Accounting & Financial Services





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.

NISD Secondary Courses for High School Credit

Level 1

Principles of Business, Marketing, and Finance #8206

Level 2

Money Matters #8307

Level 3

Accounting I #8310

Level 4

- Securities and Investments #8315
- Career Preparation I #8009

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	Work-Based Learning Activities
 Participate in Business Professionals of America, Future Business Leaders of America, or DECA 	 Intern with a local accounting firm Earn Microsoft Office certifications

NISD Industry-Based Certifications (A-F)

- Microsoft Office Specialist: Microsoft Excel Expert
- Quickbooks

NISD Performance Acknowledgment

- Microsoft Office Specialist: PowerPoint
- Microsoft Office Specialist: Word
- · Microsoft Office Specialist: Excel

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%

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



Architectural Drafting & Design





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.

NISD Secondary Courses for High School Credit

Level 1

Principles of Architecture #8098

Level 2

Architectural Design I #8104

Level 3

Architectural Design II (2CR) #8106

Level 4

- Practicum in Architectural Design (2CR) #8127
- Career Preparation I #8009

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
 Shadow an architect, interior designer or civil engineer Participate in SkillsUSA 	Intern at an architectural firm

NISD Industry-Based Certifications (A-F)

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

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%

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. 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



Automotive & Collision Repair





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.

NISD Secondary Courses for High School Credit

Level 1

Principles of Transportation Systems #8759

Level 2

- Automotive Basics #8766 OR
- Basic Collision Repair and Refinishing #8765 (Jay & Holmes HS ONLY)

Level 3

- Automotive Technology I #8752 (2CR) OR
- Collision Repair/Lab #8754 (2CR) (Jay & Holmes HS ONLY)

Level 4

- Automotive Technology II/Lab #8753 (2CR) OR
- Paint and Refinishing/Lab #8756 (2CR) (Jay & Holmes HS ONLY)
- Career Preparation I 8009 (3CR)

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

Aligned Occupations

Work-E	Based Lea	arning and
Expanded I	Learning	Opportunities

Exploration Activities	Work-Based Learning Activities
Join SkillsUSA or the Automotive Service Association	 Work at a local automotive repair or body shop

NISD Industry-Based Certifications (A-F)

- ASE Entry Level Automobile
- ASE Entry Level Collision
- ASE Refrigerant & Recovery

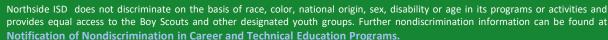
NISD Performance Acknowledgment

Alldata Information Specialist

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%

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





Business Management





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.

NISD Secondary Courses for High School Credit

Level 1

Principles of Business, Marketing, and Finance #8206

Level 2

• Business Information Management I #8216

Level 3

Business Management #8227, Dual Credit #8226

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- Practicum in Business Management (2CR) #8229
- Career Preparation I (3CR) #8009

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	Work-Based Learning Activities
Participate in Business Professional of America, Future Business Leaders of America, or DECA	Intern with a local business or chamber of commerce

NISD Industry-Based Certifications (A-F)

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

NISD Performance Acknowledgment

Microsoft Office Specialist: PowerPoint

Microsoft Office Specialist: Excel

· Microsoft Office Specialist: Word

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%

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



Carpentry





The Carpentry program of study explores the occupations and educational opportunities related to constructing, installing, or repairing structures and fixtures made of wood, such as concrete forms (including frameworks, partitions, joists, studding, rafters, and stairways). This program of study may also include exploration into installing, dismantling, or moving machinery and heavy equipment according to layout plans, blueprints, or other drawings.

