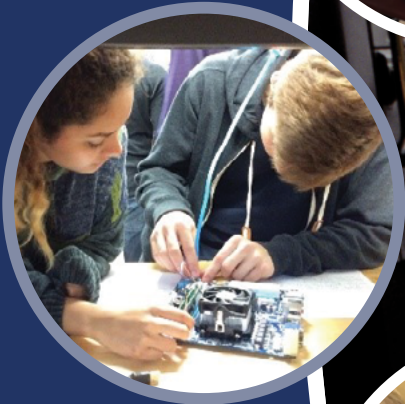


Career & Technical Education

Programs of Study 2021-2022



LAMAR CONSOLIDATED INDEPENDENT SCHOOL DISTRICT

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Rosenberg, TX 77471
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CAREER AND TECHNICAL EDUCATION (CTE) DEPARTMENT

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Educational opportunities are offered by the Lamar Consolidated Independent School District without regard to race, color, religion, national origin, sex or disability.

El Distrito Escolar Consolidado Independiente de Lamar, ofrece oportunidades educativas sin cuenta de raza, religion, nacionalidad, sexo o discapacidades.

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Throughout this guidebook you will find various courses that are either articulated or dual credit courses. Please contact the counselors at your campus for more information.

Agriculture, Food, & Natural Resources

Business & Industry Endorsement

Agriculture, Food & Natural Resources focuses on the essential elements of life—water, air, food, and land. Students that choose this pathway will have opportunities to learn how vital plant and animal science is to society as well as the necessity of protecting natural resources, wilderness, and wildlife. Opportunities are also available to raise and show small and large livestock as well as participate in Future Farmers of America (FFA) and gain valuable leadership experience. Students can also choose to pursue a career in Veterinary Medical Applications and earn entry-level Veterinary Technician certification. In addition to working with animals, students in this cluster can also gain valuable skills in metal fabrication and welding. Industry standard training is taught to help students earn entry-level welding certifications. Floral certification is available under the Plant Science pathway.



Agriculture, Food & Natural Resources

LCISD Agriculture, Food, & Natural Resources courses offered:

- Principles of Agriculture, Food, & Natural Resources
- Agribusiness Management & Marketing

Applied Agricultural Engineering:

- Agricultural Mechanics & Metal Technologies
- Agricultural Structures Design & Fabrication
- Practicum in Agriculture, Food, & Natural Resources: Applied Agricultural Engineering



Animal Science:

- Livestock Production
- Small Animal Management
- Equine Science
- Veterinary Medical Applications
- Advanced Animal Science
- Practicum in Agriculture, Food, & Natural Resources: Veterinary Medical Applications



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Plant Science:

- Floral Design
- Horticultural Science
- Landscape Design and Management
- Turf Grass Management
- Advanced Plant and Soil Science



**Agriculture, Food
& Natural Resources**



Industry Certification Opportunities:

- AWS Welding - D1.1 and D9.1
- Certified Veterinary Assistant – Level 1
- Floral Design Certification - Level One

Career and Technical Student Organization:

- FFA – Future Farmers of America



Please see the [LCISD Course Selection Guide](#) for more detailed course descriptions.

Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Farm and Ranch Manager	\$35,383	\$75,410
Floral Designer	\$18,428	\$27,161
Landscaping & Grounds Keeping Workers	\$20,313	\$24,966
Veterinarian	\$74,161	\$96,684
Veterinary Technician	\$21,412	\$29,247
Welder, Cutters, Solderers, Brazers	\$32,527	\$48,090

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Agriculture, Food and Natural Resources	Principles of Agriculture, Food, & Natural Resources (1 credit)	Agricultural Mechanics & Metal Technologies (1 credit)	Agricultural Structures Design & Fabrication (1 credit)	*Practicum in Agriculture, Food, & Natural Resources: Applied Agricultural Engineering (2 credits)	Principles of Agriculture, Food, & Natural Resources (Jr High - 1 credit) Agribusiness Management & Marketing (1 credit) Advanced Animal Science (1 credit) Welding I (2 credits) Welding II (2 credits)
		Livestock Production (1 credit) or Small Animal Management (.5 credit) and Equine Science (.5 credit)	Veterinary Medical Applications (1 credit)	*Practicum in Agriculture, Food, & Natural Resources: Veterinary Medical Applications (2 or 3 credits)	
		Floral Design (1 credit)	Horticultural Science (1 credit)	Landscape Design and Management (.5 credit) and Turf Grass Management (.5 credit) or Advanced Plant and Soil Science (1 credit)	

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Architecture & Construction

Business & Industry Endorsement

The Architecture and Construction career cluster gives students that like to design and build, the chance to hone their skills with tools and technology or decorate with flooring, paint, furniture, and art. Students interested in construction will learn about the variety of construction trades jobs in the commercial and residential construction industry. These include craft workers such as carpenters, electricians, plumbers, welders, boilermakers, stonemasons, and more. Students will also learn about management and design. Each student completes Occupational Safety & Health Administration (OSHA) Career Safe training and works toward their National Center for Construction Education and Research (NCCER) certifications. They can also participate in Skills USA competitions and gain experience in areas such as designing, planning, managing, building and maintaining the built environment. Dual Credit opportunities through Texas State Technical College (TSTC) are also available for students interested in the area of Heating, Ventilation, Air Conditioning (HVAC) & Refrigeration Technology.

Architecture students who are interested in interior design will learn how to use acquired knowledge from many areas to enhance the purpose, safety, and beauty of interior spaces. They will also gain experience in industry recognized design software. Students can also participate in Family, Career and Community Leaders of America (FCCLA) which offers members the opportunity to expand their leadership potential and develop skills for life -- planning, goal setting, problem solving, decision making, and interpersonal communication -- necessary in the home and workplace.



**Architecture
& Construction**

LCISD Architecture and Construction courses offered:

Carpentry:

- Principles of Construction
- Construction Technology I
- Construction Technology II
- Practicum in Construction Technology

Architectural Design:

- Principles of Architecture
- Interior Design I
- Interior Design II
- Practicum in Interior Design

TSTC Dual Credit - College Courses:

- Heating, Ventilation, Air Conditioning (HVAC) & Refrigeration Technology I
- Heating, Ventilation, Air Conditioning (HVAC) & Refrigeration Technology II



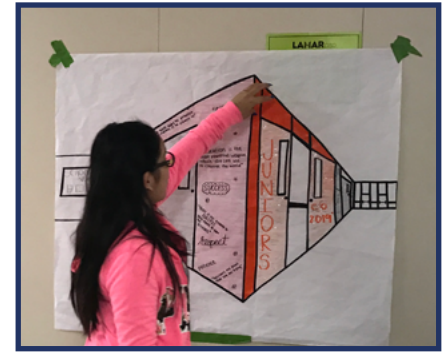
Please see the LCISD Course Selection Guide for more detailed course descriptions.

