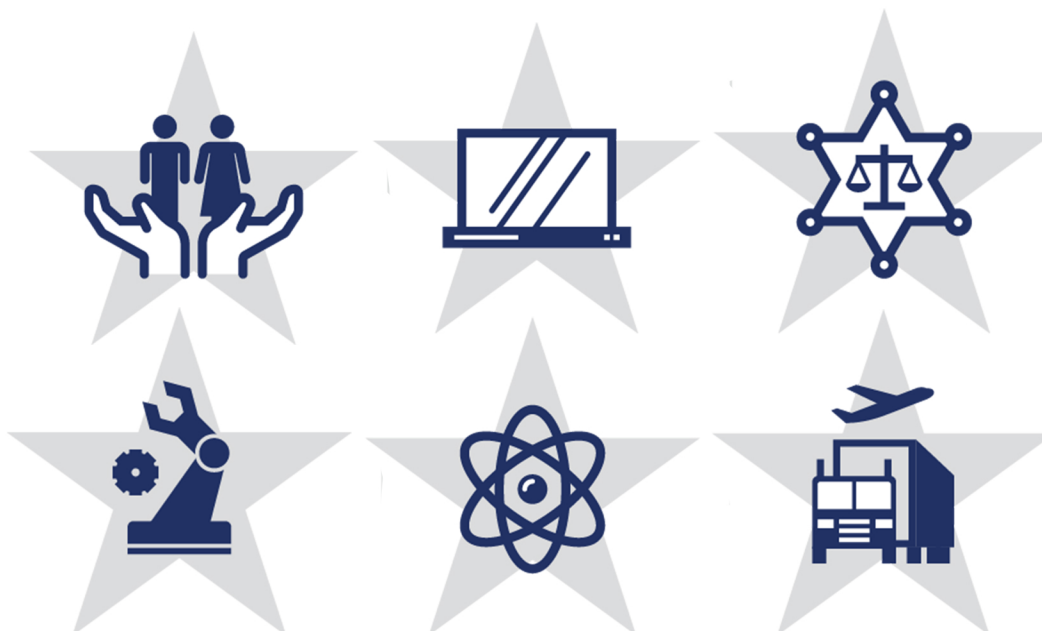




## CTE Programs of Study Frameworks



### Non-Discrimination Policy

It is the policy of Hurst-Euless-Bedford ISD not to discriminate on the basis of race, color, national origin, sex or handicap, in its career and technology (vocational) programs, services or activities and provide equal access to the Boy Scouts and other designated youth programs as required by Title VI of the civil rights act of 1964, as amended; Title IX of the Education Amendments of 1972; and section 504 of the Rehabilitation Act of 1973, as amended. Hurst-Euless-Bedford ISD will take steps to assure that lack of English language skills not be a barrier to admission and participation in all educational and career and technology (vocational) programs. Admission to these programs is based on interest and aptitude, age appropriateness and class space availability.

# CTE Programs of Study Frameworks



**Career & Technical  
Education**

Hurst - Euless - Bedford  
Independent School District



## Architecture and Construction

- Architectural Design



## Arts, Audio/Video Technology, and Communications

- Digital Communications
- Graphic Design and Multimedia Arts



## Business, Marketing, and Finance

- Accounting and Financial Services
- Business Management
- Entrepreneurship
- Marketing and Sales



## Education and Training

- Early Learning
- Teaching and Training



## Health Science

- Healthcare Diagnostics
- Healthcare Therapeutic
- Medical Therapy
- Nursing Science



## Hospitality and Tourism

- Culinary Arts



## Human Services

- Cosmetology and Personal Care Services
- Family and Community Services
- Health and Wellness



## Information Technology

- Information Technology Support and Services
- Networking Systems
- Web Development



## Law and Public Service

- Emergency Services
- Law Enforcement
- Legal Studies



## Manufacturing

- Advanced Manufacturing and Machinery Mechanics
- Welding



## Science, Technology, Engineering, and Math

- Biomedical Science
- Cybersecurity
- Engineering
- Programming and Software Development
- Renewable Energy



## Transportation, Distribution, and Logistics

- Automotive
- Drone (Unmanned Flight)

### Non-Discrimination Policy

It is the policy of Hurst-Euless-Bedford ISD not to discriminate on the basis of race, color, national origin, sex or handicap, in its career and technology (vocational) programs, services or activities and provide equal access to the Boy Scouts and other designated youth programs as required by Title VI of the civil rights act of 1964, as amended: Title IX of the Education Amendments of 1972: and section 504 of the Rehabilitation Act of 1973, as amended. Hurst-Euless-Bedford ISD will take steps to assure that lack of English language skills not be a barrier to admission and participation in all educational and career and technology (vocational) programs. Admission to these programs is based on interest and aptitude, age appropriateness and class space availability.

# HEB ISD Programs of Study Career Clusters

Click on the link below to view the Programs of Study Frameworks

	<a href="#"><u>Architecture and Construction Career Cluster</u></a> .....	2
	<a href="#"><u>Arts, Audio/Video Technology, and Communications Career Cluster</u></a> .....	5
	<a href="#"><u>Business, Marketing, and Finance Career Cluster</u></a> .....	10
	<a href="#"><u>Education and Training Career Cluster</u></a> .....	19
	<a href="#"><u>Health Science Career Cluster</u></a> .....	24
	<a href="#"><u>Hospitality and Tourism Career Cluster</u></a> .....	33
	<a href="#"><u>Human Services Career Cluster</u></a> .....	36
	<a href="#"><u>Information Technology Career Cluster</u></a> .....	43
	<a href="#"><u>Law and Public Service Career Cluster</u></a> .....	50
	<a href="#"><u>Manufacturing Career Cluster</u></a> .....	57
	<a href="#"><u>Science, Technology, Engineering, and Mathematics Career Cluster</u></a> .....	62
	<a href="#"><u>Transportation, Distribution, and Logistics Career Cluster</u></a> .....	74

## ARCHITECTURAL DESIGN



Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **completer** status for federal & state accountability reporting.





# Architecture and Construction Career Cluster

The Architecture and Construction Career Cluster focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management.

## Architectural Design Statewide Program of Study



The Architectural Design program of study 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.

### Secondary Courses for High School Credit

#### Level 1

#### Level 2

- Architectural Design I
- Interior Design I

#### Level 3

- Architectural Design II
- Interior Design II

#### Level 4

- Practicum in Architectural Design

### Postsecondary Opportunities

#### Associates Degrees

- Architecture
- Interior Design
- Civil Engineering, General
- Geographic Information Science and Cartography

#### Bachelor's Degrees

- Architecture
- Interior Design
- Civil Engineering, General
- Geographic Information Science and Cartography

#### Master's, Doctoral, and Professional Degrees

- Architecture
- Interior Architecture
- Civil Engineering, General
- Geographic Information Science and Cartography

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"><li>• Shadow an architect, interior designer or civil engineer</li><li>• Participate in SkillsUSA</li></ul>	<ul style="list-style-type: none"><li>• Intern at an architectural firm</li></ul>

### Industry-Based Certifications

- Autodesk Associate (Certified User) 3ds MAX
- Autodesk Associate (Certified User) AutoCAD
- Autodesk Associate (Certified User) Fusion 360
- Autodesk Associate (Certified User) Revit Architecture
- Autodesk Associate (Certified User) Revit for Electrical
- Autodesk Associate (Certified User) Revit for Structural Design Autodesk Certified Professional Fusion 360
- Autodesk Certified Professional in AutoCAD for Design and Drafting
- Autodesk Certified Professional in Civil 3D for Infrastructure Design
- Autodesk Certified Professional in Revit for Architectural Design
- Autodesk Certified Professional in Revit for Electrical Design
- Autodesk Certified Professional in Revit for Structural Design
- LEED Green Associate

- Certified SOLIDWORKS Associate\*
- Mastercam Associate Certification\*

\*IBC sunseting 8/31/24

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Architects	\$77,043	808	16%
Geographic Information Analysts and Surveyors	\$58,926	162	27%
Architectural/ Civil Drafters	\$50,170	1,068	9%
Construction Managers	\$87,402	2,401	14%

Successful completion of the Architectural Design program of study will fulfill requirements of the Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised – August 2022



# Architectural Design Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Architectural Design I	13004600 (1 credit)	Algebra I and English I	None
Interior Design I	13004300 (1 credit)	Algebra I and English I	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Architectural Design II	13004700 (2 credits)	Architectural Design I and Geometry	None
Interior Design II	13004400 (2 credits)	English II, Geometry, and Interior Design I	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Architectural Design	13004800 (2 credits) 13004805 (3 credits)	Architectural Design II	None

FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**



DIGITAL  
COMMUNICATIONS

GRAPHIC  
DESIGN AND  
MULTIMEDIA  
ARTS

Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **completer** status for federal & state accountability reporting.



# Arts, Audio/Video Technology, and Communications Career Cluster

The Arts, A/V 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, 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.

## Digital Communications Statewide Program of Study



The Digital Communications program of study explores the occupations and educational opportunities associated with the production of audio and visual media formats for various purposes, such as TV broadcasts, advertising, video production, or motion pictures. This program of study may also include exploration into operating machines and equipment to record sound and images, such as microphones, sound speakers, video screens, projectors, video monitors, sound and mixing boards, and related electronic equipment.

### Secondary Courses for High School Credit

#### Level 1

- Professional Communications

#### Level 2

- Audio/Video Production I

#### Level 3

- Audio/Video Production II/Lab

#### Level 4

- Practicum in Audio/Video Production

### Postsecondary Opportunities

#### Associates Degrees

- Recording Arts Technology/Technician
- Cinematography and Film/Video Production
- Radio and Television Broadcasting Technology/Technician
- Music Technology

#### Bachelor's Degrees

- Recording Arts Technology/Technician
- Cinematography and Film/Video Production
- Radio and Television
- Agricultural Communication/Journalism

#### Master's, Doctoral, and Professional Degrees

- Communications Technology/Technician
- Cinematography and Film/Video Production
- Radio and Television
- Agricultural Communication/Journalism

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Shadow a production team
- Participate in SkillsUSA or TSA

#### Work-Based Learning Activities

- Intern at a local television station or video production company
- Work with a local company on a project

### Industry-Based Certifications

- Adobe Certified Professional in Print and Digital Media Publication Using Adobe InDesign
- Adobe Certified Professional in Print and Digital Media Publication Using Adobe InDesign
- Adobe Certified Professional in Visual Design
- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Adobe Certified Professional in Digital Video Using Adobe Premiere Pro
- Audio-Visual Communications - Job Ready
- Broadcasting and Journalism
- Digital Video Production Foundations



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Sound Engineering Technicians	\$39,562	79	27%
Camera Operators, Television, Video, and Motion Picture	\$50,024	129	9%
Audio and Video Equipment Technicians	\$40,581	757	29%
Film and Video Editors	\$47,382	118	23%

Successful completion of the Digital Communications program of study will fulfill requirements of the Business and Industry endorsement. Revised – October 2022



# Digital Communications Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Professional Communications	13009900 (.5 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Audio/Video Production I	13008500 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES (CREQ)
Audio/Video Production II/Lab	13008610 (2 credits)	Audio/Video Production I	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Audio/Video Production	13008700 (2 credits) 13008705 (3 credits)	Audio/Video Production II/Lab	None

FOR ADDITIONAL INFORMATION ON THE ARTS, AUDIO/VIDEO TECHNOLOGY, AND COMMUNICATIONS CAREER CLUSTER, PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euless-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)

# Arts, Audio/Video Technology, and Communications Career Cluster

The Arts, A/V 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, 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.

## Graphic Design & Multimedia Arts Statewide Program of Study



The Graphic Design and Multimedia Arts program of study explores the occupations and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. This program of study may also include exploration into designing clothing and accessories, and creating special effects, animation, or other visual images using film, video, computers, or other electronic tools and media, for use in computer games, movies, music videos, and commercials.

