

Statewide Program of Study: **Accounting and Financial Services**

The Accounting and Financial Services program of study focuses on occupational and educational opportunities associated with examining, analyzing, and interpreting financial records. It includes exploration of financial services, preparing financial statements, auditing financial statements prepared by others, and interpreting accounting records. This program of study also introduces students to mathematical modeling tools.

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. This career cluster includes occupations ranging from business owner and entrepreneur to accountant, retail manager, and market analyst.



Secondary Courses for High School Credit

- | | |
|---------|---|
| Level 1 | • 8206-Principles of Business, Marketing, and Finance |
| Level 2 | • 8307- Money Matters |
| Level 3 | • 8310- Accounting I |
| Level 4 | • 8315- Securities and Investments
• 8011-Career Preparation for Programs of Study + Extended Career Preparation |

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Intern with a certified public accountant (CPA) at a local business
- Intern with a city or county auditor's office
- Shadow a financial advisor as an intern at an investment company

Expanded Learning Opportunities

- Participate in BPA, DECA, or FBLA
- Explore student membership in professional organizations such as AICPA, CIMA, or TXCPA

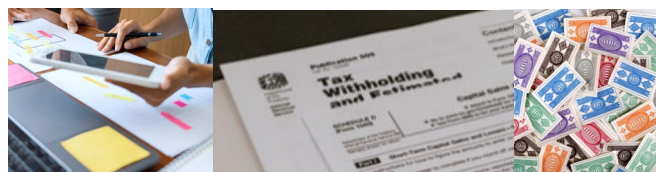
NISD Aligned Industry-Based Certifications

TEA A-F Recognized IBC

- Microsoft Office Specialist: Microsoft Excel Expert

NISD Performance Acknowledgement

- Microsoft Office Specialist: Microsoft PowerPoint
- Microsoft Office Specialist: Microsoft Word



Example Postsecondary Opportunities

Associate Degrees

- Accounting
- Bookkeeping



Bachelor's Degrees

- Accounting
- Banking and Financial Support Services

Master's, Doctoral, and Professional Degrees

- Business Administration and Management
- Finance

Additional Stackable IBCs/License

- Project Management Professional
- Property Tax Consultants Service Contract Providers



Example Aligned Occupations

Tax Preparers

Median Wage: \$56,956
Annual Openings: 898
10-Year Growth: 14%

Accountants and Auditors

Median Wage: \$78,022
Annual Openings: 12,989
10-Year Growth: 20%

Personal Financial Advisors

Median Wage: \$77,605
Annual Openings: 1,877
10-Year Growth: 21%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024..



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Statewide Program of Study: Architectural Drafting and Design

The Architectural Drafting and Design program of study focuses on occupational and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study includes reading, interpreting, and drawing blueprints for interior and exterior construction projects.

Architecture and Construction Career Cluster

The Architecture and Construction career cluster focuses on designing, planning, managing, building, and maintaining the built environment. This career cluster includes occupations ranging from architect, carpenter, and construction manager to electrician, plumber and heating, air conditioning, and refrigeration technician.



Secondary Courses for High School Credit

- | | |
|---------|---|
| Level 1 | • 8098-Principles of Architecture |
| Level 2 | • 8104-Architectural Design I |
| Level 3 | • 8106-Architectural Design II (2CR) |
| Level 4 | • 8127-Practicum in Architectural Design (2CR)
• 8011-Career Preparation for Programs of Study + Extended Career Preparation for Programs of Study (3CR) |

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Intern at an architectural firm to develop CADD drafting and design technology skills
- Shadow a civil engineer to learn more about their day-to-day responsibilities

Expanded Learning Opportunities

- Conduct an informational interview with an architect to learn about their role and responsibilities
- Participate in SkillsUSA or TSA

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Autodesk Associate (Certified User) AutoCAD
- Autodesk Associate (Certified User) Revit Architecture



Example Postsecondary Opportunities

Apprenticeships

- Drafter

Associate Degrees

- CAD/CADD Drafting and/or Design Technology
- Drafting and Design Technology
- Surveying Technology/Surveying
- Architectural Drafting and Architectural CAD/CADD

Bachelor's Degrees

- Civil Engineering
- Construction Engineering
- Surveying Engineering
- Drafting and Design Technology

Master's, Doctoral, and Professional Degrees

- Civil Engineering
- Geographic Information Science and Cartography
- Construction Engineering Technology

Example Aligned Occupations



Architectural and Civil Drafters

Median Wage: \$57,424
Annual Openings: 1,366
10-Year Growth: 15%

Architects

Median Wage: \$80,903
Annual Openings: 966
10-Year Growth: 18%

Construction Managers

Median Wage: \$95,072
Annual Openings: 6,325
10-Year Growth: 24%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Successful completion of the Architectural Drafting and Design program of study will fulfill requirements of the Business and Industry endorsement.

Statewide Program of Study: Automotive and Collision Repair

The Automotive and Collision Repair program of study focuses on the occupational and educational opportunities associated with servicing, repairing, and refinishing various types of vehicles. This program of study includes diagnosing and servicing vehicles and learning about processes, technologies, and materials used in reconstructing vehicles.

Transportation, Distribution, and Logistics Career Cluster

The Transportation, Distribution, and Logistics career cluster focuses on planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes transportation infrastructure planning and management, logistics services, and mobile equipment and facility maintenance. This career cluster includes occupations ranging from automotive mechanic, avionics technician, and automotive entrepreneur to pilots and logistics planning professionals.



Secondary Courses for High School Credit

- | | |
|---------|--|
| Level 1 | <ul style="list-style-type: none"> 8759-Principles of Transportation Systems |
| Level 2 | <ul style="list-style-type: none"> 8766-Automotive Basics 8765-Basic Collision Repair and Refinishing |
| Level 3 | <ul style="list-style-type: none"> 8752-Automotive Technology I: Maintenance and Light Repair (2CR) 8754-Collision Repair (2CR) |
| Level 4 | <ul style="list-style-type: none"> 8753-Automotive Technology II: Automotive Service (2CR) 8756-Paint and Refinishing (2CR) 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR) |

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Shadow an automotive technician at a car dealership
- Intern at a rental car company and assist technicians with vehicle maintenance
- Work at a local automotive repair shop and hold both customer service duties and automatic repair duties

Expanded Learning Opportunities

- Join a related automotive association and attend events
- Participate in SkillsUSA

NISD Aligned Industry-Based Certifications IBC

TEA A-F Recognized IBC

ASE Entry Level Automobile

- Maintenance & Light Repair
- Automatic Transmission & Transaxle
- Brakes
- Electronic & Electrical Systems
- Engine Performance
- Engine Repair
- Heating & Air Conditioning
- Manual Drivetrain & Axles
- Service Technology
- Suspension & Steering

ASE Entry-Level Collision

- Non-Structural Analysis & Damage Repair
- Collision Painting & Refinishing
- Structural Analysis & Damage Repair
- ASE Refrigerant Recovery & Recycling

NISD Performance Acknowledgement

- Alldata



Example Postsecondary Opportunities

Apprenticeships

- Automotive Technician Apprenticeship

Associate Degrees

- Automobile/Automotive Mechanics Technology
- Autobody/Collision and Repair Technology

Bachelor's Degrees

- Autobody/Collision and Repair Technology
- Heavy Equipment Maintenance Technology

Additional Stackable IBCs/License

- Automobile and Light Truck Certification (A1 – A9)



Example Aligned Occupations

Automotive Service Technicians and Mechanics

Median Wage: \$44,809
Annual Openings: 6,285
10-Year Growth: 10%

Bus and Truck Mechanics and Diesel Engine Specialists

Median Wage: \$50,967
Annual Openings: 3,096
10-Year Growth: 19%

First-Line Supervisors of Mechanics, Installers, and Repairers

Median Wage: \$66,535
Annual Openings: 5,019
10-Year Growth: 19%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>

Statewide Program of Study: *Business Management*

The Business Management program of study focuses on occupational and educational opportunities associated with planning, directing, and coordinating the administrative services and operations of an organization. It includes formulating policies, managing daily operations, and allocating the use of materials and human resources. This program of study also introduces students to mathematical modeling tools and organizational evaluation methods.