Industry Certification Opportunities:

- Autodesk Certified User in Revit Architecture
- NCCER Core – National Center for Construction Education & Research
- OSHA Career Safe
- HVAC Technician Certification – TSTC

Career and Technical Student Organizations:

- FCCLA – Family, Career and Community Leaders of America
- Skills USA



Architecture &
Construction

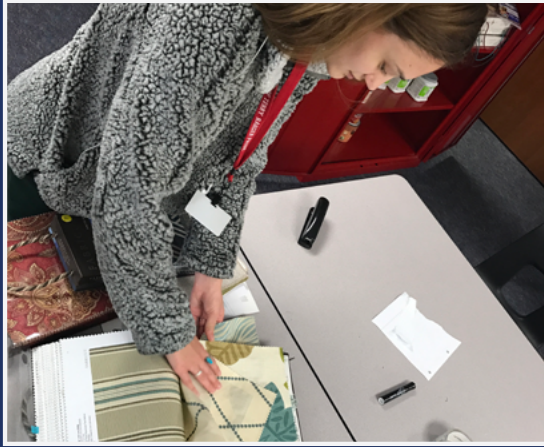
Please see the LCISD Course Selection Guide for more detailed course descriptions.

Program Location

- Construction Technology I and II, Practicum in Construction Technology
Terry HS – District Transportation provided

Dual Credit

- HVAC TSTC - District Transportation available



Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Carpenter	\$31,161	\$42,421
Construction Laborers	\$24,411	\$32,919
Construction Manager	\$66,856	\$107,356
HVAC Installer and Mechanic	\$32,005	\$48,265
Interior Designer	\$37,935	\$58,495
Surveyor	\$37,483	\$66,862

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Architecture & Construction	Principles of Construction (1 credit)	*Construction Technology I (2 credits)	*Construction Technology II (2 credits)	*Practicum in Construction Technology (2 or 3 credits)	Interior Design I (1 credit)
	or Principles of Architecture (1 credit)		Heating, Ventilation, Air Conditioning (HVAC) & Refrigeration Technology I – Dual @ TSTC (1 credit) (3/3 college credits)	Heating, Ventilation, Air Conditioning (HVAC) & Refrigeration Technology II – Dual @ TSTC (2 credits) (3/3 college credits)	Interior Design II (2 credits) *Practicum in Interior Design (2 or 3 credits)

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Arts, Audio/Video Technology, & Communications

Business & Industry Endorsement

The Arts, Audio/Video Technology & Communications cluster gives students the opportunity to learn how to utilize their creativity, while strengthening academics, oral and written communication skills. Students can explore the various avenues that are included in this career cluster. Graphic Design & Illustration spans all aspects of the advertising and visual communication industries and focuses on fundamental elements and principles of visual art and design through a hands-on approach. Audio/Video Production focuses on pre-production, production, and post-production while creating audio and video activities. Students that choose this cluster will find a variety of opportunities to be creative, express themselves, and learn how to use new and exciting technology. Industry standard training is taught to help students earn entry-level Adobe certifications.



**Arts, A/V Technology
& Communications**

LCISD Arts, Audio/Video Technology, & Communications courses offered:

- Principles of Arts, Audio/Video Technology & Communications
- Digital Media
- Digital Design & Media Production

Design and Multimedia:

- Graphic Design & Illustration I
- Graphic Design & Illustration II
- Practicum in Graphic Design & Illustration

Digital Communications:

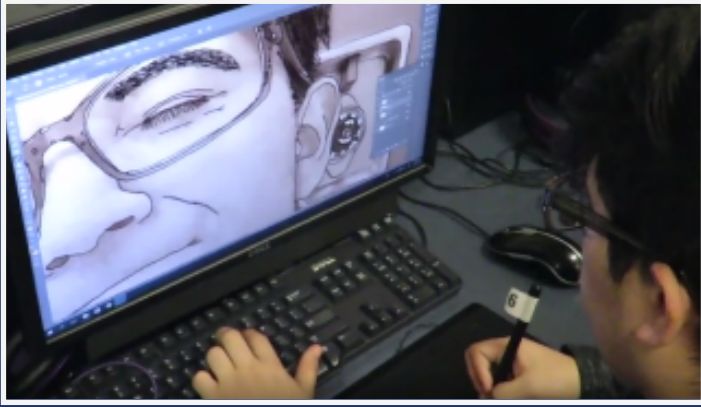
- Audio/Video Production I
- Audio/Video Production II
- Practicum in Audio/Video Production
- Professional Communications

Industry Certification Opportunities:

- Adobe Certified Associate: Illustrator
- Adobe Certified Associate: Photoshop
- Adobe Certified Associate: Premiere Pro



Please see the LCISD Course Selection Guide for more detailed course descriptions.



Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
AV Equipment Technician	\$29,783	\$54,860
Camera Operators	\$28,169	\$63,380
Film and Video Editors	\$18,964	\$58,102
Graphic Designer	\$31,519	\$49,012
Sound Engineering Technician	\$21,719	\$54,148

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>



Arts, A/V Technology & Communications

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Arts, Audio/Video Technology & Communications	Principles of Arts, Audio/ Video Technology & Communications (1 credit)	Graphic Design & Illustration I (1 credit)	*Graphic Design & Illustration II/Lab (2 credits)	*Practicum in Graphic Design & Illustration (2 or 3 credits)	Professional Communications (.5 credit)
		Audio/Video Production I (1 credit)	*Audio/Video Production II/Lab (2 credits)	*Practicum in Audio/ Video Production (2 or 3 credits)	Digital Media (1 credit) Digital Design & Media Production (1 credit)

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Business, Marketing & Finance

Business & Industry Endorsement

The Business Management cluster includes numerous areas of focus for students that are interested in the successful operations of businesses and organizations. This cluster is one of the fastest growing sources of employment and high paying jobs in the United States. Courses offered give students multiple opportunities to learn about careers in business and hone skills that are valuable in business. Students can also extend their learning through Distributed Education Clubs of America (DECA), the career and technical student organization devoted to preparing students for careers in business-oriented fields. Industry standard training is taught to help students earn entry-level Microsoft Office Specialist (MOS) certifications.



LCISD Business Management courses offered:

- Principles of Business, Marketing & Finance (Jr. High)
- Business Information Management I
- Business Information Management II
- Business Law
- Practicum in Business Management
- Business English

Industry Certification Opportunities:

- Microsoft Office Specialist Excel
- Microsoft Office Specialist Word
- Microsoft Office Expert Excel
- Microsoft Office Expert Word

Career and Technical Student Organization:

- DECA – Distributive Education Clubs of America



Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Business Management	Money Matters (1 credit)	Business Information Management I (1 credit)	Business Information Management II (1 credit)	*Practicum in Business Management (2 or 3 credits)	Principles of Business, Marketing & Finance (Jr High - 1 credit) Business English (1 credit) Business Law (1 credit)

*Interest Form required

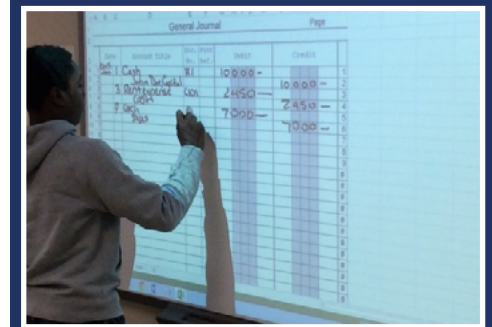
Please see the LCISD Course Selection Guide for more detailed course descriptions.