### Secondary Courses for High School Credit

#### Level 1

- Video Game Design
- Digital Media

#### Level 2

- Graphic Design and Illustration I
- Animation I
- Video Game Programming
- Commercial Photography I

#### Level 3

- Graphic Design and Illustration II/Lab
- Animation II/Lab
- Advanced Video Game Programming
- Commercial Photography II

#### Level 4

- Practicum in Graphic Design and Illustration
- Practicum in Animation
- Practicum in Commercial Photography

### Postsecondary Opportunities

#### Associates Degrees

- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Game and Interactive Media Design

#### Bachelor's Degrees

- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Game and Interactive Media Design

#### Master's, Doctoral, and Professional Degrees

- Animation, Interactive Technology, Video Graphics and Special Effects
- Graphic Design
- Intermedia/Multimedia

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join a website development or coding club
- Participate in SkillsUSA or TSA

#### Work-Based Learning Activities

- Intern with a multimedia or animation studio
- Obtain a certificate or certification in graphic design

### Industry-Based Certifications

- Adobe Certified Professional in Digital Video Using Adobe Premiere Pro
- Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator
- Adobe Certified Professional in Print and Digital Media Publication Using Adobe InDesign
- Adobe Certified Professional in Visual Design
- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Adobe Certified Professional in Visual Effects and Motion Graphics Using Adobe After Effects
- Audio-Visual Communications - Job Ready
- Autodesk Associate (Certified User) 3ds MAX
- Certified Professional Photographer
- Certified Professional Programmer (Unity)
- Graphic Production Technology - Job Ready

- Adobe Certified Professional Animate\*

\*IBC Sunsetting 8/31/24

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Graphic Designers	\$44,824	1,433	15%
Multimedia Artists and Animators	\$67,392	186	21%

Successful completion of the Graphic Design & Multimedia Arts program of study will fulfill requirements of the Business and Industry endorsement. Revised – October 2022



# Graphic Design & Multimedia Arts

## Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Video Game Design	13009970 (1 credit)	None	None
Digital Media	13027800 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Graphic Design and Illustration I	13008800 (1 credit)	None	None
Animation I	13008300 (1 credit)	None	None
Video Game Programming	N1300994 (1 credit)	REC PREQ: Video Game Design	None
Commercial Photography I	13009100 (1 credit)	None	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Graphic Design and Illustration II/Lab	13008910 (2 credits)	Graphic Design and Illustration I	None
Animation II/Lab	13008410 (2 credits)	Animation I	None
Advanced Video Game Programming	N1300995 (1 credit)	REC PREQ: Video Game Programming	None
Commercial Photography II	13009200 (1 credit)	REC PREQ: Commercial Photography I	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ)	COREQUISITES (CREQ)
Practicum in Graphic Design and Illustration	13009000 (2 credits) 13009005 (3 credits)	Graphic Design and Illustration II/Lab	None
Practicum in Animation	13008450 (2 credits) 13008455 (3 credits)	Animation II/Lab	None
Practicum in Commercial Photography	13009250 (2 credits) 13009255 (3 credits)	Commercial Photography II	None

FOR ADDITIONAL INFORMATION ON THE ARTS, AUDIO/VIDEO TECHNOLOGY, AND COMMUNICATIONS CAREER CLUSTER, PLEASE CONTACT: HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461. Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)



**ACCOUNTING  
AND FINANCIAL  
SERVICES**

**BUSINESS  
MANAGEMENT**

**ENTREPRENEURSHIP**

**MARKETING  
AND SALES**

Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **complete** status for federal & state accountability reporting.

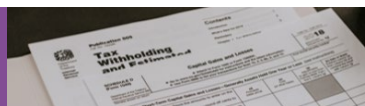




# Business, Marketing, and Finance Career Cluster

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.

## Accounting and Financial Services Statewide Program of Study



The Accounting and Financial Services program of study teaches CTE learners how to examine, analyze, and interpret financial records. Through this program of study, students will learn the skills necessary to perform financial services, prepare financial statements, interpret accounting records, give advice, or audit and evaluate statements prepared by others. This program of study will also introduce students to mathematical modeling tools.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Business, Marketing, and Finance
- Business Information Management I

#### Level 2

- Accounting I

#### Level 3

- Accounting II

#### Level 4

- Practicum in Business Management

### Postsecondary Opportunities

#### Associates Degrees

- Real Estate
- Financial, General
- Financial Planning and Services
- Certified Income Specialist

#### Bachelor's Degrees

- Accounting
- Financial, General
- Financial Planning and Services
- Certified Income Specialist

#### Master's, Doctoral, and Professional Degrees

- Financial Accounting
- Business Administration
- Financial Planning

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in Business Professionals of America, Future Business Leaders of America, or DECA

#### Work-Based Learning Activities

- Intern with a local accounting firm
- Earn Microsoft Office certifications

### Industry-Based Certifications

- Accounting - Basic
- Accounting Foundations
- Certified Insurance Service Representative
- Intuit QuickBooks Certified User
- MB-920: Microsoft Dynamics 365 Fundamentals Finance and Operations Apps
- Microsoft Office Specialist: Microsoft Access Expert (Access and Access 2019) Microsoft Office Specialist: Microsoft Excel Expert (Excel and Excel 2019)
- Volunteer Income Tax Assistance/Tax Counseling Certification: Advanced
- Volunteer Income Tax Assistance/Tax Counseling Certification: Basic
- Volunteer Income Tax Assistance/Tax Counseling Certification: Volunteer for Elderly
- Microsoft Office Specialist-Excel\*

\*IBC sunsetting 8/31/24

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Accountants and Auditors	\$71,469	14,436	22%
Loan Officers	\$68,598	2,419	19%
Personal Financial Advisors	\$86,965	1,861	52%
Administrative service Managers	\$96,138	2,277	21%
Insurance Underwriters	\$66,206	594	14%

Successful completion of the Accounting and Financial Services program of study will fulfill requirements of the Business and Industry endorsement. Revised – October 2022



## Accounting and Financial Services Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	None
Business Information Management I	13011400 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Accounting I	13016600 (1 credit)	None	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Accounting II	13016700 (1 credit)	Accounting I	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Business Management	13012200 (2 credits) 13012205 (3 credits)	REC PREQ: Touch System Data Entry & BIM I or II	None

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

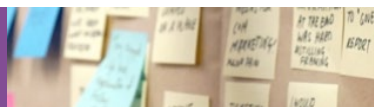
Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

# Business, Marketing, and Finance Career Cluster

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.

## Business Management Statewide Program of Study



The Business Management program of study teaches CTE learners how to plan, direct, and coordinate the administrative services and operations of an organization. Through this program of study, students will learn the skills necessary to formulate policies, manage daily operations, and allocate the use of materials and human resources. This program of study will also introduce students to mathematical modeling tools and organizational evaluation methods.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Business, Marketing, and Finance
- Business Information Management I

#### Level 2

- Virtual Business
- Business Information Management II

#### Level 3

- Global Business

#### Level 4

- Practicum in Business Management

### Postsecondary Opportunities

#### Associates Degrees

- Business Administration
- Business/Commerce
- Public Administration
- Business Management

#### Bachelor's Degrees

- Business Administration
- Business/Commerce
- Public Administration
- Management Science

#### Master's, Doctoral, and Professional Degrees

- Business Administration
- Business Management
- Public Administration
- Management Science

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in Business Professional of America, Future Business Leaders of America, or DECA

#### Work-Based Learning Activities

- Intern with a local business or chamber of commerce

### Industry-Based Certifications

- Administrative Assisting
- Certified Associate in Project Management (CAPM)
- Entrepreneurship and Small Business
- MB-920: Microsoft Dynamics 365 Fundamentals Finance and Operations Apps
- Microsoft Office Specialist 2016 Master
- Microsoft Office Specialist: Microsoft Access Expert (Access and Access 2019)
- Microsoft Office Specialist: Microsoft Excel Expert (Excel and Excel 2019)
- Microsoft Office Specialist: Microsoft Word Expert (Word and Word 2019)
- Project Management Institute (PMI) Project Management Ready

- Microsoft Office Specialist-Excel\*
- Microsoft Office Specialist-Word\*

\*IBC sunseting 8/31/24

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Administrative Service Managers	\$96,138	2,277	21%
Management Analysts	\$87,651	4,706	32%
General and Operations Managers	\$107,640	18,679	20%
Supervisors of Administrative Support Works	\$57,616	14,982	20%

Successful completion of the Business Management program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022



# Business Management Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	None
Business Information Management I	13011400 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Virtual Business	13012000 (.5 credit)	None	None
Business Information Management II	13011500 (1 credit)	Business Information Management I	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Global Business	13011800 (.5 credit)	None	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Business Management	13012200 (2 credits) 13012205 (3 credits)	REC PREQ: Touch System Data Entry & BIM I or II	None

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

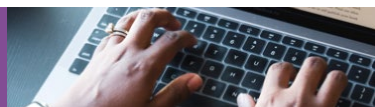
Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

# Business, Marketing, and Finance Career Cluster

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.

## Entrepreneurship Statewide Program of Study



The Entrepreneurship program of study teaches CTE learners how to plan, direct, and coordinate the management and operations of public or private sector organizations. Through this program of study, students will learn the skills necessary to formulate policies, manage daily operations, analyze management structures, and plan for the use of materials and human resources.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Business, Marketing, and Finance
- Business Information Management I

#### Level 2

- Entrepreneurship

#### Level 3

#### Level 4

- Practicum in Business Management
- Practicum in Marketing

### Postsecondary Opportunities

#### Associates Degrees

- Business Administration and Management
- Business/Commerce
- Public Administration
- Business Management

#### Bachelor's Degrees

- Business Administration and Management
- Business/Commerce
- Public Administration
- Management Science

#### Master's, Doctoral, and Professional Degrees

- Business Administration and Management
- Business/Commerce
- Public Administration
- Management Science

### Work-Based Learning and Expanded-Learning Opportunities

#### Exploration Activities

- Participate in Business Professionals of America, Future Leaders of America, or DECA

#### Work-Based Learning Activities

- Intern with a local management consulting firm

### Industry-Based Certifications

- Entrepreneurship and Small Business
- Facebook Digital Marketing Associate Certification



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
General and Operations Managers	\$107,640	18,679	20%
Management Analysts	\$87,651	4,706	32%
Managers, All Others	\$113,110	1,794	26%

Successful completion of the Entrepreneurship program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022



# Entrepreneurship Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	None
Business Information Management I	13011400 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Entrepreneurship	13034400 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Business Management	13012200 (2 credits) 13012205 (3 credits)	REC PREQ: Touch System Data Entry & BIM I or II	None
Practicum in Marketing	13034800 (2 credits) 13034805 (3 credits)	REC PREQ: 1 Course in the Principles of Business, Marketing & Finance Career Cluster	None

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

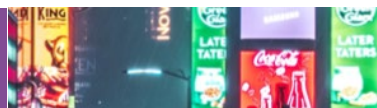
Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

# Business, Marketing, and Finance Career Cluster

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.