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. This career cluster includes occupations ranging from business owner and entrepreneur to accountant, retail manager, and market analyst.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8206-Principles of Business, Marketing, and Finance
Level 2	<ul style="list-style-type: none"> 8216-Business Information Management I
Level 3	<ul style="list-style-type: none"> 8227-Business Management 8226-Business Management D
Level 4	<ul style="list-style-type: none"> 8229-Practicum in Business Management (2CR) 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

AP	<ul style="list-style-type: none"> AP Microeconomics AP Statistics
Dual Credit	<p>Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.</p>

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Intern at local business in the HR department Shadow the COO of a local business or chamber of commerce
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in BPA, DECA, FBLA, or related UIL events Explore student membership in related professional organizations

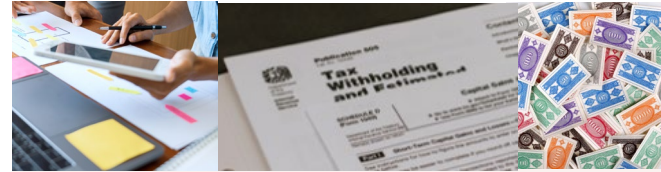
NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Entrepreneurship and Small Business
- Microsoft Office Specialist: Microsoft Excel Expert
- Microsoft Office Specialist: Microsoft Word Expert

NISD Performance Acknowledgement

- Microsoft Office Specialist: Microsoft Excel
- Microsoft Office Specialist: Microsoft Word



Example Postsecondary Opportunities

Associate Degrees

- Business Administration and Management
- Human Resources Management

Bachelor's Degrees

- Business Analytics
- Accounting and Business

Master's, Doctoral, and Professional Degrees

- Business Administration and Management
- Organizational Leadership

Additional Stackable IBCs/License

- Professional Certificate in Team Leadership
- Property Tax Professionals



Example Aligned Occupations

First-Line Supervisors of Administrative Support Workers

Median Wage: \$59,585
Annual Openings: 13,885
10-Year Growth: 9%

Human Resources Specialists

Median Wage: \$61,278
Annual Openings: 6,239
10-Year Growth: 23%

General and Operations Managers

Median Wage: \$83,220
Annual Openings: 25,450
10-Year Growth: 23%

Data Source: Texas Wages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Successful completion of the Business Management program of study will fulfill requirements of the Business and Industry endorsement.

Statewide Program of Study: Carpentry



The Carpentry program of study focuses on occupational and educational opportunities related to constructing, installing, and repairing structures and fixtures made of wood (including frameworks, partitions, joists, studding, rafters, and stairways). The program of study includes installing, dismantling, or moving machinery and heavy equipment according to layout plans, blueprints, or other drawings.

Architecture and Construction Career Cluster

The Architecture and Construction career cluster focuses on designing, planning, managing, building, and maintaining the built environment. This career cluster includes occupations ranging from architect, carpenter, and construction manager to electrician, plumber, and heating, air conditioning, and refrigeration technician.



Secondary Courses for High School Credit

- Level 1 • 8099-Principles of Construction
- Level 2 • 8139-Construction Science (*Principles of Architecture*)
- Level 3 • 8111-Construction Technology I (2CR)
• 8181-Construction Technology I D (2CR)
- Level 4 • 8112-Construction Technology II (2CR)
• 8187-Construction Technology II D (2CR)
• 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Intern with a carpenter to practice skills such as measuring materials and assembling structures
- Participate in a pre-apprenticeship that includes activities like installing cabinets, drywall, and siding

Expanded Learning Opportunities

- Shadow a construction manager to learn more about how construction teams work together to complete projects
- Participate in SkillsUSA

NISD Aligned Industry-Based Certifications

- **TEA A-F Recognized IBC**
 - HBI Pre-Apprenticeship Certificate Training (PACT), Basic Carpentry
 - HBI Pre-Apprenticeship Certificate Training (PACT), Core

NISD Performance Acknowledgement

- HBI Pre-Apprenticeship Certificate Training (PACT), Masonry
- OSHA 10-Hour- General



Example Postsecondary Opportunities

Apprenticeships

- Carpenter

Associate Degrees

- Construction Management
- Construction Engineering Technology
- Building Construction Technology

Bachelor's Degrees

- Construction Engineering
- Construction Science
- Construction Site Management

Master's, Doctoral, and Professional Degrees

- Construction Engineering Technology
- Construction Engineering
- Construction Management
- Project Management

Example Aligned Occupations



Drywall and Ceiling Tile Installers

Median Wage: \$44,699
Annual Openings: 758
10-Year Growth: 14%

Carpenters

Median Wage: \$46,272
Annual Openings: 5,623
10-Year Growth: 15%

Construction Managers

Median Wage: \$95,072
Annual Openings: 6,325
10-Year Growth: 24%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Successful completion of the Carpentry program of study will fulfill requirements of the Business and Industry endorsement.

Regional Program of Study: Cosmetology and Personal Care Services



The Cosmetology and Personal Care Services regional program of study focuses on occupational and educational opportunities associated with providing beauty and personal care services. This program of study includes managing personal care facilities and coordinating or supervising personal service workers.

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. This career cluster includes occupations ranging from community health workers to cosmetologists and nutritionists.



Secondary Courses for High School Credit

Level 1	• N/A
Level 2	• 8469-Introduction to Cosmetology (Fall-2CR) • 8473-Principles of Cosmetology Design and Color Theory (Spring-2CR)
Level 3	• 8470-Cosmetology I (2CR)
Level 4	• 8471-Cosmetology II (2CR)

Recommend Aligned Advanced Academic Courses

Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.
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Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> • Work part-time in a salon, spa, or barbershop • Participate in an apprenticeship at a salon to become an apprentice stylist
Expanded Learning Opportunities	<ul style="list-style-type: none"> • Tour a salon, spa, or barbershop • Participate in SkillsUSA

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Cosmetology Operator License

NISD Performance Acknowledgement

- OSHA 10-Hour- Cosmetology



Example Postsecondary Opportunities

Apprenticeships

- Apprentice Stylist

Associate Degrees

- Cosmetology Operator
- Esthetics and Skin Care

Additional Stackable IBCs/License

- Class A Barber
- Eyelash Extension Specialist
- Hair Weaving Specialist



Example Aligned Occupations

Hairdressers, Hairstylists, and Cosmetologists

Median Wage: \$27,286
Annual Openings: 8,014
10-Year Growth: 25%

Skincare Specialists

Median Wage: \$35,112
Annual Openings: 778
10-Year Growth: 38%

First-Line Supervisors of Personal Service Workers

Median Wage: \$36,795
Annual Openings: 2,253
10-Year Growth: 29%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Statewide Program of Study: Culinary Arts

The Culinary Arts program of study focuses on occupational and educational opportunities associated with the planning, directing, or coordinating activities of a food and beverage organization or department. This program of study includes opportunities involved in directing and participating in the preparation of food.