NISD Secondary Courses for High School Credit

Level 1

Principles of Construction #8099

Level 2

Construction Science (Principles of Architecture) #8139

Level 3

- Construction Technology I (2CR) #8111
- Construction Technology I D (2CR) #8181

Level 4

- Construction Technology II (2CR) #8112
- Construction Technology II D (2CR) #8187
- Career Preparation I (3CR) #8009

Postsecondary Opportunities

Associates Degrees

- Carpentry/Carpenter
- Industrial Mechanics and Maintenance Technology

Bachelor's Degrees

Construction Science

Master's, Doctoral, and Professional Degrees

Construction Management

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
 Shadow a carpenter or millwright Participate in SkillsUSA 	Obtain an NCCER certification in Millwright Level 1 or Carpentry Level 1

NISD Industry-Based Certifications (A-F)

- HBI Pre-Apprenticeship Certificate Training (PACT), Basic Carpentry
- HBI Pre-Apprenticeship Certificate Training (PACT), Core

NISD Performance Acknowledgement

OSHA 10 Construction Industry



Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Carpenters	\$35,922	5,031	26%
Cost Estimators	\$63,939	2,239	21%

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



Cosmetology & Personal Care Services





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.

NISD Secondary Courses for High School Credit

Level 1

N/A

Level 2

- Introduction to Cosmetology (FALL 2CR) #8469
- Principles of Cosmetology Design and Color Theory Esthetics (SPRING 2CR) #8473

Level 3

Cosmetology I/Lab (2CR) #8470

Level 4

Cosmetology II/Lab (2CR) #8471

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
Participate in TIVA or SkillsUSA	 Job shadow a cosmetologist Work part-time at a salon, spa, or barbershop

NISD Industry-Based Certifications (A-F)

· Cosmetology Operator 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, Hair Stylists, 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%

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

Northside ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities





Culinary Arts





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.

NISD Secondary Courses for High School Credit

Level 1

Introduction to Culinary Arts #8422

Level 2

- Culinary Arts (2CR) #8420
- Culinary Arts D (2CR) #8423

Level 3

- Advanced Culinary Arts (2CR) #8424
- Advanced Culinary Arts D (2CR) #8427

Level 4

- Food Science #8430
- Practicum in Culinary Arts (2CR) #8421
- Practicum in Culinary Arts D (2CR) #8428

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	Work-Based Learning Activities
 Participate in Family, Career, and Community Leaders of America, SkillsUSA, American Culinary Federation, or the Texas Restaurant Association 	 Plan a catering event or work for a catering company Participate in a cooking course Work in a restaurant

NISD Industry-Based Certifications (A-F)

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

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



Cybersecurity





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.

NISD Secondary Courses for High School Credit

Level 1

Principles of Information Technology #8500

Level 2

· Foundations of Cybersecurity #8546

Level 3

Networking #8542

Level 4

Cybersecurity Capstone #8547

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 Work-Based Learning Activities Obtain a cybersecurity IBC

NISD Industry-Based Certifications (A-F)

- CompTIA: A+
- CompTIA: IT Fundamentals
- CompTIA: Network+
- CompTIA Security+

information

security analyst

IT Specialist Networking

NISD Performance Acknowledgment

CompTIA: PenTest+

IT Specialist: Network Security



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%

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



Diagnostic and Therapeutic Services





The Diagnostic and Therapeutic Services program of study introduces students to occupations and education opportunities related to diagnosing and treating chronic or acute illness, and 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 providing treatment to patients, to include rehabilitative programs, and testing in clinical laboratories, radiologic technologies and ultrasound technologies.

NISD Secondary Courses for High School Credit

Level 1

Principles of Health Science #8352

Level 2

Medical Terminology #8358, Dual Credit #8399

Level 3

- Health Science Theory/Clinical (2CR) #8357 OR
- Health Science Theory #8356
- Anatomy and Physiology #8380, Honors #8379, Dual Credit #8376
- Medical Microbiology #8361

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- Practicum in Health Science Phlebotomy & EKG (2CR) #8363 OR
- Practicum in Health Science Medical Assistant #8373 OR
- Practicum in Health Science Patient Care Technician #8369 OR
- Pharmacology #8350