## Marketing & Sales Statewide Program of Study



The Marketing and Sales program of study teaches CTE learners how to collect information to determine potential sales of a product or service and/or create a marketing campaign to market or distribute goods and services. Through this program of study, students will learn the skills necessary to understand and apply data on customer demographics, preferences, needs, and buying habits.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Business, Marketing, and Finance

#### Level 2

- Sports and Entertainment Marketing
- Virtual Business

#### Level 3

- Social Media Marketing
- Advertising

#### Level 4

- Practicum in Marketing

### Postsecondary Opportunities

#### Associates Degrees

- Marketing/ Marketing Management, General
- Consumer Merchandising/ Retailing Management
- International Marketing
- Business

#### Bachelor's Degrees

- Marketing/ Marketing Management, General
- Business Administration
- Applied Economics
- Marketing Research

#### Master's, Doctoral, and Professional Degrees

- Marketing
- Business Administration
- Applied Economics
- Advertising

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in Business Professionals of America, Future Business Leaders of America, or DECA

#### Work-Based Learning Activities

- Intern with a local marketing firm
- Shadow a real estate agent
- Operate a school store on campus

### Industry-Based Certifications

- Certified Insurance Service Representative
- Entrepreneurship and Small Business
- Facebook Digital Marketing Associate Certification
- Real Estate Sales Agent License
- Retail Merchandising - Job Ready
- Stukent Social Media Marketing Certification

- Google Analytics Individual Qualification\*  
\*IBC sunseting 8/31/24



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Marketing Research Analysts and Marketing Specialists	\$70,346	4,664	40%
Insurance Sales Agent	\$43,181	5,886	30%
First-Line Supervisors of Retail Sales Workers	\$72,550	2,826	15%
Wholesale and Retail Buyers	\$51,106	1,229	19%

Successful completion of the Marketing and Sales program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022



# Marketing & Sales Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Business, Marketing, and Finance	13011200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Sports and Entertainment Marketing	13034600 (.5 credit)	None	None
Virtual Business	13012000 (.5 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Social Media Marketing	13034650 (.5 credit)	None	None
Advertising	13034200 (.5 credit)	None	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Marketing	13034800 (2 credits) 13034805 (3 credits)	REC PREQ: 1 Course in the Principles of Business, Marketing & Finance Career Cluster	None

FOR ADDITIONAL INFORMATION ON THE BUSINESS, MARKETING, AND FINANCE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**





EARLY  
LEARNING

TEACHING  
AND TRAINING

Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **completer** status for federal & state accountability reporting.



## Education and Training Career Cluster

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 the various careers available within the Education and Training career cluster.

### Early Learning Statewide Program of Study



The Early Learning program of study focuses on early childhood education, which consists of instructing and supporting preschool and early elementary school students in activities that promote social, physical and intellectual growth as well as in basic elements of science, art, music, and literature. This program of study introduces CTE learners to tasks necessary for planning, directing, and coordinating activities for young children.

#### Secondary Courses for High School Credit

##### Level 1

- Principles of Education and Training
- Principles of Human Services

##### Level 2

- Child Development

##### Level 3

##### Level 4

#### Postsecondary Opportunities

##### Associates Degrees

- Early Childhood Education and Teaching
- Multicultural Early Childhood Development
- Kindergarten/Preschool Education and Training
- Psychology/Sociology

##### Bachelor's Degrees

- Early Childhood Education and Teaching
- Multicultural Early Childhood Development
- Early Childhood
- Psychology/Sociology

##### Master's, Doctoral, and Professional Degrees

- Early Childhood Education and Teaching
- Multicultural Early Childhood Development
- Educational, Instructional, and Curriculum Supervision
- Educational Leadership and Administration

#### Work-Based Learning and Expanded Learning Opportunities

##### Exploration Activities

- Participate in the Texas Association of Future Educators or Family, Career, and Community Leaders of America

##### Work-Based Learning Activities

- Teach a community education class
- Volunteer as a teaching assistant

#### Industry-Based Certifications

- Child Development Associate (CDA)
- Early Childhood Education and Care – Advanced
- Early Childhood Education and Care – Basic
- Education Aide I
- Pre-Professional Certification in Early Childhood Education



#### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Kindergarten Teachers, except Special Education	\$53,310	1,848	17%
Preschool Teachers	\$27,851	4,330	17%
Elementary School Teachers	\$54,140	13,121	16%
Education Administrators, Elementary and Secondary School	\$79,830	2407	16%

Successful completion of the Early Learning program of study will fulfill requirements of the Public Service endorsement. Revised – October 2022



## Early Learning Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Education and Training	13014200 (1 credit)	REC PREQ: Human Growth and Development	None
Principles of Human Services	13024200 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Child Development	13024700 (1 credit)	None	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

FOR ADDITIONAL INFORMATION ON THE EDUCATION AND TRAINING CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

## Education and Training Career Cluster

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 the various careers available within the Education and Training career cluster.

### Teaching and Training Statewide Program of Study



The Teaching and Training program of study prepares CTE learners for careers related to teaching, instruction, and creation of instructional and enrichment materials. The program of study introduces CTE learners 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.

#### Secondary Courses for High School Credit

##### Level 1

- Principles of Education and Training
- Principles of Human Services

##### Level 2

- Human Growth and Development
- Child Development

##### Level 3

- Instructional Practices

##### Level 4

- Practicum in Education and Training

#### Postsecondary Opportunities

##### Associates Degrees

- Teacher Education
- Education, General (or specific subject area)
- Special Education
- Health and Physical Education/Fitness

##### Bachelor's Degrees

- Bilingual and Multilingual Education
- Education, General (or specific subject area)
- Special Education
- Health and Physical Education/Fitness

##### Master's, Doctoral, and Professional Degrees

- Instruction and Learning
- Educational Leadership and Administration, General
- Special Education
- Social and Philosophical Foundations of Education

#### Work-Based Learning and Expanded Learning Opportunities

##### Exploration Activities

- Participate in the Texas Association of Future Educators or Family, Career, and Community Leaders of America

##### Work-Based Learning Activities

- Teach a community education class
- Intern as a teaching assistant or tutor
- Serve as a camp counselor

#### Industry-Based Certifications

- Educational Aide I



#### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Adult Basic and Secondary Education and Literacy Teachers and Instructors	\$48,069	862	17%
Middle School Teachers, Except Special and Career/Technical Education	\$54,510	6,407	15%
Career and Technical Education Teachers, Secondary School	\$56,360	719	9%
Special Education Teachers, Secondary School	\$56,720	980	18%

Successful completion of the Teaching and Training program of study will fulfill requirements of the Public Service endorsement. Revised – August 2022



## Teaching and Training Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Education and Training	13014200 (1 credit)	REC PREQ: Human Growth and Development	None
Principles of Human Services	13024200 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Human Growth and Development	13014300 (1 credit)	None	None
Child Development	13024700 (1 credit)	None	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Instructional Practices	13014400 (2 credits)	1 credit from Education and Training Career Cluster	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Education and Training	13014500 (2 credits) 13014505 (3 credits)	Instructional Practices	None

FOR ADDITIONAL INFORMATION ON THE EDUCATION AND TRAINING CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**



HEALTHCARE  
DIAGNOSTICS

HEALTHCARE  
THERAPEUTIC

MEDICAL  
THERAPY

NURSING  
SCIENCE

Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **complete** status for federal & state accountability reporting.



# Health Science Career Cluster

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.

## Healthcare Diagnostics Statewide Program of Study



The Healthcare Diagnostics program of study introduces students to occupations and education opportunities related to performing complex medical laboratory tests for the diagnosis, treatment, and prevention of disease. This program of study may also include exploration into the opportunities associated with blood laboratories as well as radiologic technology and ultrasound technology.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Health Science

#### Level 2

- Medical Terminology

#### Level 3

- Health Science Theory/Health Science Clinical (Clinical Rot/SITE/PCT)
- Health Science Theory (Fire Academy)
- Medical Microbiology

#### Level 4

- Anatomy and Physiology
- Pathophysiology
- Practicum in Health Science (Phlebotomy/Fire Academy)

### Postsecondary Opportunities

#### Associates Degrees

- Nuclear Medical Technology/Technologist
- Magnetic Resonance Imaging (MRI) Technology/Technician

#### Bachelor's Degrees

- Nuclear Medical Technology/Technologist
- Medical Radiologic Technology/Science Radiation Therapist

#### Master's, Doctoral, and Professional Degrees

- Radiologist
- Radiologic Technology/Science Radiographer

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in Health Occupation Students of America

#### Work-Based Learning Activities

- Perform clinical rotations at a community wellness center, hospital, assisted living, nursing home

### Industry-Based Certifications

- Certified Cardiographic Technician
- Certified Clinical Medical Assistant
- Emergency Medical Technician - Basic
- Certified EKG Technician
- ECG Technician
- Limited Medical Radiologic Technologist
- Medical Assistant
- Medical Laboratory Assistant
- Medical Laboratory Technician
- Nationally Registered Certified EKG Technician
- Phlebotomy Technician
- Registered Diagnostic Medical Sonographer - Abdomen\*
- Registered Diagnostic Medical Sonographer - Obstetrics and Gynecology\*
- Registered Technologist - Cardiac-Interventional Radiography\*
- Registered Technologist - Computed Tomography\*
- Registered Technologist - Magnetic Resonance Imaging\*
- Registered Technologist - Mammography\*
- Registered Technologist - Nuclear Medicine Technology\*
- Registered Technologist - Radiography\*
- Registered Technologist - Sonography\*
- Registered Technologist - Vascular Sonography\*
- Registered Technologist - Vascular-Interventional Radiography\*
- Registered Vascular Technology\*

\*IBC sunseting 8/31/24

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Diagnostic Medical Sonographers	\$69,909	495	35%
Phlebotomist	\$30,597	1,442	36%
Nuclear Medicine Technologists	\$75,962	91	13%
Radiologic Technologists	\$55,494	1,196	21%
Magnetic Resonance Imaging Technologists	\$68,661	217	21%

Successful completion of the Healthcare Diagnostics program of study will fulfill requirements of the Public Service or STEM endorsement if the math and science requirements are met. Revised – August 2022



# Healthcare Diagnostics Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Health Science	13020200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Terminology	13020300 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Health Science Theory/Health Science Clinical	13020400 (1 credit) 13020410 (2 credits)	Biology REC PREQ: Principles of Health Science	None
Medical Microbiology	13020700 (1 credit)	Biology and Chemistry	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Anatomy and Physiology	13020600 (1 credit)	Biology and a second science credit	None
Pathophysiology	13020800 (1 credit)	Biology and Chemistry	None
Practicum in Health Science	13020500 (2 credits) 13020505 (3 credits)	Health Science Theory and Biology	None

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)



# Health Science Career Cluster

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.

## Healthcare Therapeutic Statewide Program of Study



The Healthcare Therapeutic program of study introduces students to occupations and educational opportunities related to diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study also includes an introduction to the opportunities associated with providing treatment and counsel to patients as well as rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Health Science

#### Level 2

- Medical Terminology

#### Level 3

- Anatomy and Physiology
- Health Science Theory/Health Science Clinical (Clinical Rot/SITE/PCT)
- Health Science Theory (Fire Academy)
- Medical Microbiology

#### Level 4

- Pathophysiology
- Pharmacology
- Practicum in Health Science (Phlebotomy/Fire Academy)

### Postsecondary Opportunities

#### Associates Degrees

- Dental Hygienist
- Medical/Clinical Assistant

#### Bachelor's Degrees

- Dental Hygienist

#### Master's, Doctoral, and Professional Degrees

- Dentist
- Physician Assistant
- Family and General Practitioners
- Pharmacist

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in SkillsUSA or Health Occupation Students of America

#### Work-Based Learning Activities

- Volunteer at a community wellness center, hospital, assisted living, or nursing home

### Industry-Based Certifications

- Certified Clinical Medical Assistant
- Certified Dental Assistant
- Certified EKG Technician
- Emergency Medical Technician - Basic
- Certified Nurse Aide (CNA)
- Certified Occupational Therapy Assistant
- Certified Patient Care Technician (CPCT)
- ECG Technician
- Medical Assistant
- Medical Laboratory Assistant
- Nationally Registered Certified EKG Technician
- Patient Care Technician
- Pharmacy Technician
- Phlebotomy Technician
- Registered Dental Assistant X-Ray Certification
- Certified Ophthalmic Technician\*
- Certified Surgical Technologist\*
- Licensed Dental Hygienist\*
- Orthopedic Technologist\*

\*IBC sunseting 8/31/24



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Medical Assistants	\$29,598	8,862	30%
Surgical Technologists	\$45,032	1,150	20%
Dental Hygienists	\$73,507	1,353	38%
Physicians and Surgeons	\$213,071	1,151	30%

Successful completion of the Healthcare Therapeutic program of study will fulfill requirements of a Public Service endorsement or STEM endorsement if the math and science requirements are met. Revised – August 2022



# Healthcare Therapeutic Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Health Science	13020200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Terminology	13020300 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Anatomy and Physiology	13020600 (1 credit)	Biology and a second science credit	None
Health Science Theory/ Health Science Clinical	13020400 (1 credit) 13020410 (2 credits)	Biology REC PREQ: Principles of Health Science	None
Medical Microbiology	13020700 (1 credit)	Biology and Chemistry	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Pathophysiology	13020800 (1 credit)	Biology and Chemistry	None
Pharmacology	13020950 (1 credit)	Biology and Chemistry REC PREQ: Principles of Health Science	None
Practicum in Health Science	13020500 (2 credits) 13020505 (3 credits)	Health Science Theory and Biology	None

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department  
<https://www.hebisd.edu/Domain/80>  
<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukefilippis@hebisd.edu](mailto:lukefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)

# Health Science Career Cluster

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.