Hospitality and Tourism Career Cluster

The Hospitality and Tourism career cluster focuses on the management, marketing, and operations of restaurants, lodging, attractions, recreation events, and travel-related services. This career cluster includes occupations ranging from reservation and transportation ticket agent to event planner and general manager.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8422- Introduction to Culinary Arts
Level 2	<ul style="list-style-type: none"> 8420- Culinary Arts (2CR) 8423- Culinary Arts D (2CR)
Level 3	<ul style="list-style-type: none"> 8424- Advanced Culinary Arts (2CR) 8427- Advanced Culinary Arts D (2CR)
Level 4	<ul style="list-style-type: none"> 8430- Food Science 8421- Practicum in Culinary Arts (2 CR) 8428- 8421- Practicum in Culinary Arts D (2CR) 8011- Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

AP	AP Chemistry
Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Shadow a director of a non-profit that produces and delivers food for communities in need Intern at a catering company and learn about food production for large-scale events Work part-time in a restaurant as a line cook or chef
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in FCCLA Participate in SkillsUSA Participate in American Culinary Association or the Texas Restaurant Association

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Certified Fundamentals Cook
- Food Protection Manager
- AAFCS-Pre-Professional in Culinary Arts
- ServSafe Manager



Example Postsecondary Opportunities

Associate Degrees

- Culinary Arts
- Baking and Pastry Arts



Bachelor's Degrees

- Hotel/Motel Administration/Management
- Culinary Science

Master's, Doctoral, and Professional Degrees

- Organizational Leadership
- Foodservice Systems Administration/Management

Additional Stackable IBCs/License

- Food Manager License



Example Aligned Occupations

Bakers

Median Wage: \$29,466
Annual Openings: 2,942
10-Year Growth: 26%

Chefs and Head Cooks

Median Wage: \$44,761
Annual Openings: 950
10-Year Growth: 37%

General and Operations Managers

Median Wage: \$83,220
Annual Openings: 25,450
10-Year Growth: 23%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



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

Statewide Program of Study: Cybersecurity



The Cybersecurity program of study focuses on occupational and educational opportunities associated with planning, implementing, upgrading, or monitoring security measures for the protection of computer networks and information. This program of study includes responding to computer security breaches and viruses and administering network security measures.

Information Technology Career Cluster

The Information Technology (IT) career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from Software Developer and Programmer to Cybersecurity Specialists and Network Analysts.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8500-Principles of Information Technology
Level 2	<ul style="list-style-type: none"> 8546-Foundations of Cybersecurity 8490-Foundations of Cybersecurity DC
Level 3	<ul style="list-style-type: none"> 8542-Networking 8491-Networking DC
Level 4	<ul style="list-style-type: none"> 8547-Cybersecurity Capstone 8492-Cybersecurity Capstone DC 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

AP or IB	<ul style="list-style-type: none"> AP Computer Science Principles AP Computer Science A
Dual Credit	<ul style="list-style-type: none"> Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

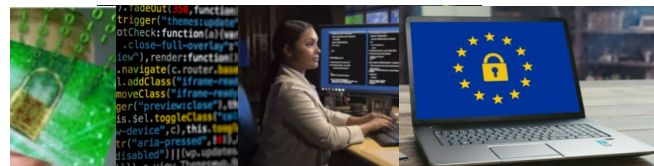
Work-Based Learning Activities	<ul style="list-style-type: none"> Intern at a local bank, hospital, or government office to develop skills in implementing security measures Interview with an information security analyst to learn how they plan for, monitor, and upgrade security measures at their organization
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in a Hackathon Participate in TSA or SkillsUSA

NISD Aligned Industry-Based Certifications

TEA A-F Recognized IBC

- CompTIA Tech+
- CompTIA Network+
- CompTIA Security+
- Information Technology Specialist: Networking

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



Examples Postsecondary Opportunities

Associate Degrees

- Computer and Information Systems Security
- Computer Programming

Bachelor's Degrees

- Computer Science
- Computer Software Engineering

Master's, Doctoral, and Professional Degrees

- Computer and Information Systems Security/Auditing/Information Assurance
- Computer Software Engineering

Additional Stackable IBCs/License

- Certified Ethical Hacker (CEH)



Example Aligned Occupations

Computer User Support Specialists

Median Wage: \$51,411
Annual Openings: 5,757
10-Year Growth: 21%

Software Developers

Median Wage: \$111,705
Annual Openings: 15,324
10-Year Growth: 36%

Information Security Analysts

Median Wage: \$110,268
Annual Openings: 1,719
10-Year Growth: 49%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

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Statewide Program of Study: *Diagnostic and Therapeutic Services*



The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

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. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8352-Principles of Health Science
Level 2	<ul style="list-style-type: none"> 8358-Medical Terminology
Level 3	<ul style="list-style-type: none"> 8360-Anatomy and Physiology 8379-Anatomy and Physiology H 8376-Anatomy and Physiology D 8361-Medical Microbiology 8356-Health Science Theory 8357-Health Science Theory + Health Science Clinical (2CR)
Level 4	<ul style="list-style-type: none"> 8350-Pharmacology 8363-Practicum in Health Science: Phlebotomy & EKG (2CR) 8369-Practicum in Health Science: Patient Care Technician (2CR) 8373-Practicum in Health Science: Medical Assisting (2CR) 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

AP	AP Biology	AP Chemistry
Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.	

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility Participate in job shadowing experiences such as Emergency Medical Services (EMS) ride along or hospital/clinical job
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in HOSA-Future Health Professionals or SkillsUSA Participate in Advanced Medical Ambulance Bus (AMBUS) event or Community Emergency Response Team (CERT) event

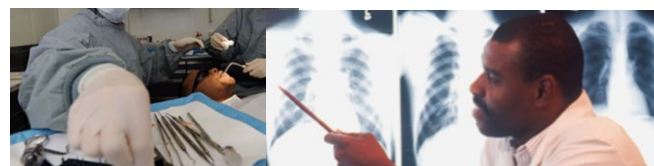
NISD Aligned Industry-Based Certifications

TEA A-F Recognized IBC

- Phlebotomy Technician (CPT)
- Certified EKG Technician (CET)
- Certified Clinical Medical Assistant (CCMA)
- Patient Care Technician (PCT)
- Pharmacy Technician (CPht)

Performance Acknowledgement

- Basic Life Support Health Care Provider (BLS)



Example Postsecondary Opportunities

Apprenticeships

- Medical Assistant

Associate Degrees

- Emergency Medical Technology
- Radiologic Technology/Science

Bachelor's Degrees

- Emergency Medical Technology
- Medical Insurance Coding

Master's, Doctoral, and Professional Degrees

- Medicine
- Occupational Therapy

Additional Stackable IBCs/License

- Registered Diagnostic Medical Sonographer



Example Aligned Occupations

Medical Assistants

Median Wage: \$36,834
Annual Openings: 11,638
10-Year Growth: 29%

Dental Hygienists

Median Wage: \$79,663
Annual Openings: 1,352
10-Year Growth: 32%

Physician Assistants

Median Wage: \$127,332
Annual Openings: 974
10-Year Growth: 41%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Successful completion of the Diagnostic and Therapeutic Services program of study will fulfill requirements of the Public Services endorsement.

Statewide Program of Study: *Diagnostic and Therapeutic Services*



The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

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. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.