Finance

Managing an office or making sound money decisions for a company requires a wide range of information. Accounting & Financial Service students learn how to help businesses or individuals stay “on track” financially in this program of study. They will also gain experience working with industry recognized software and have the opportunity to take the Quick Books Certified User certification test.

LCISD Accounting & Financial Service courses offered:

- Money Matters
- Accounting I
- Accounting II
- Accounting II (Math credit)
- Statistics & Business Decision Making
- Securities & Investment



Industry Certification Opportunities:

- Intuit Quick Books Certified User

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade
Finance	Money Matters (1 credit)	Accounting I (1 credit)	Accounting II (1 credit)	Statistics & Business Decision Making (1 credit) Securities & Investment (1 credit)

*Interest Form required

Marketing

Business & Industry Endorsement

Marketing & Sales students learn how to meet the needs of customers in a global economy. Students explore what it takes to be their own boss and what skills are needed to produce, promote, and sell a product or service. Students can also extend their learning through Distributed Education Clubs of America (DECA), the career and technical student organization that prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management in high schools and colleges around the globe.



Please see the LCISD Course Selection Guide for more detailed course descriptions.

LCISD Marketing & Sales courses offered:

- Advertising
- Sports & Entertainment Marketing
- Entrepreneurship
- Advanced Marketing
- Practicum in Marketing

Industry Certification Opportunities:

- Career Safe
- Entrepreneurship and Small Business Certification

Career and Technical Student Organization:

- DECA – Distributive Education Clubs of America



Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Marketing	Advertising (.5 credit) and Sports & Entertainment Marketing (.5 credit)	Entrepreneurship (1 credit)	Advanced Marketing (2 credits) or *Practicum in Marketing (2 or 3 credits)	*Practicum in Marketing (2 or 3 credits)	Principles of Business, Marketing & Finance (Jr High - 1 credit)

Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Business Management		
Database Administrators	\$54,423	\$89,358
Receptionist and Information Clerks	\$20,119	\$27,069
Sales Representative, Services, other	\$28,506	\$65,748
Accounting & Financial Service		
Accountant	\$51,647	\$88,921
Bookkeeping, Accounting & Auditing Clerks	\$27,821	\$43,038
Financial Managers	\$86,236	\$164,390
Loan Officers	\$44,998	\$95,281
Marketing & Sales		
Advertising and Promotions Managers	\$69,610	\$105,406
Merchandise Displayers	\$20,609	\$29,204
Real Estate Sales Agent	\$27,061	\$72,447
Sales Representative, Wholesale & Manufacturing	\$36,110	\$73,772

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Education & Training

Public Service Endorsement

Children are our future. Child care workers, teachers, counselors and librarians help provide a strong foundation by encouraging the intellectual and social development of their students. The people who work in Education & Training instill the knowledge and skills that preschoolers to adult learners needs to succeed. Individuals interested in this program of study learn to provide a positive, safe environment so the knowledge and skills necessary to become responsible adults are learned. Students involved in this career cluster have the opportunity to work as teacher assistants in various areas at partnering LCISD schools and learn effective instructional techniques for all learners from classroom teachers.

Students can now select to be involved with the Early Learning program. They have the opportunity to learn how to teach and care for young children in the classroom and in an early childhood education environment. Teachers and other education professionals shape the future of our society by helping children learn how to make their way through life. Students involved in Early Learning will have the opportunity to work as teacher assistants in various areas at partnering local child care centers and learn effective instructional techniques for young learners from child care teachers. Students will also be able to obtain hours towards their Child Development Associates (CDA) Certification.

Both Education & Training and Early Learning students will participate in CPR and First Aid training to obtain their certification. All students will have the opportunity to participate in Family, Career and Community Leaders of America (FCCLA) or Teachers Association of Future Educators (TAFE) student organization that gives students an extension of their classroom experience and provides further enrichment and competitive opportunities.



**Education
& Training**

LCISD Teaching & Training courses offered:

Education & Training:

- Principles of Education & Training
- Human Growth & Development
- Instructional Practices
- Practicum in Education & Training

Early Learning:

- Principles of Education & Training
- Child Development Associates Foundation
- Child Guidance
- Early Learning - Career Preparation



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Industry Certification Opportunities:

- CPR and First Aid – American Red Cross
- Child Development Associate (CDA) Certification

Career and Technical Student Organization:

- FCCLA – Family, Career and Community Leaders of America
- TAFE – Texas Association of Future Educators



Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Childcare/Daycare Workers	\$20,076	\$22,146
Education Admin., Preschool & Childcare Center	\$32,609	\$48,638
Elementary Education Teacher	\$50,848	\$62,302
Guidance, Educational, Vocational Counselors	\$42,207	\$62,205
Instructional Coordinators	\$51,549	\$72,069
Librarian	\$47,006	\$62,135
School Counselor	\$49,517	\$63,632
Substitute Teacher/Teacher Assistant	\$17,492	\$26,201

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade
Education and Training	Principles of Education & Training (1 credit)	Human Growth & Development (1 credit)	*Instructional Practices (2 credits)	*Practicum in Education & Training (2 credits)
Early Learning	Principles of Education & Training (1 credit)	Child Development Associate Foundation (1 credit)	Child Guidance (2 credits)	*Early Learning – Career Preparation (2 credits)

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Health Science

Public Service Endorsement

The Health Science career cluster is designed to introduce students to a variety of medical professions. Students can learn about careers in nursing, emergency medicine, pharmacy, and several other possible career pathways. They will also have the opportunity to develop a working knowledge of medical terminology, body systems, and experience professional medical environments. Students may choose to participate in Future Health Professionals (HOSA), the student organization which is an extension of their classroom experience and provides further enrichment and competitive opportunities. Several Health Science pathways will prepare students to take industry certifications. Dual Credit opportunities through Wharton Community Junior College (WCJC) are also available.