## Medical Therapy Statewide Program of Study



The Medical Therapy program of study focuses on the study of biology and medicine in order to introduce students to the knowledge and skills necessary to be successful in the healthcare field in occupations such as, Respiratory, Occupational, Physical, or Speech Therapy. CTE learners may also practice patient care and communication.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Health Science

#### Level 2

- Medical Terminology

#### Level 3

- Health Science Theory/Health Science Clinical (Clinical Rot/SITE/PCT)
- Health Science Theory (Fire Academy)

#### Level 4

- Practicum in Health Science (Phlebotomy/Fire Academy)

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in Health Occupation Students of America

#### Work-Based Learning Activities

- Intern at a lab
- Shadow a therapist
- Participate in clinical rotations

### Industry-Based Certifications

- Certified Clinical Medical Assistant
- Certified Occupational Therapy Assistant
- Certified Respiratory Therapist
- Emergency Medical Technician - Basic

- Orthopedic Exercise Specialty Certification\*
- Orthopedic Technologist\*

\*IBC sunseting 8/31/24

### Postsecondary Opportunities

#### Associates Degrees

- Occupational Therapy Assistant
- Radiation Therapists
- Respiratory Therapists
- Physical Therapy Assistant

#### Bachelor's Degrees

- Respiratory Therapists

#### Master's, Doctoral, and Professional Degrees

- Occupational Therapists
- Speech Language Pathologist
- Physical Therapists



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Speech Language Pathologists	\$73,070	1,068	25%
Respiratory Therapists	\$57,429	830	20%
Occupational Therapists	\$92,227	834	34%
Physical Therapy Assistants	\$70,200	1,268	44%

Successful completion of the Medical Therapy program of study will fulfill requirements of a Public Service or STEM endorsement if the math and science requirements are met. Revised – October 2022



# Medical Therapy Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Health Science	13020200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Terminology	13020300 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Health Science Theory/ Health Science Clinical	13020400 (1 credit) 13020410 (2 credits)	Biology REC PREQ: Principles of Health Science	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Health Science	13020500 (2 credits) 13020505 (3 credits)	Health Science Theory and Biology	None

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at lukedefilippis@hebisd.edu, 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

## Health Science Career Cluster

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.

### Nursing Science *Statewide Program of Study*



The Nursing Science program of study introduces students to the knowledge and skills related to patient care. CTE learners may learn about or practice caring for patients, routine procedures such as monitoring vital signs, development and implementation of care plans, maintenance of medical records, and disease or pain management. Students may focus on the healthcare system and research system designs and make recommended modifications.

#### Secondary Courses for High School Credit

##### Level 1

- Principles of Health Science

##### Level 2

- Medical Terminology

##### Level 3

- Medical Microbiology
- Anatomy and Physiology

##### Level 4

- Pathophysiology
- Pharmacology

#### Postsecondary Opportunities

##### Associates Degrees

- Registered Nursing/Registered Nurse

##### Bachelor's Degrees

- Informatics Nurse Specialists

##### Master's, Doctoral, and Professional Degrees

- Nurse Practitioner
- Nursing Administration
- Nurse Anesthetist

#### Work-Based Learning and Expanded Learning Opportunities

##### Exploration Activities

- Participate in Health Occupation Students of America

##### Work-Based Learning Activities

- Volunteer at a community wellness center, hospital, assisted living center, or nursing home

#### Industry-Based Certifications

- Certified Clinical Medical Assistant
- Certified Nurse Aide (CNA)
- Certified Patient Care Technician (CPCT)
- Licensed Vocational Nurse
- Medical Assistant
- Patient Care Technician
- Phlebotomy Technician
- Registered Nurse



#### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Licensed Vocational Nurses	\$45,178	7,186	21%
Registered Nurses	\$68,682	17,493	26%
Nurse Practitioners	\$107,827	977	50%
Nurse Anesthetists	\$154,856	357	23%

Successful completion of the Nursing Science program of study will fulfill requirements of a Public Service endorsement or STEM endorsement if the math and science requirements are met. Revised – August 2022



# Nursing Science Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Health Science	13020200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Terminology	13020300 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Microbiology	13020700 (1 credit)	Biology and Chemistry	None
Anatomy and Physiology	13020600 (1 credit)	Biology and a second science credit	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Pathophysiology	13020800 (1 credit)	Biology and Chemistry	None
Pharmacology	13020950 (1 credit)	Biology and Chemistry REC PREQ: Principles of Health Science	None

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euless-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

## CULINARY ARTS



Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **completer** status for federal & state accountability reporting.



# Hospitality and Tourism Career Cluster

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.

## Culinary Arts Statewide Program of Study



The Culinary Arts program of study introduces CTE learners to occupations and educational opportunities related to the planning, directing, or coordinating activities of a food and beverage organization or department. This program of study also explores opportunities involved in directing and participating in the preparation and cooking of food.

### Secondary Courses for High School Credit

#### Level 1

- Introduction to Culinary Arts

#### Level 2

- Culinary Arts

#### Level 3

#### Level 4

- Practicum in Culinary Arts

### Postsecondary Opportunities

#### Associates Degrees

- Hotel and Restaurant Management
- Restaurant Culinary and Catering Management
- Hospitality Administration/ Management, General
- Culinary Arts/ Chef Training

#### Bachelor's Degrees

- Hotel and Restaurant Management
- Food Service Systems Administration/ Management
- Hospitality Administration/ Management, General
- Culinary Science and Food Service Management

#### Master's, Doctoral, and Professional Degrees

- Hotel and Restaurant Management
- Food Service Systems Administration/ Management
- Hospitality Administration/ Management, General
- Business Administration Management, General

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in Family, Career, and Community Leaders of America, SkillsUSA, American Culinary Federation, or the Texas Restaurant Association

#### Work-Based Learning Activities

- Plan a catering event or work for a catering company
- Participate in a cooking course
- Work in a restaurant

### Industry-Based Certifications

- Certified Fundamentals Cook
- Certified Fundamentals Pastry Cook
- Certified Hospitality & Tourism Management Professional
- Commercial Foods
- Culinary Meat Selection & Cookery Certification
- Food Protection Manager Certification
- Food Safety & Science Certification
- ManageFirst Professional
- Pre-Professional Certification in Culinary Arts
- Pre-Professional Certification in Food Science Fundamentals
- ServSafe Manager



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Food and Beverage Managers	\$55,619	1,561	28%
Chef and Head Cooks	\$43,285	1,366	25%
Food Science Technicians	\$34,382	236	11%

Successful completion of the Culinary Arts program of study will fulfill requirements of the Business and Industry endorsement. Revised – October 2022





# Culinary Arts Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Introduction to Culinary Arts	13022550 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Culinary Arts	13022600 (2 credits)	REC PREQ: Introduction to Culinary Arts	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Culinary Arts	13022700 (2 credits) 13022705 (3 credits)	Culinary Arts	None

FOR ADDITIONAL INFORMATION ON THE HOSPITALITY AND TOURISM CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euless-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at lukedefilippis@hebisd.edu, 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**



**COSMETOLOGY  
AND PERSONAL  
CARE SERVICES**  
REGIONAL PROGRAM OF  
STUDY

**FAMILY AND  
COMMUNITY  
SERVICES**

**HEALTH  
AND  
WELLNESS**

Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **completer** status for federal & state accountability reporting.



# Human Services Career Cluster

The Human Services Career Cluster focuses on preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care services, and consumer services.

## Cosmetology and Personal Care Services Regional Program of Study



The Cosmetology and Personal Care Services regional program of study introduces CTE learners to knowledge and skills related to providing beauty and personal care services. CTE concentrators may learn about or practice managing personal care facilities and coordinating or supervising personal service workers.

### Secondary Courses for High School Credit

#### Level 1

#### Level 2

- Introduction to Cosmetology

#### Level 3

- Cosmetology I

#### Level 4

- Cosmetology II/Lab

### Postsecondary Opportunities

#### Certificate/License

- Certified Aesthetic Laser Operator
- Cosmetologist
- Certified Spa Supervisor
- Nail Technician/Specialist and Manicurist

#### Associates Degrees

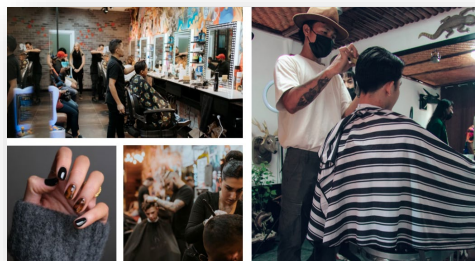
- Cosmetology/Cosmetologist, General
- Aesthetician/Esthetician and Skin Care Specialist
- Salon/Beauty Salon Management/Manager
- Cosmetology, Barber/Styling, and Nail Instructor

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"> <li>• Participate in TIVA or SkillsUSA</li> </ul>	<ul style="list-style-type: none"> <li>• Job shadow a cosmetologist</li> <li>• Work part-time at a salon, spa, or barbershop</li> </ul>

### Industry-Based Certifications

- Cosmetology Operator License
- Cosmetology Esthetician Specialty License
- Cosmetology Manicurist Specialty License
- Barber Operating License



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
First-Line Supervisors of Personal Service Workers	\$36,941	1,634	24%
Barbers	\$28,267	348	14%
Hairdressers, Hairstylists, and Cosmetologists	\$21,507	3,489	22%
Manicurists and Pedicurists	\$21,715	418	45%
Shampooers	\$18,720	139	24%
Skincare Specialists	\$26,437	637	22%

Successful completion of the Cosmetology and Personal Care Services regional program of study will fulfill requirements of the Public Service endorsement. Revised – August 2022



# Cosmetology and Personal Care Services

## Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Introduction to Cosmetology	13025100 (1 credit)	None	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Cosmetology I	13025200 (2 credits)	REC PREQ: Introduction to Cosmetology	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Cosmetology II/Lab	13025310 (3 credits)	Cosmetology I	None

FOR ADDITIONAL INFORMATION ON THE HUMAN SERVICES CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euless-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

# Human Services Career Cluster

The Human Services Career Cluster focuses on preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care services, and consumer services.