EMT

Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8352-Principles of Health Science
Level 2	<ul style="list-style-type: none"> 8358-Medical Terminology 8399-Medical Terminology D
Level 3	<ul style="list-style-type: none"> 8664-Health Science Theory 8380-Anatomy and Physiology 8379-Anatomy and Physiology H 8376-Anatomy and Physiology D
Level 4	<ul style="list-style-type: none"> 8563-Emergency Medical Technician-Basic (2CR)

Recommended Aligned Advanced Academic Courses

AP	<ul style="list-style-type: none"> AP Biology AP Chemistry
Dual Credit	<p>Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.</p>

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility Participate in job shadowing experiences such as Emergency Medical Services (EMS) ride along or hospital/clinical job
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in HOSA-Future Health Professionals or SkillsUSA Participate in Advanced Medical Ambulance Bus (AMBUS) event or Community Emergency Response Team (CERT) event

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Emergency Medical Technician–Basic

NISD Performance Acknowledgement

- Basic Life Support (BLS)



Example Postsecondary Opportunities

Apprenticeships

- Medical Assistant

Associate Degrees

- Emergency Medical Technology
- Radiologic Technology/Science

Bachelor's Degrees

- Emergency Medical Technology
- Medical Insurance Coding

Master's, Doctoral, and Professional Degrees

- Medicine
- Occupational Therapy

Additional Stackable IBCs/License

- Registered Diagnostic Medical Sonographer



Example Aligned Occupations

Medical Assistants

Median Wage: \$36,834
Annual Openings: 11,638
10-Year Growth: 29%

Dental Hygienists

Median Wage: \$79,663
Annual Openings: 1,352
10-Year Growth: 32%

Physician Assistants

Median Wage: \$127,332
Annual Openings: 974
10-Year Growth: 41%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Successful completion of the Diagnostic and Therapeutic Services program of study will fulfill requirements of the Public Services endorsement.

Statewide Program of Study: *Digital Communications- Audio Video Production*



The Digital Communications program of study focuses on occupational 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. The program of study includes operating machines and equipment such as microphones, sound speakers, video screens, projectors, video monitors, sound and mixing boards, and related electronic equipment to record sound and images.

Arts, Audio Visual Technology, and Communication Career Cluster

The Arts, Audio Visual Technology, and Communication (AAVTC) career cluster focuses on designing, producing, exhibiting, performing, writing, and publishing multimedia content requiring creative aptitude, fluency in computer and technology applications, and proficiency in oral and written communication. This career cluster includes occupations ranging from camera operator, audio and video technician, director, and producer to graphic designer and web and digital interface designer.

Secondary Courses for High School Credit

- | | |
|----------------|---|
| Level 1 | <ul style="list-style-type: none"> 8176-Principles of Arts, Audio/Video Technology, and Communications |
| Level 2 | <ul style="list-style-type: none"> 8153-Audio/Video Production I |
| Level 3 | <ul style="list-style-type: none"> 8154-Audio/Video Production II + Audio/Video Production II Lab (2CR) 8189-Audio/Video Production II + Audio/Video Production II Lab D (2CR) |
| Level 4 | <ul style="list-style-type: none"> 8149-Practicum in Audio/Video Production (2CR) TBD-Practicum in Audio/Video Production (2CR) (26-27 SY) 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR) |

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Shadow a sound designer to learn how sound and foley are created for movies or podcasts
- Intern with a technical director at a sports team, recording studio, or radio station
- Shadow a technician on a live news broadcast, concert, or other event

Expanded Learning Opportunities

- Participate in SkillsUSA or TSA
- Participate in Student Television Network
- Capture and edit film and audio for a podcast with a local community organization

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Adobe Certified Professional in Digital Video Using Adobe Premiere Pro



Example Postsecondary Opportunities

Apprenticeships

- Light Technician

Associate Degrees

- Commercial and Advertising Art
- Animation, Interactive Technology, Video Graphics, and Special Effects

Bachelor's Degrees

- Cinematography and Film/Video Production
- Recording Arts Technology

Master's, Doctoral, and Professional Degrees

- Animation, Interactive Technology, Video Graphics, and Special Effects
- Communications Technology

Additional Stackable IBCs/License

- CompTIA Digital Media and Entertainment Professional Certification (DMEP)

Example Aligned Occupations

Camera Operators, Television, Video, and Film

Median Wage: \$48,422
Annual Openings: 155
10-Year Growth: 20%

Audio and Video Technicians

Median Wage: \$46,319
Annual Openings: 626
10-Year Growth: 30%

Producers and Directors

Median Wage: \$65,029
Annual Openings: 522
10-Year Growth: 12%



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

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Statewide Program of Study: Early Learning

The Early Learning program of study focuses on occupational and educational opportunities associated with instructing and supporting preschool and early elementary school students. This program of study addresses social, physical, and intellectual growth and skills necessary for planning, directing, and coordinating activities for young children.

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. This career cluster includes occupations ranging from teaching assistant and classroom teacher to school administrator.



Secondary Courses for High School Credit

Level 1	• 8450-Principles of Human Services
Level 2	• 8452-Child Development
Level 3	• 8461- Child Guidance (2CR) • 8463- Child Guidance D (2CR)
Level 4	• 8464- Practicum in Early Learning (2CR) • 8011- Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.
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Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> • Serve as a summer camp counselor for pre-school or kindergarten students • Serve as a teaching assistant at a lab school or daycare
Expanded Learning Opportunities	<ul style="list-style-type: none"> • Participate in FCCLA • Participate in TAFE

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Educational Aide 1



Example Postsecondary Opportunities

Apprenticeships

- Child Care Development Specialist

Associate Degrees

- Teacher Education, Multiple Levels
- Child Care Provider/Assistant

Bachelor's Degrees

- Elementary Education and Teaching
- Early Childhood and Family Studies

Master's, Doctoral, and Professional Degrees

- Educational Leadership and Administration, General
- Education, General

Additional Stackable IBCs/License

- Certified Child Care Professional



Example Aligned Occupations

Child Care Workers

Median Wage: \$23,528
Annual Openings: 12,823
10-Year Growth: 17%

Preschool Teachers, Except Special Education

Median Wage: \$24,127
Annual Openings: 4,148
10-Year Growth: 26%

Elementary School Teachers, Except Special Education

Median Wage: \$61,389
Annual Openings: 11,712
10-Year Growth: 13%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>

Statewide Program of Study: Engineering Foundations

The Engineering Foundations program of study focuses on occupational and educational opportunities associated with a wide range of skills applied in the Engineering industry. Students will design, test, and evaluate projects related to engines, machines, and structures. This program of study includes applying scientific, mathematical, and empirical evidence to solve problems through innovation, design, construction, operation, and maintenance of different engineering systems.

Engineering Career Cluster

The Engineering career cluster focuses on planning, designing, testing, building, and maintaining of machines, structures, materials, systems, and processes using empirical evidence and science, technology, and math principles. This career cluster includes occupations ranging from mechanical engineer and drafter to electrical engineer and to mapping technician.



Secondary Courses for High School Credit

Level 1	• 8700-Principles of Applied Engineering
Level 2	• 8721-Manufacturing Engineering Technology I
Level 3	• 8701-Engineering Design and Presentation I
Level 4	• 8702-Engineering Design and Presentation II (2CR) • 8727-Practicum in Science, Technology, Engineering, and Mathematics (2CR) • 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

AP	AP Calculus AB AP Computer Science A AP Physics 1 AP Physics 2 AP Statistics
Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> • Intern at an engineering, robotics, or aerospace company. • Visit an engineering firm and shadow multiple types of engineers.
Expanded Learning Opportunities	<ul style="list-style-type: none"> • Participate in SkillsUSA or TSA • Join a local engineering association and attend meetings.