Health Science

LCISD Healthcare Diagnostics, Therapeutics and Nursing courses offered:

- Principles of Health Science
- Medical Terminology
- Health Science Theory
- Health Science Clinical
- Pharmacology
- Practicum in Health Science: General
- Practicum in Health Science: Certified Nursing Assistant - CNA
- Medical Billing & Coding
- Anatomy & Physiology
- Medical Microbiology



Dual Credit - College Courses:

- Practicum in Health Science: Emergency Medical Technician – EMT - WCJC
- Practicum in Health Science: Advanced Emergency Medical Technician - AEMT - WCJC



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Industry Certification Opportunities:

- CPR and First Aid - American Red Cross and American Heart Association – Basic Life Support
- Certified Billing and Coding Specialist (CBCS)
- Clinical Medical Assistant
- Certified Nurse Aide/Assistant
- Certified Pharmacy Technician (CPhT)
- Emergency Medical Technician (EMT) - WCJC
- National Certified ECG Technician (NCET)
- OSHA Career Safe

Program Location

- CNA - Terry HS – District Transportation provided
- Dual Credit – EMT – WCJC Richmond - Transportation available

Career and Technical Student Organization:

- HOSA - Future Health Professionals
(Health Occupations Students of America)



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Dietitian and Nutritionist	\$44,350	\$58,049
Licensed Practical and Vocational Nurse	\$40,698	\$48,783
Medical Assistants	\$23,913	\$31,374
Medical Records & Health Information Technicians	\$27,708	\$44,502
Nursing Assistants	\$20,794	\$27,632
Pharmacist	\$98,007	\$121,213
Pharmacist Technician	\$26,266	\$34,873
Physician Assistant	\$54,751	\$97,071
Radiologic Technician	\$47,143	\$61,595
Registered Nurse	\$61,664	\$78,800

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>



Please see the **LCISD Course Selection Guide** for more detailed course descriptions.

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Health Science	Principles of Health Science (1 credit)	Medical Terminology (1 credit)	Health Science Theory (1 credit) or **Health Science Clinical (2 credits)	Medical Billing & Coding (1 credit)	Anatomy & Physiology (1 credit) Medical Microbiology (1 credit)
				Pharmacology (1 credit)	
				**Practicum in Health Science: Certified Nursing Assistant (CNA) (2 credits)	
				*Practicum in Health Science: General (2 or 3 credits)	
				Practicum in Health Science: Emergency Medical Technician – EMT Dual @ WCJC (3 credits) (5/1 college credits) and Practicum in Health Science: Advanced Emergency Medical Technician – AEMT Dual @ WCJC (3 credits) (2 college credits)	

*Interest Form required

**Approval process involved



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Hospitality & Tourism

Business & Industry Endorsement

The culinary arts and hospitality program prepares students for careers in this ever-expanding field. Students learn how to prepare and serve food, follow safety and sanitation standards, deal with food-related customer concerns, and supervise others in this service industry. Students can also have the opportunity to practice cost control, customer service, and learn more details of the profession through a practicum experience. ServSafe certifications are available to be earned and Skills USA offers numerous competitive opportunities for students to show off the skills that they learn in the classroom.



**Hospitality
& Tourism**

LCISD Culinary Art courses offered:

- Principles of Hospitality & Tourism (Jr. High)
- Introduction to Culinary Arts
- Culinary Arts
- Advanced Culinary Arts
- Practicum in Culinary Arts
- Food Science

Culinary courses Articulated with College Courses:

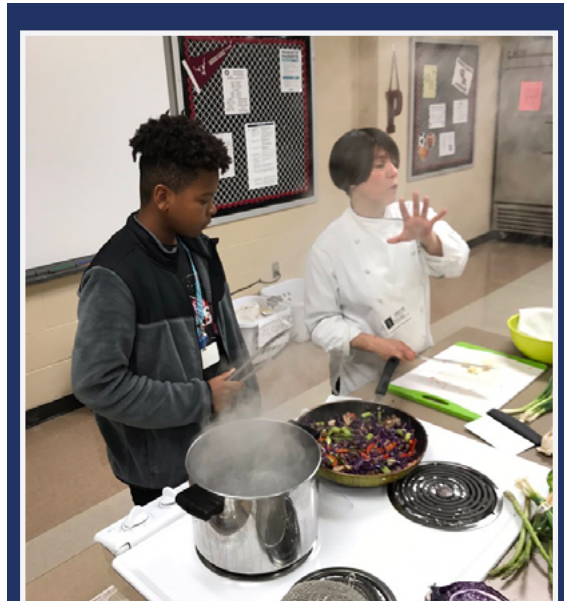
- Culinary Arts – Culinary Institute LeNotre
- Advanced Culinary Arts – Culinary Institute LeNotre
- Practicum in Culinary Arts – Art Institute of Houston and Culinary Institute LeNotre

Industry Certification Opportunities:

- ServSafe Food Handler
- ServSafe Manager

Career and Technical Student Organization:

- Skills USA
- ProStart



Please see the LCISD Course Selection Guide for more detailed course descriptions.



Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Chef and Head Cooks	\$29,988	\$45,267
First-Line Supervisors	\$26,634	\$44,556
Food Science Technician	\$38,928	\$75,835
Food Service Manager	\$38,142	\$62,976
Lodging Managers	\$29,783	\$57,912
Meeting, Convention & Event Planners	\$31,073	\$49,872

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>



Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Culinary Arts	Introduction to Culinary Arts (1 credit)	Culinary Arts (2 credits)	Advanced Culinary Arts (2 credits)	*Practicum in Culinary Arts (2 or 3 credits)	Principles of Hospitality & Tourism (Jr. High - 1 credit) Food Science (1 credit)

*Interest Form required



**Hospitality
& Tourism**

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Human Services

The Human Services career cluster offers students the opportunity to learn about career fields that emphasize direct help and service to others. Students that choose these careers will have the unique responsibility to improve the quality of life for people of all ages. Students will learn skills as they lend a helping hand and make an impact on others through the areas of counseling and mental health, early childhood development, family and community, personal care, and consumer services. These students participate in CPR and First Aid training to obtain their certification. Students also have the opportunity to participate in Family, Career and Community Leaders of America (FCCLA) student organization that gives students an extension of their classroom experience and provides further enrichment and competitive opportunities.



**Human
Services**

LCISD Human Services courses offered:

- Principles of Human Services (Jr. High)
- Professional Communications
- Lifetime Nutrition & Wellness
- Human Growth & Development (under Education & Training)
- Child Guidance
- Practicum in Human Services

Industry Certification Opportunities:

- CPR and First Aid – American Red Cross
- Child Development Associate

Career and Technical Student Organization:

- FCCLA – Family, Career and Community Leaders of America
- Skills USA



Please see the [LCISD Course Selection Guide](#) for more detailed course descriptions.

Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Child, Family, & School Social Workers	\$30,497	\$42,811
Clinical, Counseling & School Psychologist	\$46,038	\$67,160
Counselors	\$49,517	\$63,632
Healthcare Social Workers	\$41,598	\$64,813
Psychologist	\$55,796	\$95,141
Social and Human Service Assistants	\$23,342	\$35,534

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>



Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Family & Community Services	Professional Communications (.5 credit) Lifetime Nutrition & Wellness (.5 credit)	Human Growth & Development (under Education & Training) (1 credit)	Child Guidance (2 credits)	*Practicum in Human Services (2 or 3 credits)	Principles of Human Services (Jr. High – 1 credit)

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Information Technology

Business & Industry Endorsement

The Information Technology and Support Service industry is in constant demand due to the needs of various businesses and industries. Opportunities for IT professionals are everywhere. Students that choose this pathway will learn skills and certifications that will make them become marketable to a variety of businesses. Doors to well-paying jobs and careers will be opened based on what students learn and experience through these courses. Students will prepare for and take A+ industry certifications. Dual Credit opportunities through Texas State Technical College (TSTC) are also available for students interested in the area of Cyber Security.