## Family and Community Services Statewide Program of Study



The Family and Community Services program of study introduces students to knowledge and skills related to social services, including child and human development and consumer sciences. CTE learners may learn about or practice managing social and community services or teaching family and consumer sciences. Students may follow career paths in social work or therapy for children, families, or school communities.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Human Services
- Professional Communications
- Interpersonal Studies
- Dollars and Sense

#### Level 2

- Lifetime Nutrition and Wellness
- Human Growth and Development
- Child Development

#### Level 3

- Counseling and Mental Health
- Family and Community Services

#### Level 4

- Practicum in Human Services

### Postsecondary Opportunities

#### Associates Degrees

- Human Development and Family Studies
- Human Services/Sciences, General
- Family and Consumer Sciences
- Community Health Services

#### Bachelor's Degrees

- Human Development and Family Studies
- Human Services/Sciences, General
- Family and Consumer Sciences
- Child and Family Services

#### Master's, Doctoral, and Professional Degrees

- Human Development and Family Studies
- Marriage and Family Therapy/Counseling
- Human Services/Sciences
- Family Studies

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in American Association of Family and Consumer Sciences or Family, Career and Community Leaders of America

#### Work-Based Learning Activities

- Volunteer at a community center
- Intern for a community non-profit organization

### Industry-Based Certifications

- Community Health Workers
- Child Development Associate (CDA)



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Child, Family, and School Social Workers	\$41,350	2,221	17%
Social and Community Services Managers	\$65,146	608	33%
Marriage and Family Therapists	\$42,266	217	35%
Social and Human Service Assistants	\$32,448	2,822	25%

Successful completion of the Family and Community Services program of study will fulfill requirements of the Public Service endorsement. Revised – August 2022



# Family and Community Services Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Human Services	13024200 (1 credit)	None	None
Professional Communications	13009900 (.5 credit)	None	None
Interpersonal Studies	13024400 (.5 credit)	None	None
Dollars and Sense	13024300 (.5 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Lifetime Nutrition and Wellness	13024500 (.5 credit)	None	None
Human Growth and Development	13014300 (1 credit)	None	None
Child Development	13024700 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Counseling and Mental Health	13024600 (1 credit)	None	None
Family and Community Services	13024900 (1 credit)	None	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Human Services	13025000 (2 credits) 13025005 (3 credits)	REC PREQ: Principles of Human Services	None

FOR ADDITIONAL INFORMATION ON THE HUMAN SERVICES CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euless-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)

# Human Services Career Cluster

The Human Services Career Cluster focuses on preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care services, and consumer services.

## Health and Wellness Statewide Program of Study



The Health and Wellness program of study introduces students to knowledge and skills related to promoting physical, emotional, social, and mental health and wellness. Students who choose this program of study may learn how to assist patients in planning for their health and wellness, respond to crises, and advise, provide education or counseling, or make referrals. CTE learners may also focus on addressing barriers to access health and wellness services.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Human Services

#### Level 2

- Lifetime Nutrition and Wellness
- Human Growth and Development
- Interpersonal Studies

#### Level 3

#### Level 4

- Practicum in Human Services

### Postsecondary Opportunities

#### Associates Degrees

- Nutrition Sciences
- Community Health Services/Liaison/Counseling
- Health and Wellness, General
- Public Health

#### Bachelor's Degrees

- Nutrition Sciences
- Mental Health Counseling/Counselor
- Nutrition
- Human Nutrition and Foods

#### Master's, Doctoral, and Professional Degrees

- Nutrition Sciences
- Community Health and Preventative Medicine
- Nutrition
- Exercise and Sports Nutrition

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"> <li>Participate in American Association of Family and Consumer Sciences or the Family Career and Community Leaders of America</li> </ul>	<ul style="list-style-type: none"> <li>Job shadow a dietitian or nutritionist</li> <li>Work part-time at a counseling services center, health department or hospital</li> </ul>

### Industry-Based Certifications

- Community Health Workers
- Pre-Professional Certification in Nutrition, Food, and Wellness
- Licensed Dietetic Technician\*

\*IBC Sunsetting 8/31/24



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Community Health Workers	\$38,064	592	25%
Rehabilitation Counselors	\$43,930	586	23%
Mental Health Counselors	\$41,558	812	38%
Health Care Social Workers	\$55,515	1,583	35%

Successful completion of the Health and Wellness program of study will fulfill requirements of the Public Service endorsement. Revised – August 2022



# Health and Wellness Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Human Services	13024200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Lifetime Nutrition and Wellness	13024500 (.5 credit)	None	None
Human Growth and Development	13014300 (1 credit)	None	None
Interpersonal Studies	13024400 (.5 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Human Services	13025000 (2 credits) 13025005 (3 credits)	REC PREQ: Principles of Human Services	None

FOR ADDITIONAL INFORMATION ON THE HUMAN SERVICES CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at lukedefilippis@hebisd.edu, 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)





INFORMATION  
TECHNOLOGY  
SUPPORT AND  
SERVICES

NETWORKING  
SYSTEMS

WEB DEVELOPMENT

Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **completer** status for federal & state accountability reporting.



# Information Technology Career Cluster

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.

## Information Technology Support and Services Statewide Program of Study



The Information Technology Support and Services program of study explores the occupations and educational opportunities associated with administering, testing, and implementing computer databases and applying knowledge of database management systems. This program of study may also include analyzing user requirements and problems to automate or improve existing systems and review computer system capabilities. This program of study may also include exploration into the research, design, or testing of computer or computer-related equipment for commercial, industrial, military, or scientific use.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Information Technology

#### Level 2

- Computer Maintenance

#### Level 3

- Computer Technician Practicum

#### Level 4

- Practicum of Information Technology
- Independent Study in Technology Applications

### Postsecondary Opportunities

#### Associates Degrees

- Computer and Information Sciences, General
- Computer and Information Systems Security/ Information Assurance
- Information Technology
- Computer Systems Networking and Telecommunications

#### Bachelor's Degrees

- Computer and Information Sciences, General
- Computer and Information Systems Security /Information Assurance
- Computer Engineering, General
- Computer Systems Networking and Telecommunications

#### Master's, Doctoral, and Professional Degrees

- Computer and Information Sciences, General
- Computer Systems Analysis/ Analyst
- Computer Engineering, General
- Information Technology

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join TSA
- Job shadow a database administrator or computer hardware engineer

#### Work-Based Learning Activities

- Earn an IT certification

### Industry-Based Certifications

- Business Information Processing
- Cloud Essentials+
- CompTIA A+ Certification
- CompTIA IT Fundamentals+
- Computer Repair Technology - Job Ready
- Google IT Support Professional Certificate



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Database Administrator	\$83,075	1,063	19%
Computer Hardware Engineer	\$111,738	343	24%
Computer System Analyst and Support	\$87,568	5,937	29%

Successful completion of the Information Technology Support and Services program of study will fulfill requirements of the Business and Industry endorsement or STEM endorsement if the math and science requirements are met.

Revised – October 2022



# Information Technology Support and Services

## Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Information Technology	13027200 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Maintenance	13027300 (1 credit)	Principles of Information Technology	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Technician Practicum	13027500 (2 credits)	REC PREQ: Computer Maintenance	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Information Technology	13028000 (2 credits) 13028005 (3 credits)	Minimum of two high school Information Technology (IT) courses	None
Independent Study in Technology Applications	03580900 (1 credit)	REC PREQ: Computer Science I & II	None

FOR ADDITIONAL INFORMATION ON THE INFORMATION TECHNOLOGY CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euleess-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)

# Information Technology Career Cluster

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.

## Networking Systems Statewide Program of Study



The Networking Systems program of study explores the occupations and educational opportunities associated with designing and implementing computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. This program of study may also include exploration into analyzing science, engineering, and other data processing problems to implement and improve computer systems.

### Secondary Courses for High School Credit

#### Level 1

- Computer Science I
- Principles of Information Technology

#### Level 2

- Computer Maintenance
- AP Computer Science Principles

#### Level 3

- Networking/Lab

#### Level 4

- Practicum in Information Technology
- Independent Study in Technology Applications

### Postsecondary Opportunities

#### Associates Degrees

- Computer and Information Sciences, General
- Computer Systems Networking And Telecommunications
- Information Technology
- Network and System Administration/ Administrator

#### Bachelor's Degrees

- Computer and Information Sciences, General
- Computer Systems Networking And Telecommunications
- Computer and Information Systems Security/ Information Assurance
- Computer Engineering, General

#### Master's, Doctoral, and Professional Degrees

- Computer and Information Sciences, General
- Information Technology
- Computer and Information Systems Security/ Information Assurance
- Computer Engineering, General

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join TSA
- Job shadow a computer network architect or support specialist

#### Work-Based Learning Activities

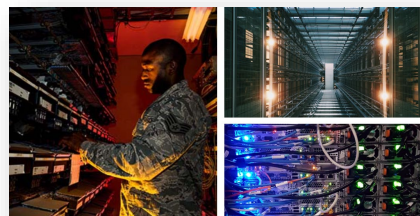
- Earn an IT certification

### Industry-Based Certifications

- Cisco 100-490 RSTech Supporting Cisco Routing and Switching Network Devices
- Cisco CCNA (200-301) Implementing and Administering Cisco Solutions
- CompTIA A+ Certification
- CompTIA Network+
- CompTIA Server+
- Computer Networking Fundamentals - Job Ready
- Google Cloud Certified Professional - Cloud Architect

- Associate of (ISC)\*

\*IBC sunseting 8/31/24



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Computer Network Architects	\$111,633	1,082	23%
Computer Systems Analysts	\$87,568	5,937	29%
Computer Network Support Specialists	\$68,037	1,824	19%

Successful completion of the Networking Systems program of study will fulfill requirements of the Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised – October 2022



# Networking Systems Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Science I	03580200 (1 credit)	Algebra I	None
Principles of Information Technology	13027200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Maintenance	13027300 (1 credit)	Principles of Information Technology	None
AP Computer Science Principles	A3580300 (1 credit)	Algebra I	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Networking/Lab	13027400 (1 credit) 13027410 (2 credits)	None	Networking w/Lab

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Information Technology	13028000 (2 credits) 13028005 (3 credits)	Minimum of two high school Information Technology (IT) courses	None
Independent Study in Technology Applications	03580900 (1 credit)	REC PREQ: Computer Science I & II	None

FOR ADDITIONAL INFORMATION ON THE INFORMATION TECHNOLOGY CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

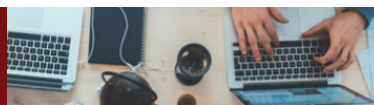
Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)

# Information Technology Career Cluster

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.

## Web Development Statewide Program of Study



The Web Development program of study explores the occupations and educational opportunities associated with designing, creating, and modifying websites. This program of study may also explore integrating websites with other computer applications, and converting written, graphic, audio, and video components to compatible web formats by using software designed to facilitate the creation of web and multimedia content.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Information Technology

#### Level 2

- Computer Science I

#### Level 3

- Web Design

#### Level 4

- Practicum in Information Technology
- Independent Study in Technology Applications

### Postsecondary Opportunities

#### Associates Degrees

- Computer Programming/Programmer, General
- Computer Science
- Web Page, Digital/Multimedia and Information Resources Design
- Computer Systems Networking and Telecommunications

#### Bachelor's Degrees

- Web/Multimedia Management and Webmaster
- Computer Science
- Web Page, Digital/Multimedia and Information Resources Design
- Computer Systems Networking and Telecommunications

#### Master's, Doctoral, and Professional Degrees

- Computational Science
- Computer Science
- Information Science/Studies
- Computer Systems Networking and Telecommunications

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join TSA
- Participate in a coding or computer programming club
- Create a web page

#### Work-Based Learning Activities

- Earn an Oracle or web certification

### Industry-Based Certifications

- Certified Web and Mobile App Developer Apprentice
- Certified Web Animator Associate
- Oracle Certified Associate Java SE 8 Programmer
- Web Design- Job Ready

- Google Analytics Individual Qualification\*
- WD Certified Web Design\*

\*IBC sunsetting 8/31/24



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Web Developers	\$67,912	1,079	39%
Web Administrators, Computer Occupations	\$85,197	1,616	20%
Software Developers	\$104,499	6,311	30%

Successful completion of the Web Development program of study will fulfill requirements of the Business and Industry endorsement and STEM endorsement if the math and science requirements are met.. Revised – October 2022



# Web Development Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Information Technology	13027200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Science I	03580200 (1 credit)	Algebra I	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Web Design	03580820 (1 credit)	None	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Information Technology	13028000 (2 credits) 13028005 (3 credits)	Minimum of two high school Information Technology (IT) courses	None
Independent Study in Technology Applications	03580900 (1 credit)	REC PREQ: Computer Science I & II	None

FOR ADDITIONAL INFORMATION ON THE INFORMATION TECHNOLOGY CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**



EMERGENCY  
SERVICES

LAW  
ENFORCEMENT

LEGAL STUDIES

Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **completer** status for federal & state accountability reporting.





## Law and Public Service Career Cluster

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 police, courts, corrections, private security, and fire and emergency services.