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Autodesk Associate (Certified User) AutoCAD
- Autodesk Associate (Certified User) Fusion 360
- Autodesk Associate (Certified User) Revit for Structural Design
- Certified SOLIDWORKS Associate (CSWA) – Academic
- Certified SOLIDWORKS (CSWP) – Academic

NISD Performance Acknowledgment

- Solidworks Additive Manufacturing



Example Postsecondary Opportunities

Apprenticeships

- Industrial Engineering Technician Apprenticeship

Associate Degrees

- Manufacturing Engineering Technology/Technician
- Robotics Technology/Technician

Bachelor's Degrees

- Electrical and Electronics Engineering
- Engineering, General

Master's, Doctoral, and Professional Degrees

- Electrical and Electronics Engineering
- Engineering, General

Additional Stackable IBCs/Licensures

- Professional Engineer (PE License)
- Engineer in Training Certification (EIT)



Example Aligned Occupations



Civil Engineering Technologists and Technicians

Median Wage: \$61,138
Annual Openings: 765
10-Year Growth: 11%

Aerospace Engineers

Median Wage: \$115,694
Annual Openings: 483
10-Year Growth: 18%

Mechanical Engineers

Median Wage: \$99,937
Annual Openings: 1,755
10-Year Growth: 19%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



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

Statewide Program of Study: *Exercise Science, Wellness, and Restoration*



The Exercise Science, Wellness, and Restoration program of study focuses on occupational and educational opportunities associated with assisting patients with maintaining physical, mental, and emotional health. This program of study includes researching diet and exercise needed to maintain a healthy, balanced lifestyle and exploring techniques to help patients recover from injury, illness, or disease.

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. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8431-Principles of Exercise Science and Wellness
Level 2	<ul style="list-style-type: none"> 8386-Kinesiology I
Level 3	<ul style="list-style-type: none"> 8360-Anatomy and Physiology 8379-Anatomy and Physiology H 8376-Anatomy and Physiology D
Level 4	<ul style="list-style-type: none"> 8388-Kinesiology II 8011-Career Preparation for Programs of Study + Extended Career Preparation

Recommended Aligned Advanced Academic Courses

AP	AP Biology	AP Chemistry
Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.	

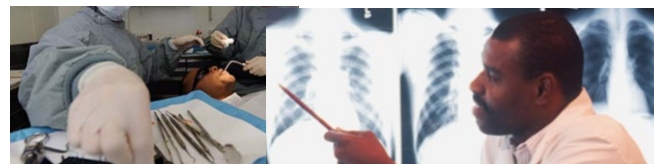
Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility Participate in job shadowing experiences such as Emergency Medical Services (EMS) ride along or hospital/clinical job
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in HOSA-Future Health Professionals or SkillsUSA Participate in Advanced Medical Ambulance Bus (AMBUS) event or Community Emergency Response Team (CERT) event

NISD Aligned Industry-Based Certifications

TEA A-F Recognized IBC

- AAFCS Pre-Professional Nutrition, Food, & Wellness



Example Postsecondary Opportunities

Apprenticeships

- Medical Assistant

Associate Degrees

- Associate of Applied Science

Bachelor's Degrees

- Nutrition Sciences
- Exercise Physiology and Kinesiology

Master's, Doctoral, and Professional Degrees

- Exercise Science and Kinesiology
- Physical Therapy

Additional Stackable IBCs/License

- Physical Therapy Technician/Aide Certification



Example Aligned Occupations



Exercise Trainers and Group Fitness Instructors

Median Wage: \$44,916
Annual Openings: 5,022
10-Year Growth: 41%

Physical Therapist Assistants

Median Wage: \$74,866
Annual Openings: 1,218
10-Year Growth: 44%

Athletic Trainers

Median Wage: \$54,447 Annual Openings: 295
10-Year Growth: 13%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>

Statewide Program of Study: *Graphic Design & Interactive Media* -

Animation

The Graphic Design and Interactive Media program of study focuses on occupational and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. The program of study includes 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.

Arts, Audio Visual Technology, and Communication Career Cluster

The Arts, Audio Visual Technology, and Communication (AAVTC) career cluster focuses on designing, producing, exhibiting, performing, writing, and publishing multimedia content requiring creative aptitude, fluency in computer and technology applications, and proficiency in oral and written communication. This career cluster includes occupations ranging from camera operator, audio and video technician, director, and producer to graphic designer and web and digital interface designer.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8176-Principles of Arts, Audio/Video Technology, and Communications
Level 2	<ul style="list-style-type: none"> 8151-Animation I
Level 3	<ul style="list-style-type: none"> 8152-Animation II + Animation II Lab (2CR)
Level 4	<ul style="list-style-type: none"> 8167-Practicum in Animation (2CR) 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.
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Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Shadow an art director at a branding firm or design agency Intern in the marketing and communications department of a technology company
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in SkillsUSA or TSA Participate in Student Television Network Join a related co-curricular or extracurricular club such as web development or computer coding

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator
- Adobe Certified Professional In Visual Effects and Motion Graphics Using Adobe After Effects
- Adobe Certified Professional in Digital Video Using Adobe Premiere Pro

NISD Performance Acknowledgement

- Autodesk Certified User - Maya



Example Postsecondary Opportunities

Associate Degrees

- Graphic Design
- Digital Arts



Bachelor's Degrees

- Web Page, Digital/Multimedia and Information Resources Design
- Design and Visual Communications

Master's, Doctoral, and Professional Degrees

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

Additional Stackable IBCs/License

- Certified Textile Designer (CTD)



Example Aligned Occupations

Software Developers

Median Wage: \$111,705
Annual Openings: 15,324
10-Year Growth: 36%

Graphic Designers

Median Wage: \$50,973
Annual Openings: 1,766
10-Year Growth: 10%

Art Directors

Median Wage: \$81,926
Annual Openings: 619
10-Year Growth: 18%



Successful completion of the *Graphic Design and Interactive Media* program of study will fulfill requirements of the *Business and Industry* endorsement.

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>

Statewide Program of Study: *Graphic Design & Interactive Media* -



Commercial Photography

The Graphic Design and Interactive Media program of study focuses on occupational and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. The program of study includes 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.

Arts, Audio Visual Technology, and Communication Career Cluster

The Arts, Audio Visual Technology, and Communication (AAVTC) career cluster focuses on designing, producing, exhibiting, performing, writing, and publishing multimedia content requiring creative aptitude, fluency in computer and technology applications, and proficiency in oral and written communication. This career cluster includes occupations ranging from camera operator, audio and video technician, director, and producer to graphic designer and web and digital interface designer.



Secondary Courses for High School Credit

- | | |
|---------|---|
| Level 1 | • 8176-Principles of Arts, Audio/Video Technology, and Communications |
| Level 2 | • 8158-Commercial Photography I |
| Level 3 | • 8159-Commercial Photography II (2CR) |
| Level 4 | • 8188-Practicum in Commercial Photography (2CR)
• 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR) |

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Shadow an art director at a branding firm or design agency
- Intern in the marketing and communications department of a technology company

Expanded Learning Opportunities

- Participate in SkillsUSA or TSA
- Participate in Student Television Network
- Join a related co-curricular or extracurricular club such as web development or computer coding

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- Adobe Certified Professional in Graphic Design and Illustration Using Adobe Illustrator



Example Postsecondary Opportunities

Associate Degrees

- Graphic Design
- Digital Arts



Bachelor's Degrees

- Web Page, Digital/Multimedia and Information Resources Design
- Design and Visual Communications

Master's, Doctoral, and Professional Degrees

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

Additional Stackable IBCs/License

- Certified Textile Designer (CTD)



Example Aligned Occupations

Software Developers

Median Wage: \$111,705
Annual Openings: 15,324
10-Year Growth: 36%

Graphic Designers

Median Wage: \$50,973
Annual Openings: 1,766
10-Year Growth: 10%

Art Directors

Median Wage: \$81,926
Annual Openings: 619
10-Year Growth: 18%



Successful completion of the *Graphic Design and Interactive Media* program of study will fulfill requirements of the Business and Industry endorsement.