**Information
Technology**

LCISD Information Technology & Support Service courses offered:

- Principles of Information Technology
- Computer Maintenance Lab
- Computer Technician Practicum

Cyber Security Dual Credit - College Courses:

- Practicum in Information Technology - TSTC (1st time taken)
- Practicum in Information Technology – TSTC (2nd time taken)

Industry Certification Opportunities:

- CompTIA

Program Location

- Computer Maintenance and Computer Technician Practicum:
Terry HS – District Transportation provided
- Dual Credit – TSTC - District Transportation available



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Computer Hardware Engineer	\$78,341	\$114,511
Computer Network Support Specialists	\$45,588	\$74,005
Computer Systems Analyst	\$61,725	\$100,838
Computer User Support Specialist	\$37,907	\$62,536
Information Security Analyst	\$63,797	\$98,250
Web Developer	\$50,645	\$74,929

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>



Information Technology

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade
Information Technology Support & Services	Principles of Information Technology (1 credit)	*Computer Maintenance Lab (2 credits)	*Computer Technician Practicum - (1st time taken) (2 or 3 credits)	*Computer Technician Practicum - (2nd time taken) (2 or 3 credits)
			Cyber Security – Dual with TSTC	Practicum in Information Technology (1st time taken) (2 credits) – Dual @ TSTC (3/3 college credits)

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Law and Public Services

Public Services Endorsement

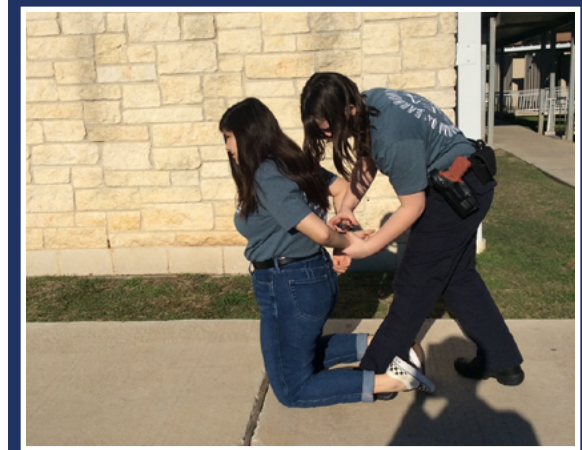
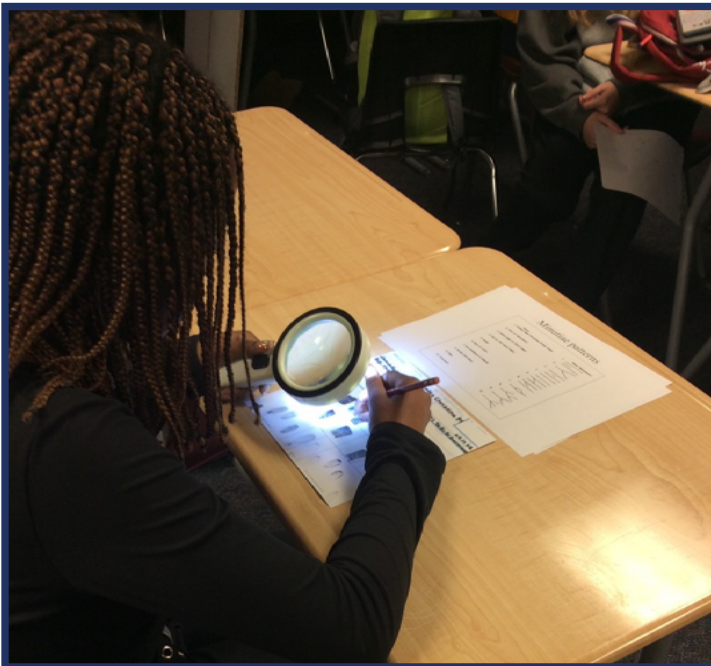
From law enforcement to courtroom action, learning how the law works is your first step. Whether you are interested in working for a police department, the FBI, CIA, DEA, or in CSI, taking criminal justice classes will put you on the right path. Students that choose this pathway will have opportunities to learn about careers that range from protective services, such as homeland and computer security, police officers to rescuers, to lawyers, judges, and legal assistants. Opportunities in law offer rewarding opportunities and unique positions not available in other industries. Industry standard training is taught to help students earn the National Emergency Communication Certification - 911 or Emergency Telecommunicator Certification and Basic Correctional Officer certification. Students can also participate in Skills USA competitions and gain experience in areas such as court practices and traffic stop procedures to gain an even better understanding of law enforcement.



**Law, Public Safety,
Corrections
& Security**

LCISD Law Enforcement courses offered:

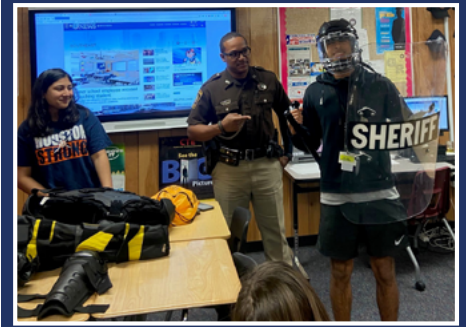
- Law Enforcement I
- Law Enforcement II
- Courts Systems & Practices
- Correctional Services
- Practicum in Law, Public Safety, Correction and Security
- Forensic Science



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Industry Certification Opportunities

- National Emergency Communications Certification - 911
- Basic Correctional Officer Certification
- Career Safe – Cyber Safety
- Emergency Telecommunicator Certification



Career and Technical Student Organizations:

- Skills USA



Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Correctional Officers and Jailers	\$35,697	\$43,337
Forensic Science Technicians	\$48,206	\$65,109
Lawyer	\$78,098	\$173,896
Paralegal and Legal Assistant	\$35,038	\$61,457
Police, Fire and Ambulance Dispatcher	\$30,864	\$41,230
Police and Sheriff's Patrol Officers	\$48,067	\$64,659
Security Guards	\$20,081	\$30,521

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Law Enforcement	Law Enforcement I (1 credit)	Law Enforcement II (1 credit)	Correction Services (1 credit)	*Practicum in Law, Public Safety, Correction and Security (2 or 3 credits)	Courts Systems & Practices (1 credit) Forensic Science (1 credit)

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Manufacturing

Business & Industry Endorsement

Welding is the most common way to permanently join metal parts. Welders join metal parts by melting and fusing metal pieces that form a permanent bond. Because of its strength, welding is used in shipbuilding, automobile manufacturing and repair, building and bridge construction, power plants, refineries and many other manufacturing processes. Students gain valuable skills in metal fabrication and welding. Industry standard training is taught to help students earn entry-level welding certifications. Students have the opportunity to participate in Future Farmers of America (FFA), and gain valuable leadership experience. Dual Credit opportunities through Texas State Technical College (TSTC) are also available for students interested in areas of Welding or Precision Manufacturing.