### Emergency Services Statewide Program of Study



The Emergency Services program of study focuses on training CTE learners to respond to emergency situations, such as medical emergencies and fire-based emergencies. Students will learn how to prevent emergencies, respond appropriately and in accordance with rules and regulations during crises, and investigate and delineate the source of the emergency.

#### Secondary Courses for High School Credit

##### Level 1

- Principles of Law, Public Safety, Corrections, and Security

##### Level 2

##### Level 3

- Anatomy and Physiology
- Counseling and Mental Health

##### Level 4

- Practicum in Law, Public Safety, Corrections, and Security

#### Postsecondary Opportunities

##### Associates Degrees

- Emergency Medical Technology/Technician (EMT Paramedic)
- Fire Prevention and Safety Technology/Technician
- Fire Science/Firefighting

##### Bachelor's Degrees

- Emergency Medical Technology/Technician (EMT Paramedic)
- Natural Resources Law Enforcement and Protective Services

#### Work-Based Learning and Expanded Learning Opportunities

##### Exploration Activities

- Attend local emergency awareness events
- Join the Texas Public Service Association

##### Work-Based Learning Activities

- Volunteer at a hospital or a fire station

#### Industry-Based Certifications

- Basic Structure Fire Protection
- Emergency Medical Responder
- Emergency Medical Technician - Basic
- IAED Emergency Telecommunicator

- OSHA Hazardous Waste Operations and Emergency Response\*

\*IBC sunseting 8/31/24



#### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Firefighters	\$50,149	2,309	13%
Fire Inspectors and Investigators	\$54,787	161	14%
Emergency Medical Technicians	\$34,091	1,880	31%

Successful completion of the Emergency Services program of study will fulfill requirements of the Public Service endorsement. Revised – August 2022



## Emergency Services Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Law, Public Safety, Corrections, and Security	13029200 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Counseling and Mental Health	13024600 (1 credit)	None	None
Anatomy and Physiology	13020600 (1 credit)	Biology and a second science credit	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Law, Public Safety, Corrections, and Security	13030100 (2 credits) 13030105 (3 credits)	REC PREQ: A minimum of two high school LPS courses	None

FOR ADDITIONAL INFORMATION ON THE LAW AND PUBLIC SERVICE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

## Law and Public Service Career Cluster

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 police, courts, corrections, private security, and fire and emergency services.

### Law Enforcement Statewide Program of Study



The Law Enforcement program of study teaches CTE learners about the development of, adherence to, and protection of various branches of law. 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.

#### Secondary Courses for High School Credit

##### Level 1

- Principles of Law, Public Safety, Corrections, and Security

##### Level 2

- Law Enforcement I  
(Rotation/911 Dispatch/Fire Academy)

##### Level 3

- Law Enforcement II

##### Level 4

- Counseling and Mental Health
- Forensic Science
- Practicum in Law, Public Safety Corrections, and Security

#### Postsecondary Opportunities

##### Associates Degrees

- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Criminal Justice/Police Science
- Corrections
- Criminalistics and Criminal Science

##### Bachelor's Degrees

- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Criminal Justice/Police Science
- Juvenile Corrections
- Cyber/Computer Forensics and Counterterrorism

##### Master's, Doctoral, and Professional Degrees

- Criminal Justice/Safety Studies/Law
- Enforcement Administration
- Natural Resources
- Law Enforcement and Protective Services

#### Work-Based Learning and Expanded Learning Opportunities

##### Exploration Activities

- Join the Texas Public Service Association or local criminal justice clubs

##### Work-Based Learning Activities

- Attend court hearings and other legal procedures

#### Industry-Based Certifications

- Non-Commissioned Security Officer Level II



#### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Police and Sheriff's Patrol Officers	\$60,112	5,241	13%
Probation Officers and Correctional Treatment Officers	\$44,054	793	9%
Correctional Officers and Jailers	\$40,186	4,683	9%
Immigration and Customs Inspectors	\$78,104	1,236	9%
First-Line Supervisors of Police and Detectives	\$91,312	253	25%

Successful completion of the Law and Public Service program of study will fulfill requirements of the Public Service endorsement. Revised – August 2022



## Law Enforcement Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Law, Public Safety, Corrections, and Security	13029200 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Law Enforcement I	13029300 (1 credit)	REC PREQ: Principles of LPS	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Law Enforcement II	13029400 (1 credit)	REC PREQ: Law Enforcement I	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Counseling and Mental Health	13024600 (1 credit)	None	None
Forensic Science	13029500 (1 credit)	Biology and Chemistry	None
Practicum in Law, Public Safety, Corrections, and Security	13030100 (2 credits) 13030105 (3 credits)	REC PREQ: A minimum of two high school LPS courses	None

FOR ADDITIONAL INFORMATION ON THE LAW AND PUBLIC SERVICE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euleess-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)

## Law and Public Service Career Cluster

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 police, courts, corrections, private security, and fire and emergency services.

### Legal Studies Statewide Program of Study



The Legal Studies program of study introduces CTE learners to the occupations and educational opportunities related to representing clients in criminal and civil litigation and other legal proceedings, as well as assisting lawyers and preparing legal documents. This program of study explores possible specializations in a single area of law.

#### Secondary Courses for High School Credit

##### Level 1

- Principles of Law, Public Safety, Corrections, and Security

##### Level 2

- Court Systems and Practices

##### Level 3

- Advanced Legal Skills and Professions

##### Level 4

- Practicum in Law, Public Safety, Corrections, and Security

#### Postsecondary Opportunities

##### Associates Degrees

- Legal Assistant/Paralegal

##### Bachelor's Degrees

- Legal Assistant/Paralegal

##### Master's, Doctoral, and Professional Degrees

- Law
- Intellectual Property Law
- Advanced Legal Research/Studies General
- International Law and Legal Studies

#### Work-Based Learning and Expanded Learning Opportunities

##### Exploration Activities

- Attend court hearings and other legal procedures
- Join the Texas Public Service Association

##### Work-Based Learning Activities

- Intern with a local attorney
- Script and conduct a mock trial



#### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Lawyers	\$126,131	2,801	19%
Paralegal and Legal Assistants	\$50,544	2,837	19%

Successful completion of the Legal Studies program of study will fulfill requirements of the Public Service endorsement.  
Revised – August 2022



## Legal Studies Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Law, Public Safety, Corrections, and Security	13029200 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Court Systems and Practices	13029600 (1 credit)	None	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Advanced Legal Skills and Professions	N1303016 (1 credit)	REC PREQ: Courts Systems and Practices	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Law, Public Safety, Corrections, and Security	13030100 (2 credits) 13030105 (3 credits)	REC PREQ: A minimum of two high school LPS courses	None

FOR ADDITIONAL INFORMATION ON THE LAW AND PUBLIC SERVICE CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at lukedefilippis@hebisd.edu, 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

## ADVANCED MANUFACTURING AND MACHINERY MECHANICS

### WELDING



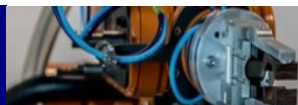
Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **complete** status for federal & state accountability reporting.

# Manufacturing Career Cluster

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 control, maintenance, and manufacturing/process engineering.

## Advanced Manufacturing and Machinery Mechanics Statewide Program of Study



The Advanced Manufacturing and Machinery Mechanics program of study focuses on the assembly, operation, maintenance, and repair of electromechanical equipment or devices. CTE learners may work in a variety of mechanical fields, gaining knowledge and experience in robotics, refinery and pipeline systems, deep ocean exploration, or hazardous waste removal. CTE concentrators may work in a variety of fields of engineering.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Applied Engineering

#### Level 2

- Robotics I

#### Level 3

- Engineering Design and Presentation I
- Robotics II

#### Level 4

- Practicum in Manufacturing

### Postsecondary Opportunities

#### Associates Degrees

- Electromechanical Engineering/Technology
- Certified Quality Technician
- Industrial Mechanics and Maintenance Technology

#### Bachelor's Degrees

- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

#### Master's, Doctoral, and Professional Degrees

- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"><li>Participate in SkillsUSA and local STEM events</li></ul>	<ul style="list-style-type: none"><li>Work at a local business or industry apprenticeship</li><li>Join the American Welding Society</li></ul>

### Industry-Based Certifications

- C-101 Certified Industry 4.0 Associate - Basic Operations
- C-103 Certified Industry 4.0 Associate - Robot System Operations
- C-200 Certified Industry 4.0 Automation System Specialist I -216 Robotic System Integration 1
- C-200 Certified Industry 4.0 Automation Systems Specialist I -208 Programmable Controller Troubleshooting 1
- C-200 Certified Industry 4.0 Automation Systems Specialist I -215 Robotic Operations 1
- Certified Manufacturing Associate
- Certified SOLIDWORKS Professional (CSWP) – CAM
- Certified SOLIDWORKS Professional (CSWP) - Additive MFG CNC Lathe Operations
- CNC Lathe Set Up and Operations
- FANUC Robot Operator 1
- FESTO Certified Industry 4.0 Associate Fundamentals
- Industrial Technology Maintenance (ITM) - Process Control Systems
- Machining CNC Mill Operations Level I
- Machining CNC Mill Programming Setup and Operations Level I
- Machining CNC Milling Skills Level II & III
- Industrial Technology Maintenance (ITM) - Electronic Control Systems\*
- ISCET Certified Electronics Technicians\*
- Mastercam Associate Certification Mill Design and Toolpaths\*
- Mastercam Certified Professional Mill Level 1\*
- Mastercam Professional Level Certification\*
- OSHA 30 Hour General\*

\*IBC sunseting 8/31/24

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Electro-Mechanical Assemblers	\$30,160	951	9%
Electro-Mechanical Technicians	\$56,555	127	9%
Industrial Machinery Mechanics	\$49,816	3,788	27%

Successful completion of the Advanced Manufacturing and Machinery Mechanics program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met.  
Revised – August 2022





# Advanced Manufacturing and Machinery Mechanics

## Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Applied Engineering	13036200 (1 credit)	None	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Robotics I	13037000 (1 credit)	None	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Engineering Design and Presentation I	13036500 (1 credit)	Algebra I	None
Robotics II	13037050 (1 credit)	Robotics I	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Manufacturing	13033000 (2 credits) 13033005 (3 credits)	REC PREQ: A minimum of two high school courses in the Manufacturing Career Cluster	None

FOR ADDITIONAL INFORMATION ON THE MANUFACTURING CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst–Euleless-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

# Manufacturing Career Cluster

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 control, maintenance, and manufacturing/process engineering.

## Welding Statewide Program of Study



The Welding program of study focuses on the development and use of automatic and computer-controlled machines, tools, and robots that perform work on metal or plastic. CTE learners will learn how to modify parts to make or repair machine tools or maintain individual machines, and how to use hand-welding or flame-cutting equipment.