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>

Statewide Program of Study: Graphic Design & Interactive Media - Fashion



Design

The Graphic Design and Interactive Media program of study focuses on occupational and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. The program of study includes 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.

Arts, Audio Visual Technology, and Communication Career Cluster

The Arts, Audio Visual Technology, and Communication (AAVTC) career cluster focuses on designing, producing, exhibiting, performing, writing, and publishing multimedia content requiring creative aptitude, fluency in computer and technology applications, and proficiency in oral and written communication. This career cluster includes occupations ranging from camera operator, audio and video technician, director, and producer to graphic designer and web and digital interface designer.



Secondary Courses for High School Credit

- | | |
|---------|---|
| Level 1 | • 8183-Principles of Arts, Audio/Video Technology, and Communications- Fashion |
| Level 2 | • 8160-Fashion Design I |
| Level 3 | • 8161-Fashion Design II + Fashion Design II Lab (2CR) |
| Level 4 | • 8162-Practicum in Fashion Design (2CR)
• 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR) |

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Shadow an art director at a branding firm or design agency
- Intern in the marketing and communications department of a technology company

Expanded Learning Opportunities

- Participate in SkillsUSA or TSA
- Participate in Student Television Network
- Join a related co-curricular or extracurricular club such as web development or computer coding

NISD Aligned Industry-Based Certifications (IBC)

NISD Performance Acknowledgement

- National Retail Federation Foundation– Business of Retail
- National Retail Federation Foundation– Retail of Industry Fundamentals
- Retail Merchandising – Job Ready (NOCTI 440)



Example Postsecondary Opportunities

Associate Degrees

- Graphic Design
- Digital Arts



Bachelor's Degrees

- Web Page, Digital/Multimedia and Information Resources Design
- Design and Visual Communications

Master's, Doctoral, and Professional Degrees

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

Additional Stackable IBCs/License

- Certified Textile Designer (CTD)



Example Aligned Occupations

Software Developers

Median Wage: \$111,705
Annual Openings: 15,324
10-Year Growth: 36%

Graphic Designers

Median Wage: \$50,973
Annual Openings: 1,766
10-Year Growth: 10%

Art Directors

Median Wage: \$81,926
Annual Openings: 619
10-Year Growth: 18%



Successful completion of the Graphic Design and Interactive Media program of study will fulfill requirements of the Business and Industry endorsement.

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>

Statewide Program of Study: *Graphic Design & Interactive Media* –



Graphic Design

The Graphic Design and Interactive Media program of study focuses on occupational and educational opportunities associated with designing or creating graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. The program of study includes 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.

Arts, Audio Visual Technology, and Communication Career Cluster

The Arts, Audio Visual Technology, and Communication (AAVTC) career cluster focuses on designing, producing, exhibiting, performing, writing, and publishing multimedia content requiring creative aptitude, fluency in computer and technology applications, and proficiency in oral and written communication. This career cluster includes occupations ranging from camera operator, audio and video technician, director, and producer to graphic designer and web and digital interface designer.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8176-Principles of Arts, Audio/Video Technology, and Communications
Level 2	<ul style="list-style-type: none"> 8155-Graphic Design and Illustration I 8197 Graphic Design and Illustration I D
Level 3	<ul style="list-style-type: none"> 8156-Graphic Design and Illustration II + Graphic Design and Illustration II Lab (2CR) 8198-Graphic Design and Illustration II + Graphic Design and Illustration II Lab D (2CR) (26-27 SY)
Level 4	<ul style="list-style-type: none"> 8157-Practicum in Graphic Design and Illustration (2CR) 8199-Practicum in Graphic Design and Illustration D (2CR) (27-28 SY) 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.
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Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Shadow an art director at a branding firm or design agency Intern in the marketing and communications department of a technology company
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in SkillsUSA or TSA Participate in Student Television Network Join a related co-curricular or extracurricular club such as web development or computer coding

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Adobe Certified Professional in Visual Design Using Adobe Photoshop
- 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 Effects and Motion Graphics Using Adobe After Effects



Example Postsecondary Opportunities

Associate Degrees

- Graphic Design
- Digital Arts



Bachelor's Degrees

- Web Page, Digital/Multimedia and Information Resources Design
- Design and Visual Communications

Master's, Doctoral, and Professional Degrees

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

Additional Stackable IBCs/License

- Certified Textile Designer (CTD)



Example Aligned Occupations

Software Developers

Median Wage: \$111,705
Annual Openings: 15,324
10-Year Growth: 36%

Graphic Designers

Median Wage: \$50,973
Annual Openings: 1,766
10-Year Growth: 10%

Art Directors

Median Wage: \$81,926
Annual Openings: 619
10-Year Growth: 18%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



Successful completion of the *Graphic Design and Interactive Media* program of study will fulfill requirements of the *Business and Industry* endorsement.



Statewide Program of Study: Health and Wellness

The Health and Wellness program of study focuses on occupational and educational opportunities associated with promoting physical, emotional, and mental health and wellness. This program of study includes assisting patients in planning for their health and wellness, responding to crises, providing education or counseling, making referrals, and addressing barriers to accessing health and wellness services.

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. This career cluster includes occupations ranging from community health workers to cosmetologists and nutritionists.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8459- Principles of Human Services (Middle School) 8450 –Principles of Human Services (High School)
Level 2	<ul style="list-style-type: none"> 8448- Lifetime Nutrition and Wellness (.5CR) AND 8452- Interpersonal Studies (.5 CR)
Level 3	<ul style="list-style-type: none"> 8449- Applied Nutrition and Dietetics
Level 4	<ul style="list-style-type: none"> 8430 Food Science 8458 Practicum in Human Services (2 CR) 8011 Career Preparation for Programs of Study + Extended Career Preparation

Recommended Aligned Advanced Academic Courses

Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.
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Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Shadow a dietician in a local hospital or nursing home to learn about tailoring diets to patient needs Work part-time as a peer counselor at a community non-profit organization that works with children Intern at a non-profit organization to learn about identifying resources to serve needs of participants
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in FCCLA

NISD Aligned Industry-Based Certifications

TEA A-F Recognized IBC

- Pre-Professional Certification in Nutrition, Food, and Wellness



Example Postsecondary Opportunities

Apprenticeships

- Community Health Worker Apprentice

Associate Degrees

- Social Work
- Community Health Services Counseling

Bachelor's Degrees

- Social Work
- Mental Health Counseling

Master's, Doctoral, and Professional Degrees

- Nutrition Sciences
- Dietetics

Additional Stackable IBCs/License

- Dietician



Example Aligned Occupations

Community Health Workers

Median Wage: \$39,520
Annual Openings: 501
10-Year Growth: 25%

Dietetic Technician

Median Wage: \$28,919
Annual Openings: 160
10-Year Growth: 18%

Dietitians and Nutritionists

Median Wage: \$63,687
Annual Openings: 475
10-Year Growth: 21%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



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

Statewide Program of Study: Law Enforcement



The Law Enforcement program of study focuses on occupational and educational opportunities associated with the development and enforcement of laws by various branches of law enforcement. This program of study includes the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.

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. This career cluster includes occupations ranging from police officer and firefighter to political scientist and lawyer.