LCISD Welding courses offered:

- Welding I
- Welding II

Dual Credit Courses:

Manufacturing Technology:

- Welding I – TSTC
- Welding II - TSTC
- Precision Metal Manufacturing I – TSTC
- Precision Metal Manufacturing II – TSTC

Process Technology:

- Introduction to Process Technology - WCJC
- Petrochemical Safety, Health, and Environment - WCJC

Industry Certification Opportunities:

- AWS Welding – D1.1 and D9.1

Career and Technical Student Organization:

- FFA – Future Farmers of America

Program Location

- Dual Credit –TSTC - District Transportation available
- Dual Credit - WCJC – District Transportation available



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Computer Controlled Machine Tool Operator	\$31,159	\$45,159
Machinist	\$31,047	\$47,264
Petroleum Pump Systems Operator	\$46,949	\$69,456
Power Plant Operators	\$43,467	\$69,679
Sheet Metal Worker	\$29,530	\$46,613
Structural Metal Fabricators & Fitters	\$32,485	\$44,098
Welder, Cutters, Solderers, Brazers	\$32,527	\$48,090

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>



Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Manufacturing	Principles of Agriculture, Food, & Natural Resources (1 credit)	Agricultural Mechanics & Metal Technologies (1 credit)	Welding I (2 credits)	Welding II (2 credits)	Principles of Agriculture, Food, & Natural Resources (Jr High - 1 credit)
			Welding I – Dual @ TSTC (2 credits) (4/3 college credits)	Welding II – Dual @ TSTC (2 credits) (4/3 college credits)	
Process Technology			Precision Metal Manufacturing I – Dual @ TSTC (2 credits) (3/3 college credits)	Precision Metal Manufacturing II – Dual @ TSTC (2 credits) (3/3 college credits)	Agricultural Structures Design & Fabrication (1 credit)
			Agricultural Structures Design & Fabrication (1 credit)	Introduction to Process Technology – Dual @ WCJC (1 credit) (3 college credits) and Petrochemical Safety, Health, and Environment – Dual @ WCJC (1 credit) (4 college credits)	Principles of Technology (1 credit)

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

STEM – Science, Technology, Engineering & Mathematics

STEM Endorsement

Engineers apply the principles of mathematics and science to develop solutions to technical problems relating to research and development, manufacturing, sales, construction, inspection, and maintenance. Their work is the connecting factor between scientific inventions and commercial applications designed to meet commercial and consumer needs. Students can participate in Technology Students Association (TSA), to apply what they learn in their Project Lead the Way (PLTW) courses and gives them the chance to pursue academic challenges among students with similar goals and interests.

LCISD Pre-Engineering courses offered:

- Principles of Applied Engineering (Jr. High)
- Introduction to Engineering Design (IED) – PLTW
- PLTW Engineering Specialization Courses:
 - » AeroSpace Engineering
 - » Civil Engineering & Architecture
 - » Computer Integrated Manufacturing
 - » Environmental Sustainability
- Engineering Science – PLTW
- Digital Electronics (DE) – PLTW
- Engineering Design and Problem Solving – PLTW

STEM courses Articulated with College Courses:

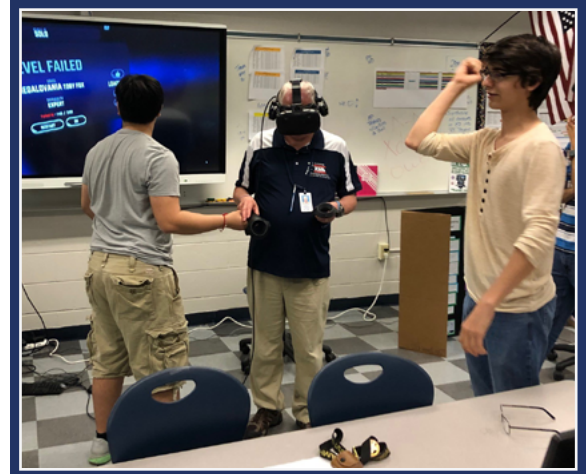
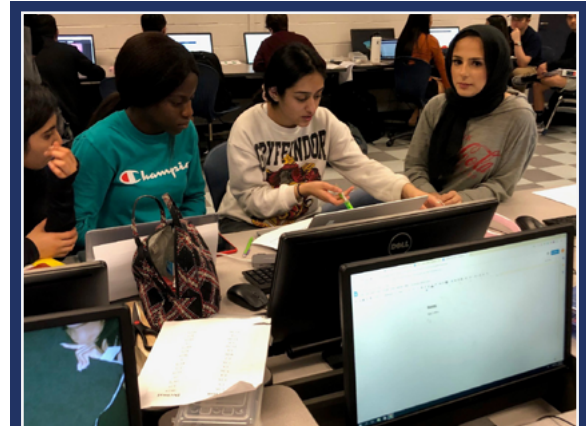
- Introduction to Engineering Design (IED) –
PLTW – Rochester Institute of Technology
- Civil Engineering & Architecture –
PLTW – Rochester Institute of Technology
- Computer Integrated Manufacturing –
PLTW – Rochester Institute of Technology
- Engineering Science –
PLTW – Rochester Institute of Technology
- Digital Electronics (DE) –
PLTW – Rochester Institute of Technology

Career and Technology Student Organization:

- TSA – Technology Student Association



Science, Technology,
Engineering
& Mathematics



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Biochemists and Biophysicists	\$50,792	\$86,770
Civil Engineers	\$65,554	\$115,226
Civil Engineering Technicians	\$33,539	\$63,121
Drafters	\$36,641	\$76,944
Geoscientists	\$76,778	\$154,895
Statisticians	\$49,601	\$78,542

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>



**Science, Technology,
Engineering
& Mathematics**

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade	Other Course Options
Science, Technology, Engineering & Mathematics	Introduction to Engineering Design (IED) – PLTW (1 credit)	Aerospace Engineering (1 credit)	Engineering Science – PLTW (1 credit) or Digital Electronics (DE) – PLTW (1 credit)	Engineering Design and Problem Solving – PLTW (1 credit)	Principles of Applied Engineering (Jr High - 1 credit) Principles of Technology (1 credit)
		Civil Engineering & Architecture (1 credit)			
		Computer Integrated Manufacturing (1 credit)			
		Environmental Sustainability (1 credit)			

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Cyber Security

STEM Endorsement

The Cybersecurity program of study includes the occupations and educational opportunities related to planning, implementing, upgrading, or monitoring security measure for the protection of computer networks and information. This program of study may also include exploration into responding to computer security breaches and virus and administering network security measures. Dual Credit opportunities through Texas State Technical College (TSTC) are also available for students interested in the area of Cyber Security.