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
Participate in Health Occupation Students of America	Perform clinical rotations at a community wellness center, hospital, assisted living, nursing home

Postsecondary Opportunities

Associates Degrees

- Dental Hygienist
- Medical/Clinical Assistant
- Nuclear Medical Technology/Technologist

Bachelor's Degrees

- Dental Hygienist
- Medical Radiologic Technology/Science Radiation Therapist

Master's, Doctoral, and Professional Degrees

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

NISD Industry-Based Certifications (A-F)

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

NISD Performance Acknowledgement

Basic Life Support (BLS) Provider

Aligned Occupations

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

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. 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

Diagnostic & Therapeutic Services - EMT





The Diagnostic and Therapeutic Services program of study introduces students to occupations and education opportunities related to diagnosing and treating chronic or acute illness, and 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 providing treatment to patients, to include rehabilitative programs, and testing in clinical laboratories, radiologic technologies and ultrasound technologies.

NISD Secondary Courses for High School Credit

Level 1

Principles of Health Science #8352

Level 2

Medical Terminology #8358, Dual Credit #8399

Level 3

- Health Science Theory EMT # 8664 AND
- Anatomy and Physiology #8380, Honors #8379, Dual Credit #8376

Level 4

Emergency Medical Technician - Basic (2CR) #8563

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	Work-Based Learning Activities
 Attend local emergency awareness events Join the Texas Public Service Association 	Volunteer at a hospital or a fire station

NISD Industry-Based Certifications

- Emergency Medical Technician Basic (EMT B)
- Emergency Medical Responder (EMR)



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%

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



Digital Communications - Audio Video Production





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.

NISD Secondary Courses for High School Credit

Level 1

 Principles of Arts, A/V Technology, and Communications #8176, Dual Credit #8184

Level 2

Audio/Video Production I #8153

Level 3

 Audio/Video Production II/Lab (2CR) #8154, Dual Credit #8189

Level 4

Practicum of Audio/Video Production (2CR) #8149

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	Work-Based Learning Activities
 Shadow a production team Participate in SkillsUSA or TSA 	 Intern at a local television station or video production company Work with a local company on a project

NISD Industry-Based Certifications (A-F)

- Adobe Certified Professional: After Effects
- Adobe Certified Professional: Photoshop
- Adobe Certified Professional: Premiere Pro



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%

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



Early Learning





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.

NISD Secondary Courses for High School Credit

Level 1

- Principles of Human Services #8459 (Middle School)
- Principles of Human Services #8450 (High School)

Lovel 2

Child Development #8462

Level 3

- Child Guidance (2CR) #8461
- Child Guidance D (2CR) #8463

Level 4

- Practicum in Early Learning (2CR) #8464
- Career Preparation I (3CR) #8009

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	Work-Based Learning Activities
 Participate in the Texas Association of Future Educators or Family, Career, and Community Leaders of America 	 Teach a community education class Volunteer as a teaching assistant

NISD Industry-Based Certifications (A-F)

- Early Childhood Education and Care Basic
- Educational Aide I







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%

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



Engineering Foundations





The Engineering Foundations 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.

NISD Secondary Courses for High School Credit

Level 1

- Principles of Applied Engineering #8729 (Middle School)
- Principles of Applied Engineering #8700 (HIgh School)

Level 2

Manufacturing Engineering Technology I #8721

Level 3

Engineering Design and Presentation I-Robotics #8701

Level 4

- Engineering Design and Presentation II-Robotics #8702 (2CR)
- Practicum in STEM-Engineering #8727 (2CR)

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	Work-Based Learning Activities
 Participate in SkillsUSA competitions 	Intern at an engineering firmShadow a machinist

NISD Industry-Based Certifications (A-F)

- Autodesk Associate (Certified User) AutoCAD
- Certified SOLIDWORKS Associate
- Certified SOLIDWORKS Professional
- Fusion 360

NISD Performance Acknowledgment

 Certified Solidworks Associate-Additive Manufacturing

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	105

Engineering Career Cluster

The Engineering 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. Successful completion of the Engineering Foundation 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



Exercise Science, Wellness & Restoration





The Exercise Science, Wellness, and Restoration program of study introduces CTE learners to the fields that assist patients with maintaining physical, mental, and emotional health. Students will research diet and exercise needed to maintain a healthy, balanced lifestyle and learn about and practice techniques to help patients recover from injury, illness, or disease.