### Secondary Courses for High School Credit

#### Level 1

- Introduction to Welding

#### Level 2

- Welding I

#### Level 3

- Welding II/Lab

#### Level 4

- Practicum in Manufacturing

### Postsecondary Opportunities

#### Associates Degrees

- Certified Welder or Welder Inspector
- Machine Shop Technology/Assistant
- Operations Management and Supervision
- Occupational Safety and Health Technology/Technician

#### Bachelor's Degrees

- Welding Engineering Technology/Technician
- Biomedical Technology/Technician
- Operations Management and Supervision
- Environmental Health

#### Master's, Doctoral, and Professional Degrees

- Welding Engineering Technology/Technician
- Occupational Health and Industrial Hygiene
- Operations Management and Supervision
- Environmental Health

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate and compete in SkillsUSA
- Job shadow a machinist

#### Work-Based Learning Activities

- Work in a local business or industry apprenticeship
- Join the American Welding Society

### Industry-Based Certifications

- API 1104 Welding Pipelines and Related Facilities
- AWS Certified Welder
- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding
- AWS SENSE Level 1: Entry Welder
- Industrial Technology Maintenance (ITM) - Maintenance Welding
- NCCER Construction Technology Certification Level I
- NCCER Core
- NCCER Welding Level I
- Welding - Job Ready

- OSHA 30 Hour General\*

\*IBC sunseting 8/31/24



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Welders, Cutters, Solderers, and Brazers	\$41,350	6,171	9%
Welding Soldering and Brazing Machine Setters, Operators and Tenders	\$40,040	280	9%

Successful completion of the Welding program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022



# Welding Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Introduction to Welding	13032250 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Welding I	13032300 (2 credits)	REC PREQ: Introduction to Welding	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Welding II/Lab	13032400 (2 credits) 13032410 (3 credits)	Welding I	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Manufacturing	13033000 (2 credits) 13033005 (3 credits)	REC PREQ: A minimum of two high school courses in the Manufacturing Career Cluster	None

FOR ADDITIONAL INFORMATION ON THE MANUFACTURING CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

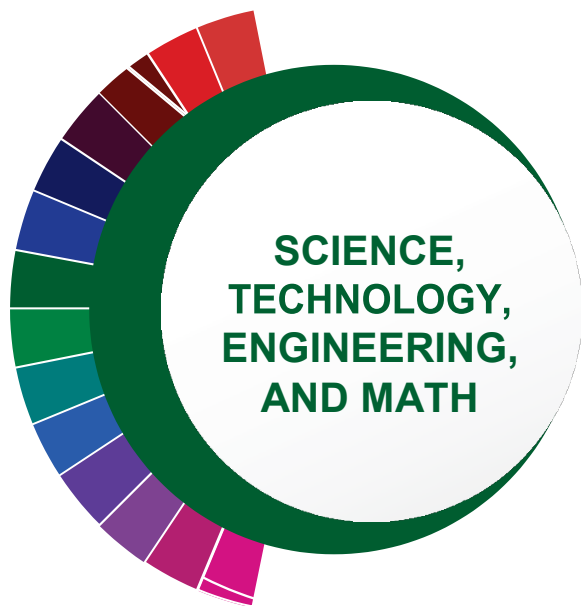
<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euleless-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at lukedefilippis@hebisd.edu, 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**



BIOMEDICAL  
SCIENCE

CYBERSECURITY

ENGINEERING

PROGRAMMING  
AND SOFTWARE  
DEVELOPMENT

RENEWABLE  
ENERGY

Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **completer** status for federal & state accountability reporting.



# Science, Technology, Engineering, and Mathematics Career Cluster

The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

## Biomedical Science Statewide Program of Study



The Biomedical Science program of study focuses on the study of biology and medicine in order to introduce CTE learners to the knowledge and skills necessary to be successful in the healthcare field, such as researching and diagnosing diseases, pre-existing conditions, or other determinants of health. Students may also practice patient care and communication.

### Secondary Courses for High School Credit

#### Level 1

#### Level 2

#### Level 3

- Medical Microbiology

#### Level 4

- Pathophysiology
- Scientific Research and Design (Honors Aerospace I)
- Practicum in STEM

### Postsecondary Opportunities

#### Associates Degrees

- Histologic Technician
- Clinical Laboratory Science/Medical Technology/Technologist

#### Bachelor's Degrees

- Biomedical Engineers
- Clinical Laboratory Science/Medical Technology/Technologist

#### Master's, Doctoral, and Professional Degrees

- Genetic Counseling
- Medical Scientists
- Epidemiology

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join Health Occupations Students of America

#### Work-Based Learning Activities

- Intern at a lab
- Shadow a healthcare or medical professional

### Industry-Based Certifications

- Biotechnician Assistant Credentialing Exam (BACE)
- Medical Laboratory Assistant
- Medical Laboratory Technician



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Medical and Laboratory Technicians	\$37,981	1,159	28%
Biological Technicians	\$42,931	452	17%
Forensic Science Technicians	\$48,152	171	35%
Chemical Technicians	\$49,733	672	10%
Medical and Clinical Laboratory Technologists	\$58,760	1,166	35%

**Successful completion of the Biomedical program of study will fulfill requirements of the Public Service or STEM endorsement if the math and science requirements are met. Revised – October 2022**



## Biomedical Science Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Microbiology	13020700 (1 credit)	Biology and Chemistry	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Pathophysiology	13020800 (1 credit)	Biology and Chemistry	None
Scientific Research and Design	13037200 (1 credit)	Biology, Chemistry, Integrated Physics and Chemistry (IPC), or Physics	None
Practicum in Science, Technology, Engineering, and Math	13037400 (2 credits) 13037405 (3 credits)	Algebra I and Geometry REC PREQ: Two STEM Career Cluster credits	None

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING AND MATH CAREER CLUSTER,

PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

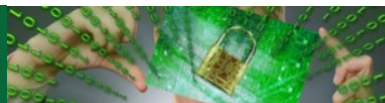
Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

# Science, Technology, Engineering, and Mathematics Career Cluster

The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

## Cybersecurity Statewide Program of Study



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.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Information Technology
- Fundamentals of Computer Science
- Foundations of Cybersecurity

#### Level 2

- Computer Science I
- AP Computer Science Principles
- Computer Maintenance

#### Level 3

- Networking/Lab
- Digital Forensics
- AP Computer Science A-Math
- AP computer Science B-LOTE
- IB Computer Science Standard Level

#### Level 4

- Cybersecurity Capstone
- Practicum in Information Technology
- Practicum in STEM
- Independent Study in Technology Applications
- IB Computer Science Higher Level- Math
- IB Computer Science Higher Level-LOTE

### Postsecondary Opportunities

#### Associates Degrees

- System Networking, and LAN/WAN Management
- Information Technology
- Computer and Information Sciences, General
- Computer Science

#### Bachelor's Degrees

- Computer Systems Networking and Telecommunications
- Computer Systems Networking and Telecommunications
- Computer and Information Sciences, General
- Computer Science

#### Master's, Doctoral, and Professional Degrees

- Computer Systems Analysis/Analyst
- Information Technology
- Computer Information Sciences, General
- Computer Science

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join TSA
- Job shadow a computer system analyst or information security analyst

#### Work-Based Learning Activities

- Obtain a cybersecurity IBC

### Industry-Based Certifications

- Cisco 200-201 CBROPS - Understanding Cisco Cybersecurity Operations Fundamentals
- CompTIA A+ Certification
- CompTIA Network+
- CompTIA Security+
- Cybersecurity Fundamentals
- CyberSecurity Fundamentals: An ISACA Certificate
- Oracle Certified Associate Java SE 8 Programmer

- Associate of (ISC)\*

\*IBC sunseting 8/31/24



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Information Security Analysts	\$91,915	814	29%
Network and Computer System Administrators	\$82,597	2,814	19%
Computer System Analysts	\$87,568	5,937	29%

Successful completion of the Cybersecurity program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met. Revised – October 2022



# Cybersecurity Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principals of Information Technology	1302700 (1 credit)	None	None
Fundamentals of Computer Science	03580140 (1 credit)	None	None
Foundations of Cybersecurity	03580850 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Computer Science I	03580200 (1 credit)	Algebra I	None
AP Computer Science Principles	A3580300 (1 credit)	Algebra I	None
Computer Maintenance	13027300 (1 credit)	Principles of Information Technology	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Networking/Lab	13027400 (1 credit) 13027410 (1 credit)	None	None
Digital Forensics	03580360 (1 credit)	REC PREQ: Foundations of Cybersecurity	None
AP Computer Science A-Math	A3580110 (1 credit)	None	None
AP Computer Science B-LOTE	A3580120 (1 credit)	None	None
IB Computer Science Standard Level	I3580200 (2 credits)	None	None

See next page for Level 4 courses





# Science, Technology, Engineering, and Mathematics Career Cluster

The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

## Engineering Statewide Program of Study



The Engineering program of study focuses on the design, development, and use of engines, machines, and structures. CTE learners will learn how to apply science, mathematical methods, and empirical evidence to the innovation, design, construction, operation, and maintenance of different manufacturing systems.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Applied Engineering

#### Level 2

#### Level 3

- Engineering Design and Presentation I
- Engineering Science

#### Level 4

- Engineering Design and Problem Solving (Honors Aerospace II)
- Engineering Design and Presentation II
- Practicum in STEM
- Scientific Research and Design (Honors Aerospace I)

### Postsecondary Opportunities

#### Associates Degrees

- Electrical and Electronics Engineering
- Drafting and Design Technology/ Technician, General
- Engineering Technology

#### Bachelor's Degrees

- Electrical and Electronics Engineering
- CAD/CADD Drafting and/or Design Technology/ Technician
- Bioengineering and Biomedical Engineering
- Construction Engineering Technology/ Technician

#### Master's, Doctoral, and Professional Degrees

- Electrical and Electronics Engineering
- Mechanical Engineering
- Bioengineering and Biomedical Engineering

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in Skills USA competitions

#### Work-Based Learning Activities

- Intern at an engineering firm
- Shadow a machinist

### Industry-Based Certifications

- Autodesk Associate (Certified User) AutoCAD
- Autodesk Associate (Certified User) Fusion 360
- Autodesk Associate (Certified User) Inventor for Mechanical Design
- Autodesk Associate (Certified User) Revit Architecture
- Autodesk Associate (Certified User) Revit for Electrical
- Autodesk Associate (Certified User) Revit for Structural Design
- Autodesk Certified Professional Fusion 360
- Autodesk Certified Professional in AutoCAD for Design and Drafting
- Autodesk Certified Professional in Civil 3D for Infrastructure Design
- Autodesk Certified Professional in Inventor for Mechanical Design
- Autodesk Certified Professional in Revit for Architectural Design
- Autodesk Certified Professional in Revit for Electrical Design
- Autodesk Certified Professional in Revit for Structural Design
- C-103 Certified Industry 4.0 Associate - Robot System Operations
- Engineering Technology Foundations
- Lean Six Sigma Green Belt Certification
- Pre-Engineering/Engineering Technology - Job Ready

- Certified SOLIDWORKS Associate\*

\*IBC sunseting 8/31/24

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Aerospace Engineers	\$110,843	481	9%
Industrial Engineers	\$97,074	1,263	10%
Mechanical Engineers	\$91,107	1,535	11%
Chemical Engineers	\$112,819	474	9%
Electrical Engineers	\$98,405	1,137	10%

Successful completion of the Engineering program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met. Revised – October 2022



# Engineering Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Applied Engineering	13036200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Engineering Design and Presentation I	13036500 (1 credit)	Algebra I	None
Engineering Science	13037500 (1 credit)	Algebra I, Biology, Chemistry and either Integrated Physics (IPC) or Physics, and at least one credit from the STEM career cluster	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Engineering Design & Problem Solving	13037300 (1 credit)	Algebra I and Geometry	None
Engineering Design and Presentation II	13036600 (2 credits)	Algebra I and Geometry	None
Practicum in Science, Technology, Engineering, and Mathematics	13037400 (2 credits) 13037405 (3 credits)	Algebra I and Geometry REC PREQ: Two STEM Career Cluster credits	None
Scientific Research & Design	13037200 (1 credit)	Biology, Chemistry and either Integrated Physics (IPC) or Physics	None

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING AND MATH CAREER CLUSTER, PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

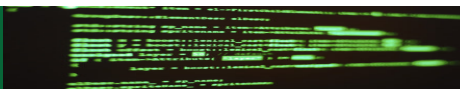
Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)

# Science, Technology, Engineering, and Mathematics Career Cluster

The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

## Programming and Software Development Statewide Program of Study



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.