LCISD Cyber Security courses offered:

- Principles of Information Technology
- Computer Maintenance
- Practicum in Information Technology – Dual – TSTC

Cyber Security Pathway Dual Credit - College Courses:

- Practicum in Information Technology – Dual - TSTC

Program Location

- **Dual Credit** – TSTC - District Transportation available

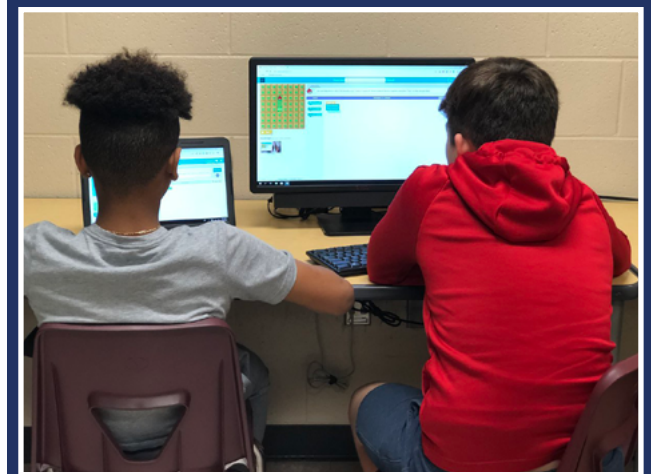
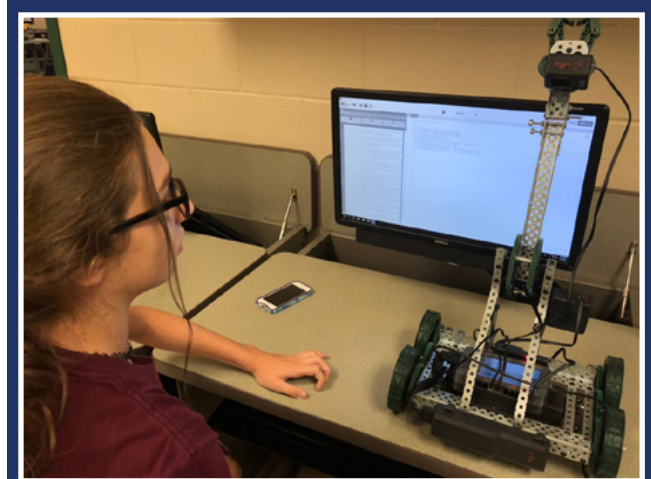
Programming and Software Development

STEM Endorsement

The Programming and Software Development program of study explores the occupations and education opportunities associated with researching, designing, developing, and testing operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computer applications. This program of study may also include exploration into creating, modifying, and testing the codes, forms, and script that allow computer applications to run.

LCISD Programming & Software Development courses offered:

- Computer Science I PAP
- Computer Science Principles AP
- Computer Science A-AP
- Independent Study: Technology Applications I



Please see the LCISD Course Selection Guide for more detailed course descriptions.

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade
Programming and Software Development	Computer Science I PAP (1 credit)	Computer Science Principles AP (1 credit)	Computer Science A-AP (2 credits)	Independent Study: Technology Applications I (1 credit)
Cyber Security – Dual with TSTC	Principles of Information Technology (1 credit)	Computer Maintenance (2 credits)	Practicum in Information Technology - (1st time taken) (2 credits) – Dual @ TSTC (3/3 college credits)	Practicum in Information Technology - (2nd time taken) (2 credits) – Dual @ TSTC (3/3 college credits)



Sample Career Options with Average Annual Pay

	Entry-Level <u>Wage</u>	Average <u>Wage</u>
Cyber Security		
Computer Network Support Specialists	\$64,537	\$82,597
Information Security Analyst	\$63,008	\$91,915
Programming and Software Development		
Computer Network Architect	\$72,464	\$111,633
Software Developer, System Software	\$70,389	\$103,334

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Transportation, Distribution & Logistics

Business & Industry Endorsement

Diesel and automotive technicians must meet customers' needs and new technologies as the sophistication of this industry is constantly changing. Automotive service technicians' and mechanics' responsibilities have evolved from simple mechanical repairs with traditional hand tools to high-level technology related repairs requiring the ability to work with computerized equipment. Students can participate in Skills USA competitions and gain an even better understanding of the automotive field. Industry standard training is taught to help students earn their Safety and Pollution Prevention (S/P2) and work towards the Automotive Service Excellence (ASE) certifications. Dual Credit opportunities through Texas State Technical College (TSTC) are also available for students interested in areas of Automotive Technology or Diesel Equipment Technology.



**Transportation,
Distribution
& Logistics**

LCISD Transportation Technology courses offered:

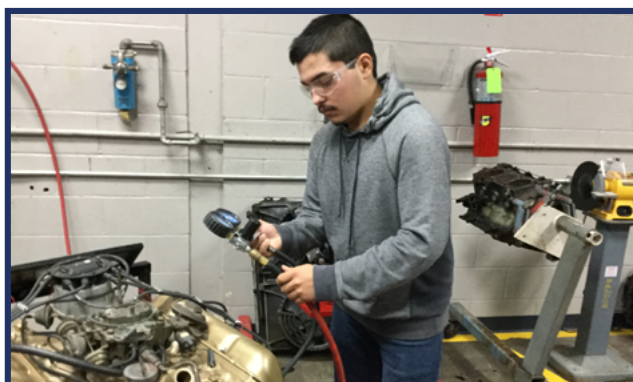
- Automotive Basics
- Automotive Technology I: Maintenance & Light Repair
- Automotive Technology II: Automotive Service
- Practicum in Transportation Systems

Dual Credit - College Courses:

- Automotive Technology I: Maintenance & Light Repair - Dual - TSTC
- Automotive Technology II: Automotive Service - Dual - TSTC
- Diesel Equipment Technology I – Dual - TSTC
- Diesel Equipment Technology II – Dual – TSTC

Industry Certification Opportunities

- S/P2 Safety
- Various ASE certifications



TEXAS CTE
Your journey starts here.

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Career and Technical Student Organizations:

- Skills USA

Program Location

- **Automotive Technology I & II** - High School courses
Lamar CHS – District Transportation provided
- **Dual Credit Diesel** – TSTC - District Transportation available



**Transportation,
Distribution
& Logistics**



Sample Career Options with Average Annual Pay

	Entry-Level Wage	Average Wage
Automotive Service Technician and Mechanics	\$28,693	\$47,259
Dispatcher	\$27,611	\$41,230
Heavy Tractor-Trailer Truck Drivers	\$30,893	\$43,335
Industrial Engineers	\$76,060	\$124,602
Production, Planning and Expediting Clerks	\$33,033	\$53,228

Source: <https://texaswages.com/MSAWages>

<http://www.wrksolutions.com/for-employers/understand-the-local-labor-market/gulf-coast-regional-data>

Program of Study Course Sequence	9th Grade	10th Grade	11th Grade	12th Grade
Transportation	Automotive Basics (1 credit)	*Automotive Technology I: Maintenance & Light Repair (2 credits)	*Automotive Technology II: Automotive Services (2 credits) or *Practicum in Transportation Systems (2 or 3 credits)	*Practicum in Transportation Systems (2 or 3 credits)
		*Automotive Technology I: Maintenance & Light Repair – TSTC Dual @ LCHS (2 credits) (3/3 college credits)	*Automotive Technology II: Automotive Services – TSTC Dual @ LCHS (2 credits) (4/3 college credits) or Diesel Equipment Technology I – Dual @ TSTC (2 credits) (3/3 college credits)	Diesel Equipment Technology I – Dual @ TSTC (2 credits) (3/3 college credits) or Diesel Equipment Technology II – Dual @ TSTC (2 credits) (4/4 college credits)

*Interest Form required

Please see the LCISD Course Selection Guide for more detailed course descriptions.