Secondary Courses for High School Credit

- | | |
|---------|--|
| Level 1 | <ul style="list-style-type: none"> 8550-Principles of Law, Public Safety, Corrections, and Security 8571-Principles of Law, Public Safety, Corrections, and Security D |
| Level 2 | <ul style="list-style-type: none"> 8554-Criminal Investigation |
| Level 3 | <ul style="list-style-type: none"> 8552-Law Enforcement I 8553-Forensic Science |
| Level 4 | <ul style="list-style-type: none"> 8556-Law Enforcement II 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR) |

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Shadow a detective to learn about investigations and the role of detectives in law enforcement
- Intern in dispatch at a local law enforcement agency to learn about first responder roles and processes

Expanded Learning Opportunities

- Visit a police department
- Participate in TSA or SkillsUSA

NISD Aligned Industry-Based Certifications

TEA A-F Recognized IBC

- Non-Commissioned Security Officer Level II License



Example Postsecondary Opportunities

- ### Apprenticeships
- Security Specialist

- ### Associate Degrees
- Criminal Justice
 - Law Enforcement

- ### Bachelor's Degrees
- Forensic Science
 - Criminal Justice

- ### Master's, Doctoral, and Professional Degrees
- Criminal Justice
 - Criminology and Criminal Justice

- ### Additional Stackable IBCs/Licensures
- Jailer – Basic County Corrections
 - Basic Telecommunicator

Example Aligned Occupations

Police and Sheriff's Patrol Officers

Median Wage: \$64,373
Annual Openings: 5,424
10-Year Growth: 13%

Detectives and Criminal Investigators

Median Wage: \$82,090
Annual Openings: 1,536
10-Year Growth: 8%

First-Line Supervisors of Police and Detectives

Median Wage: \$97,571
Annual Openings: 5,461
10-Year Growth: 12%



Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>

Statewide Program of Study: *Marketing and Sales*

The Marketing and Sales program of study focuses on occupational and educational opportunities associated with collecting information to estimate potential sales of a product or service and create campaigns to market or distribute goods and services. It includes applying data related to customer demographics, preferences, needs, and buying habits.

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. This career cluster includes occupations ranging from business owner and entrepreneur to accountant, retail manager, and market analyst.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8206-Principles of Business, Marketing, and Finance
Level 2	<ul style="list-style-type: none"> 8219-Marketing
Level 3	<ul style="list-style-type: none"> 8655-Sports and Entertainment Marketing (.5CR) 8224-Social Media Marketing (.5CR)
Level 4	<ul style="list-style-type: none"> 8657-Practicum in Marketing (2CR) 8011-Career Preparation for Programs of Study + Extended Career Preparation

Recommended Aligned Advanced Academic Courses

AP or IB	AP Statistics
Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Intern at a marketing and advertising company Job shadow a pharmaceutical sales representative Intern at a local retail company
Expanded Learning Opportunities	<ul style="list-style-type: none"> Job shadow an account representative at a marketing firm Participate in BPA, DECA, FBLA, or related UIL events

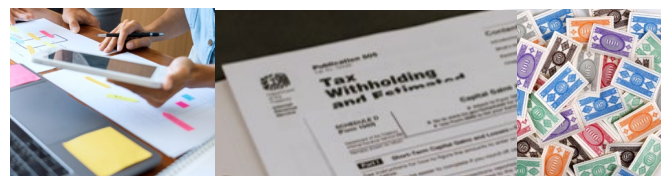
NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Business of Retail: Certified Specialist
- Student Social Media Marketing Certification
- Retail Merchandising - Job Ready
- Customer Service and Sales: Certified Specialist

NISD Performance Acknowledgement

- Microsoft Office Specialist: Microsoft PowerPoint
- Microsoft Office Specialist: Microsoft Word



Example Postsecondary Opportunities

Associate Degrees

- Marketing/Marketing Management
- Retail Management



Bachelor's Degrees

- Business Administration
- Marketing/Marketing Management
- Fashion Merchandising

Master's, Doctoral, and Professional Degrees

- Business Administration
- Applied Economics
- Business Analytics

Additional Stackable IBCs/License

- Salesforce
- Service Contract Providers



Example Aligned Occupations

Retail Salespersons

Median Wage: \$28,356
Annual Openings: 56,132
10-Year Growth: 15%

Market Research Analysts

Median Wage: \$60,926
Annual Openings: 5,688
10-Year Growth: 35%

Sales Managers

Median Wage: \$123,729
Annual Openings: 3,368
10-Year Growth: 21%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



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

Statewide Program of Study: Programming and Software Development

The Programming and Software Development program of study focuses on occupational and educational opportunities associated with researching, designing, developing, testing, and 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 includes creating, modifying, and testing the codes, forms, and script that allow computer applications to run.

Information Technology Career Cluster

The Information Technology (IT) career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from Software Developer and Programmer to Cybersecurity Specialists and Network Analysts.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 7104-AP Computer Science Principles OR 7320-OnRamps Computer Science
Level 2	<ul style="list-style-type: none"> 7110-Advanced Computer Science I
Level 3	<ul style="list-style-type: none"> 7214/5970-AP Computer Science A MATH/LOTE (2CR) OR 7210-Computer Science II H
Level 4	<ul style="list-style-type: none"> 7310-Computer Science III 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

AP or IB	AP Calculus AB AP Statistics
Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Intern at a local IT company to develop skills in programming and coding Shadow a software developer to learn how they create and improve software to support efficient processes at their company
Expanded Learning Opportunities	<ul style="list-style-type: none"> Program and create a game Participate in SkillsUSA or TSA

NISD Aligned Industry-Based Certifications

TEA A-F Recognized IBC

- Information Technology Specialist: Java
- Information Technology Specialist: Javascript

NISD Performance Acknowledgement

- Information Technology Specialist: Python

Successful completion of the Programming and software development program of study with junior requirements of the STEM endorsement if the math and science requirements are met or the Business and Industry endorsement.



Example Postsecondary Opportunities

Apprenticeships

- Computer Programmer Apprenticeship

Associate Degrees

- Computer Programming
- Web Page, Digital/Multimedia and Information Resources Design

Bachelor's Degrees

- Data Science
- Computer Engineering

Master's, Doctoral, and Professional Degrees

- Management Science
- Computer Software Engineering

Additional Stackable IBCs/License

- AWS Certified Developer Associate



Example Aligned Occupations

Computer User Support Specialists

Median Wage: \$51,411
Annual Openings: 5,757
10-Year Growth: 21%

Software Developers

Median Wage: \$111,705
Annual Openings: 15,324
10-Year Growth: 36%

Computer Programmers

Median Wage: \$87,997
Annual Openings: 1,176
10-Year Growth: 4%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>





Statewide Program of Study: Renewable Energy

The Renewable Energy program of study focuses on occupational and educational opportunities associated with assembling, inspecting, maintaining, and repairing different equipment required for renewable energy. This program of study includes exploration of solar photovoltaic equipment and wind turbines and the systems and processes used to maintain and manage these types of equipment.

