technical Education Programs -

<https://www.ltidschools.org/domain/767>