College Credit Opportunities

Lamar Consolidated ISD CTE offers students college credit opportunities through partnerships with local post-secondary institutions. Credits can be earned in the following two ways:

Articulated Credit

Articulated credit courses are college-level technical courses that allow high school students to qualify for college credit statewide through the Advanced Technical Credit Program (ATC) or through local agreements. Courses are taught by high school teachers. Articulated Credit programs combine the academic courses needed for success in college AND technical courses that begin to prepare students for a career. Students in an Articulated Credit program get an early start in accumulating college credits. They can earn college credit for high school technical courses that have been agreed upon by college and Lamar CISD. Articulated Credit courses can save students time and money once they begin attending the two-year college of their choice.

To learn more about articulated credit courses, please contact your CTE teacher for more information.

Dual Credit

Dual credit courses are college-level academic or technical courses taken by high school students for which they receive high school credit and college credit at the same time. Courses are taught by college-approved instructors. A college or university awards credit for a dual credit course after successful completion of the course.

Lamar CISD CTE offers dual credit opportunities for the following courses through these institutions:

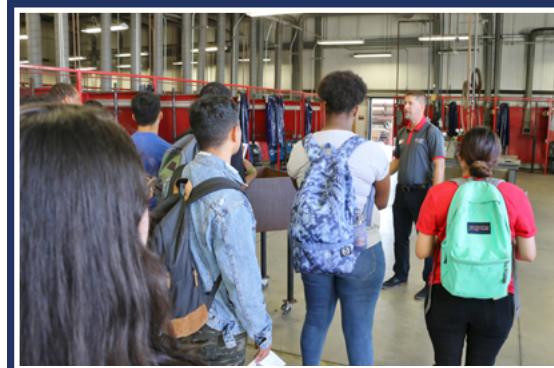
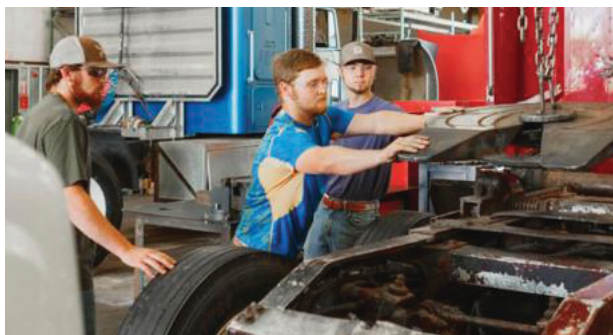
Texas State Technical College (TSTC)

- Automotive Technology I and II
- Cyber Security
- Diesel Technology
- Heating, Ventilation, Air Conditioning and Refrigeration - HVAC
- Precision Machining Technology
- Welding Technology

Wharton County Junior College (WCJC)

- Emergency Medical Technician (EMT)
- Process Technology

Please contact your campus counselor for more information about these college credit opportunities.



Throughout this guidebook you will find various courses that are either Articulated or Dual Credit courses. Please contact the counselors at your campus for more information.

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Career and Technical Education (CTE) Junior High Courses

Gateway to Career and Technical Education (CTE) - 7th or 8th

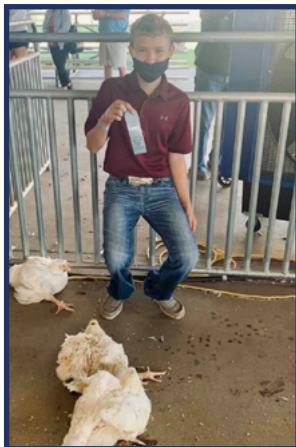
Explore key concepts in each CTE Career Cluster along with learning leadership and computer skills, career/workplace etiquette, and career development.

Principles of Agriculture, Food & Natural Resources – 8th

Discover how plant and animal science are a vital part of all of our lives. Research which laws, regulations, and policies are in place to bring food safely from the field to your table. Learn leadership, record-keeping skills and have the opportunity to raise an animal as a FFA member.

Principles of Applied Engineering – 8th

Learn how to program a robot, design your own home, or create special effects for a movie. Learn by using cutting-edge equipment/technology, cooperative hands-on activities and gain the skills necessary to be successful in the Engineering/Technology career path.



Principles of Business, Marketing & Finance – 8th

Learn how to develop your own company name, logo, and a variety of creative documents that you will need to successfully market and promote your business while tracking your profits all the way to the bank.

Principles of Hospitality & Tourism – 8th

Hospitality and Tourism is the world's largest industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, resorts, restaurant and food/beverage services. The course also includes personal success, time management, leadership, communication skills, customer service and technology use.

Principles of Human Services – 8th

Discover how nutrition and dietary practices can assist in personal development. Help create a family's budget, as well as plan recreational and outreach community programs for children, young adults, families and the elderly.

Please see the LCISD Course Selection Guide for more detailed course descriptions.

Career and Technical Student Organizations

Career and Technical Student Organizations (CTSOs) can play an important role in every CTE student's experience. CTSOs develop character, leadership, technical, and teamwork skills and are a natural extension of the classroom. Additionally, students involved in student organizations have the opportunity to participate in competitions locally and beyond.

Lamar CISD actively sponsors the following student organizations:



DECA

DECA prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management in high schools and colleges around the globe.



Future Farmers of America (FFA)

Making a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agriculture education.



Future Health Professionals (HOSA)

The mission of HOSA is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill and leadership development of all health science education students, therefore, helping the student meet the needs of the health care community.



Family, Career and Community Leaders of America (FCCLA)

FCCLA's mission is to promote personal growth and leadership development through Family and Consumer Sciences education. Focusing on the multiple roles of family member, wage earner and community leader, members develop skills for life through: character development, creative and critical thinking, interpersonal communication, practical knowledge, and career preparation.



Skills USA

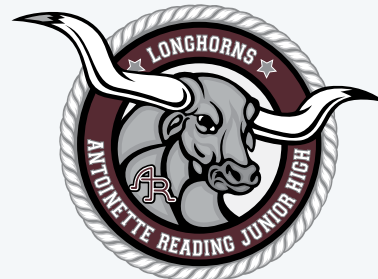
SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps each student excel.



Technology Student Association (TSA)

The Technology Student Association fosters personal growth, leadership, and opportunities in technology, innovation, design, and engineering. Members apply and integrate science, technology, engineering and mathematics concepts through co-curricular activities, competitive events and related programs.

Lamar CISD offers CTE courses and programs at each junior and high school



Randle
High School

Wright
Junior High