Energy Career Cluster

The Energy career cluster prepares individuals for careers in the designing, processing, planning, maintaining, generating, transmission, and distribution of traditional and alternative energy. This career cluster includes occupations ranging from petroleum engineers, rotary drill operators, chemical technicians, and power plant operators to solar photovoltaic installers and wind turbine service technicians.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8700-Principles of Applied Engineering
Level 2	<ul style="list-style-type: none"> 8744-AC/DC Electronics
Level 3	<ul style="list-style-type: none"> 8745-Solid State Electronics
Level 4	<ul style="list-style-type: none"> 8746-Practicum in Science, Technology, Engineering, and Mathematics (2CR) 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

AP	<ul style="list-style-type: none"> AP Physics 1 IB Physics
Dual Credit	<p>Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.</p>

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Shadow a wind turbine service technician at a wind farm to learn about maintaining wind turbine equipment Intern at a solar power company and engage in planning for a solar roof installation in your community
Expanded Learning Opportunities	<ul style="list-style-type: none"> Tour a wind turbine or solar farm Participate in SkillsUSA

NISD Aligned Industry-Based Certifications (IBC)



Example Postsecondary Opportunities

Associate Degrees

- Electrical, Electronic, and Communications Engineering Technology/Technician
- Instrumentation Technology/Technician
- Energy Systems Technology/Technician
- Solar Energy Technology/Technician



Bachelor's Degrees

- Electrical and Electronics Engineering
- Energy Systems Technology/Technician
- Mechanical/Mechanical Engineering Technology/Technician
- Electromechanical/Electromechanical Engineering Technology/Technician

Master's, Doctoral, and Professional Degrees

- Electrical and Electronics Engineering
- Construction Engineering
- Construction Management, General



Example Aligned Occupations

Electric and Electronic Engineering Technologists and Technicians

Median Wage: \$62,968
Annual Openings: 1,156
10-Year Growth: 14%

Wind Turbine Service Technicians

Median Wage: \$56,641
Annual Openings: 397
10-Year Growth: 102%

Electrical Engineers

Median Wage: \$102,534
Annual Openings: 1,271
10-Year Growth: 21%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



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



Statewide Program of Study: Teaching and Training

The Teaching and Training program of study focuses on occupational and educational opportunities associated with careers related to teaching, instructing, and creating instructional and enrichment materials. The program of study includes recognizing a variety of student groups and their corresponding needs, identifying processes for developing curriculum and coordinating educational content, and coaching groups and individuals.

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. This career cluster includes a diverse spectrum of occupations, ranging from teaching assistant, classroom teacher, to school administrator.



Secondary Courses for High School Credit

- Level 1** • 8450- Principles of Human Services
- Level 2** • 8462 -Child Development
- Level 3** • 8252-Instructional Practices (2CR)
- Level 4** • 8253 -Practicum in Education and Training (2CR)
• 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Serve as a camp counselor to learn mentoring, facilitation, and lesson planning skills
- Volunteer in a tutoring center to learn lesson planning and skills assessment

Expanded Learning Opportunities

- Participate in FCCLA
- Participate in TAFE

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Educational Aide 1



Example Postsecondary Opportunities

Apprenticeships

- Teacher Apprentice

Associate Degrees

- Adult and Continuing Education and Teaching
- Educational/Instructional Technology

Bachelor's Degrees

- Elementary Education and Teaching
- Secondary Education and Teaching

Master's, Doctoral, and Professional Degrees

- Educational Leadership and Administration, General
- Curriculum and Instruction

Additional Stackable IBCs/License

- Generalist, Grades EC-4

Example Aligned Occupations



Teaching Assistants, Except Postsecondary

Median Wage: \$28,066
Annual Openings: 10,000
10-Year Growth: 15%

Secondary School Teachers, Except Special Education and CTE

Median Wage: \$61,035
Annual Openings: 8,288
10-Year Growth: 14%

Education Administrators, Kindergarten through Secondary

Median Wage: \$81,976
Annual Openings: 2,676
10-Year Growth: 14%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



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

Statewide Program of Study: Web Development



The Web Development program of study focuses on occupational and educational opportunities associated with designing, creating, and modifying websites. It includes integration of websites with other computer applications and conversion of written, graphic, audio, and video components to compatible web formats using software designed to facilitate the creation of web and multimedia content.

Information Technology Career Cluster

The Information Technology (IT) career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes ranging from Software Developer and Programmer to Cybersecurity Specialists and Network Analysts. occupations



Secondary Courses for High School Credit

Level 1	• 8500-Principles of Information Technology
Level 2	• 8626-Web Design • 8626ADV-Web Design (2028 Graduates ONLY)
Level 3	• 8519-Web Game Development • 8510-Practicum in Information Technology – Web Development (2CR)
Level 4	• 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

AP	AP Computer Science A AP Computer Science Principles
Dual Credit	Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

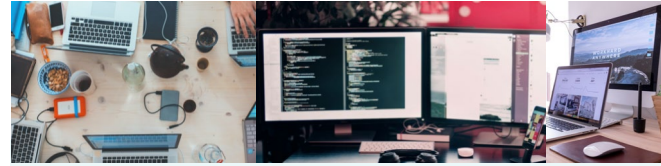
Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> • Intern at a nonprofit or small business to support developing or updating their website and digital media • Shadow a web designer to learn about how they developed their digital design skills and what factors they consider when developing a website
Expanded Learning Opportunities	<ul style="list-style-type: none"> • Create a website • Participate in SkillsUSA or TSA

NISD Aligned Industry-Based Certifications (IBC)

TEA A-F Recognized IBC

- Certified Web and Mobile App Developer Apprentice



Example Postsecondary Opportunities

Associate Degrees

- Web Page, Digital/Multimedia and Information Resources Design
- Web/Multimedia Management



Bachelor's Degrees

- Computer and Information Sciences
- Information Technology

Master's, Doctoral, and Professional Degrees

- Computer and Information Sciences
- Computer Software Engineering

Additional Stackable IBCs/License

- HTML Developer



Example Aligned Occupations

Web Developers

Median Wage: \$77,712
Annual Openings: 1,170
10-Year Growth: 24%

Software Developers

Median Wage: \$111,705
Annual Openings: 15,324
10-Year Growth: 36%

Computer and Information Systems Managers

Median Wage: \$155,593
Annual Openings: 3,064
10-Year Growth: 26%



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

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>

Statewide Program of Study: Welding

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.

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 process engineering. This career cluster includes occupations ranging from welder and machinist to industrial engineering technician and semiconductor processing technician.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> 8601-Introduction to Welding
Level 2	<ul style="list-style-type: none"> 8613-Welding I (2CR) 8614-Welding I D (2CR)
Level 3	<ul style="list-style-type: none"> 8615-Welding II (2CR) 8617-Welding II D (2CR)
Level 4	<ul style="list-style-type: none"> 8616-Practicum in Manufacturing (2CR) 8618-Practicum in Manufacturing D (2CR) 8011-Career Preparation for Programs of Study + Extended Career Preparation (3CR)

Recommended Aligned Advanced Academic Courses

Dual Credit

Various academic Dual Credit offered in Math, Science, Social Studies, English, World Languages, and Fine Arts. Check with your campus for availability.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Job shadow a welder
- Intern for a local welding company

Expanded Learning Opportunities

- Tour a welding shop
- Participate in SkillsUSA or TSA
- Participate in a welding project that benefits the community

NISD Aligned Industry-Based Certifications IBC

TEA A-F Recognized IBC

- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding

NISD Performance Acknowledgement

- OSHA 10 Hour

Example Postsecondary Opportunities

Apprenticeships

- Welding

Associate Degrees

- Welding Technology
- Building/Construction Site Management
- Operations Management and Supervision

Bachelor's Degrees

- Welding Technology
- Construction Management
- Project Management
- Building/Construction Site Management

Master's, Doctoral, and Professional Degrees

- Engineering
- Engineering/Industrial Management
- Manufacturing Engineering
- Construction Engineering

Example Aligned Occupations

Welders, Cutters, Solderers, and Brazers

Median Wage: \$48,177
Annual Openings: 6,792
10-Year Growth: 23%

First-Line Supervisors of Production and Operating Workers

Median Wage: \$62,584
Annual Openings: 5,926
10-Year Growth: 17%

Industrial Production Managers

Median Wage: \$119,691
Annual Openings: 1,296
10-Year Growth: 19%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>