### Secondary Courses for High School Credit

#### Level 1

- Fundamentals of Computer Science

#### Level 2

- AP Computer Science Principles
- Computer Science I

#### Level 3

- AP Computer Science A, MATH
- AP Computer Science A, LOTE
- Computer Science II
- IB Computer Science Standard Level

#### Level 4

- IB Computer Science Higher Level, LOTE
- IB Computer Science Higher Level, MATH
- Practicum in Information Technology
- Practicum in Audio/Video Production
- Practicum in Science, Technology, Engineering, and Mathematics
- Independent Study in Technology Applications

### Postsecondary Opportunities

#### Associates Degrees

- Computer Programming/Programmer General
- Computer Software Engineer
- Computer Science
- Certified Software Analyst

#### Bachelor's Degrees

- Management Information Systems, General
- Computer Software Engineer
- Computer Science
- Information Science/ Studies

#### Master's, Doctoral, and Professional Degrees

- Computer Software Engineer
- Computer Science
- Information Science/ Studies

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
------------------------	--------------------------------

- Join TSA
- Participate in a coding club at school
- Obtain a programming IBC

### Industry-Based Certifications

- C++ Certified Associate Programmer
- Certified Entry-Level Python Programmer (PCEP)
- Certified Professional Programmer
- CompTIA Linux+
- Oracle Certified Associate Java SE 8 Programmer
- Oracle Database SQL Certified Associate



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Software Developer, Systems Software	\$103,334	2,985	25%
Software Developers, Application	\$104,499	6,311	30%
Computer Programmers	\$79,893	1,454	9%

Successful completion of the Programming and Software Development program of study will fulfill requirements of the Business and Industry endorsement and STEM endorsement if the math and science requirements are met. Revised – August 2022



# Programming and Software Development Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Fundamentals of Computer Science	03580140 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
AP Computer Science Principles	A3580300 (1 credit)	Algebra I	None
Computer Science I	03580200 (1 credit)	Algebra I	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
AP Computer Science A, MATH, LOTE	A3580110 (1 credit) A3580120 (1 credit)	None	None
Computer Science II	03580300 (1 credit)	Algebra I, Computer Science I, or Fundamentals of Computer Science	None
IB Computer Science Standard Level	I3580200 (2 credits)	None	None

## Level 4

Course Name	Service ID	PREREQUISITES	COREQUISITES
IB Computer Science Higher Level, MATH, LOTE	I3580320 (1 credit) I3580310 (1 credit)	None	None
Practicum in Information Technology	13028000 (2 credits) 13028005 (3 credits)	Two high school Information Technology courses	None
Practicum in Audio/Video Production	13008700 (2 credits) 13008705 (3 credits)	Audio/Video Production II Lab	None
Practicum in Science, Technology, Engineering, and Mathematics	13037400 (2 credits) 13037405 (3 credits)	Algebra I and Geometry REC PREQ: Two STEM Career Cluster credits	None
Independent Study in Technology Applications	03580900 (1 credit)	REC PREQ: Computer Science I & II	None

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euless-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

# Science, Technology, Engineering, and Mathematics Career Cluster

The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

## Renewable Energy Statewide Program of Study



The Renewable Energy program of study helps CTE learners discover to assemble, inspect, maintain, and repair different equipment required for renewable energy. It introduces students to solar photovoltaic equipment and wind turbines, the systems and processes used to maintain and manage these types of equipment, and helps students develop the skills needed to do so.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Applied Engineering

#### Level 2

#### Level 3

- Scientific Research and Design (Honors Aerospace I)

#### Level 4

- Engineering Design and Problem Solving (Honors Aerospace II)
- Practicum in STEM

### Postsecondary Opportunities

#### Associates Degrees

- Industrial Mechanics and Maintenance Technology
- Solar Energy/ Technology
- Engineering, Mechanics
- Engineering, General

#### Bachelor's Degrees

- Surveying Engineering
- Systems Engineering
- Engineering, Mechanics
- Engineering, General

#### Master's, Doctoral, and Professional Degrees

- Surveying Engineering
- Systems Engineering
- Manufacturing Engineering
- Engineering, General

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
------------------------	--------------------------------

- Join Skills USA or a local science club
- Research four renewable energy companies and compare them

### Industry-Based Certifications

- C-200 Certified Industry 4.0 Automation Systems Specialist I - 201 Electrical Systems 1
- Industrial Technology Maintenance (ITM) - Electrical Systems
- NCCER Electronic System Technician Level I
- NCCER Electronic System Technician Level II
- Certified Electronics Systems Associate\*
- Industrial Technology Maintenance (ITM) - Electronic Control Systems\*
- ISCET Certified Electronics Technicians\*
- OSHA 30 Hour General\*

\*IBC sunseting 8/31/24



### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Wind Turbine Services Technician	\$51,334	387	108%
Solar Photovoltaic Installer	\$43,957	47	81%

Successful completion of the Renewable Energy program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met. Revised – August 2022



# Renewable Energy Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Applied Engineering	13036200 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Scientific Research and Design	13037200 (1 credit)	Biology, Chemistry, Integrated Physics and Chemistry (IPC), or Physics	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Engineering Design and Problem Solving	13037300 (1 credit)	Algebra I and Geometry	None
Practicum in STEM	13037400 (2 credits) 13037405 (3 credits)	Algebra I and Geometry REC PREQ: Two STEM Career Cluster credits	None

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS CAREER CLUSTER,

PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

HEB ISD (SY 2023-2024)

## AUTOMOTIVE



### DRONE (UNMANNED FLIGHT) REGIONAL PROGRAM OF STUDY

Students completing two or more courses for two or more credits within a program of study earn **concentrator** status for Perkins V federal & state accountability reporting.

Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn **completer** status for federal & state accountability reporting.





# Transportation, Distribution, and Logistics Career Cluster

The Transportation, Distribution, and Logistics Career Cluster focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

## Automotive Statewide Program of Study



The Automotive program of study teaches CTE learners how to repair and refinish automobiles and service various types of vehicles. CTE learners may learn to collect payment for services or supplies and perform typical vehicle maintenance procedures such as lubrication, oil changes, installation of antifreeze, or replacement of accessories like wiper blades or tires.

### Secondary Courses for High School Credit

#### Level 1

#### Level 2

- Automotive Basics

#### Level 3

- Automotive Technology I

#### Level 4

- Automotive Technology II/Lab
- Practicum in Transportation Systems

### Postsecondary Opportunities

#### Associates Degrees

- Autobody/ Collision and Repair Technology/ Technician
- Medium/Heavy Vehicle and Truck Technology/ Technician
- Mechanical Engineering/ Mechanical Technology/ Technician

#### Bachelor's Degrees

- Mechanical Engineering/ Mechanical Technology/ Technician

#### Master's, Doctoral, and Professional Degrees

- Mechanical Engineering

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Join SkillsUSA or the Automotive Service Association

#### Work-Based Learning Activities

- Work at a local automotive repair or body shop

### Industry-Based Certifications

- ASE Entry Level Automobile Maintenance and Light Repair (MR)
- ASE Entry-Level Automobile Automatic Transmission/Transaxle (AT)
- ASE Entry-Level Automobile Brakes (BR)
- ASE Entry-Level Automobile Electronic/Electrical Systems (EE)
- ASE Entry-Level Automobile Engine Performance (EP)
- ASE Entry-Level Automobile Engine Repair (ER)
- ASE Entry-Level Automobile Heating and Air Conditioning (AC)
- ASE Entry-Level Automobile Manual Drive Train and Axles (MD)
- ASE Entry-Level Automobile Service Technology
- ASE Entry-Level Automobile Suspension and Steering (SS)
- ASE Entry-Level Collision Mechanical and Electrical Components (ME)
- ASE Entry-Level Collision Non-Structural Analysis and Damage Repair (SR)
- ASE Entry-Level Collision Painting and Refinishing (PR)
- ASE Entry-Level Collision Structural Analysis and Damage Repair
- ASE Refrigerant Recovery and Recycling
- Principles of Small Engine Technology Certification
- Small Engine Technology
- OSHA 30 Hour General\*
- ASE Suspension and Steering\*
- ASE Structural Analysis Damage Repair\*
- ASE Painting & Refinishing\*
- ASE Non-Structural Analysis Damage Repair\*
- ASE Mech Elec Components\*
- ASE Manual Drive Train Axles\*
- ASE Maintenance Light Repair\*
- ASE Heating, Ventilation, AC (HVAC)\*
- ASE Auto Transmission\*
- ASE Automobile Service Technology\*
- ASE Brakes\*
- ASE Electrical/Electronic Systems\*
- ASE Engine Performance\*
- ASE Engine Repair\*

\*IBC sunseting 8/31/24

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Automotive Body and Related Repairers	\$40,144	1,456	25%
Automotive Service Technician and Mechanics	\$38,459	5,557	18%

Successful completion of the Automotive program of study will fulfill requirements of the Business and Industry endorsement. Revised – October 2022



# Automotive Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
-------------	------------	---------------	--------------

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Automotive Basics	13039550 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Automotive Technology I: Maintenance and Light Repair	13039600 (2 credits)	REC PREQ: Automotive Basics	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Automotive Technology II/Lab	13039700 (2 credits) 13039710 (3 credits)	Automotive Technology I: Maintenance and Light Repair	None
Practicum in Transportation Systems	13040450 (2 credits) 13040455 (3 credits)	REC PREQ: Two Transportation, Distribution, and Logistics Career Cluster credits	None

FOR ADDITIONAL INFORMATION ON THE TRANSPORTATION, DISTRIBUTION, AND LOGISTICS CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Eules-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at lukedefilippis@hebisd.edu, 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**

## Transportation, Distribution, and Logistics Career Cluster

The Transportation, Distribution, and Logistics Career Cluster focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

### Drone (Unmanned Flight) Regional Program of Study



The Drone-Unmanned Flight regional program of study introduces CTE learners to the occupations and education opportunities related to operating or designing an unmanned aircraft using a ground-based controller and the systems of communications between the controller and the aircraft.

#### Secondary Courses for High School Credit

##### Level 1

- Introduction to Unmanned Aerial Vehicles (UAV)

##### Level 2

- Robotics I

##### Level 3

- Robotics II
- Engineering Science

##### Level 4

- Practicum in Manufacturing
- Scientific Research and Design (Honors Aerospace I)

#### Postsecondary Opportunities

##### Associates Degrees

- Airline Pilots, Copilots, and Flight Engineers

#### Work-Based Learning and Expanded Learning Opportunities

##### Exploration Activities

- Participate in SkillsUSA
- Explore virtual aviation websites

##### Work-Based Learning Activities

- Work part-time at an aviation services agency, drone company, or airline company

#### Industry-Based Certifications

- FAA Part 107 Remote Drone Pilot

- Certified Aerospace Technician\*
- ISCET Certified Electronics Technicians\*

\*IBC sunseting 8/31/24



#### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Aerospace Engineering and Operations Technicians	\$60,757	114	9%
Avionics Technicians	\$59,114	170	9%
Airline Pilots, Copilots, and Flight Engineers	\$165,130	1,150	9%
Commercial Pilots	\$86,310	548	9%

Successful completion of the Drone (Unmanned Flight) regional program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met. Revised – October 2022



## Drone (Unmanned Flight) Course Information

### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Introduction to Unmanned Aerial Vehicles (UAV)	N1304670 (1 credit)	REC PREQ: Biology, Chemistry, Integrated Physics and Chemistry (IPC) or Physics	None

### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITE
Robotics I	13037000 (1 credit)	None	None

### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Robotics II	13037050 (1 credit)	Robotics I	None
Engineering Science	13037500 (1 credit)	Algebra I, Biology, Chemistry, Integrated Physics and Chemistry (IPC) or Physics, and at least one credit from the STEM career cluster	None

### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Manufacturing	13033000 (2 credits) 13033005 (3 credits)	REC PREQ: A minimum of two high school courses in the Manufacturing Career Cluster	None
Scientific Research and Design	13037200 (1 credit)	Biology, Chemistry, Integrated Physics and Chemistry (IPC) or Physics	None

FOR ADDITIONAL INFORMATION ON THE TRANSPORTATION, DISTRIBUTION, AND LOGISTICS CAREER CLUSTER,  
PLEASE CONTACT:

HEB ISD Career & Technical Education Department

<https://www.hebisd.edu/Domain/80>

<https://tea.texas.gov/cte>

Hurst –Euleess-Bedford ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Luke DeFilippis at [lukedefilippis@hebisd.edu](mailto:lukedefilippis@hebisd.edu), 817-283-4461.

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](#).

**HEB ISD (SY 2023-2024)**