NISD Secondary Courses for High School Credit

Level 1

Principles of Exercise Science and Wellness #8431

Level 2

Kinesiology I #8386

Level 3

 Anatomy and Physiology #8380, Honors #8379, Dual Credit #8376

Level 4

Kinesiology II #8388

Postsecondary Opportunities

Associates Degrees

- · Physical Therapist Assistant
- · Physical Therapy Aide
- Dietetic Technician

Bachelor's Degrees

- · Kinesiology and Exercise Science
- Therapeutic Recreation/Recreational Therapy
- Athletic Training/Trainer

Master's, Doctoral, and Professional Degrees

- Exercise Physiology
- Therapeutic Recreation/Recreation Therapy
- · Athletic Training/Trainer
- Physical Therapist

Work-Based Learning and Expanded-Learning Opportunities

Exploration Activities	Work-Based Learning Activities
Participate in Health Occupations Students of America	 Volunteer at a hospital or rehabilitation center Manage a school sports team

NISD Industry-Based Certifications

 Pre-Professional Certification in Nutrition, Food, and Wellness



Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Athletic Trainers	\$53,450	215	22%
Exercise Physiologists	\$41,662	33	33%
Coaches and Scouts	\$40,010	2,133	23%
Dieticians and Nutritionists	\$57,762	428	24%
Recreational Therapists	\$45,906	74	24%

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. Successful completion of the Exercise 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



Graphic Design and Interactive Media - Animation





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.

NISD Secondary Courses for High School Credit

Level 1

 Principles of Arts, A/V Technology, and Communications #8176, Dual Credit #8184

Level 2

Animation I #8151

Level 3

Animation II/Lab (2CR) #8152

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- Practicum in Animation (2CR) #8167
- Career Preparation I (3CR) #8009

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	Work-Based Learning Activities
 Join a website development or coding club Participate in SkillsUSA or TSA 	 Intern with a multimedia or animation studio Obtain a certificate or certification in graphic design

NISD Industry-Based Certifications (A-F)

• Adobe Certified Professional: After Effects

Adobe Certified Professional: Photoshop

Adobe Certified Professional: Illustrator

NISD Performance Acknowledgment

· Adobe Certified Professional: Animate

Autodesk: Maya

Aligned Occupations

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

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



Graphic Design & Interactive Media - Commercial Photography





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.

NISD Secondary Courses for High School Credit

Level 1

 Principles of Arts, A/V Technology, and Communications #8176, Dual Credit #8184

Level 2

Commercial Photography I #8158

Level 3

Commercial Photography II/Lab (2CR) #8159

Level 4

- Practicum in Commercial Photography (2CR) #8188
- Career Preparation I (3CR) #8009

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	Work-Based Learning Activities
 Join a website development or coding club Participate in SkillsUSA or TSA 	 Intern with a multimedia or animation studio Obtain a certificate or certification in graphic design

NISD Industry-Based Certifications (A-F)

Adobe Certified Professional: IllustratorAdobe Certified Professional: Photoshop

Aligned Occupations

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

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. 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 & Interactive Media - Fashion Design





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.

NISD Secondary Courses for High School Credit

Level 1

 Principles of Arts, A/V Technology, and Communications-Fashion #8183

Level 2

Fashion Design I #8160

Level 3

Fashion Design II/Lab (2CR) #8161

Level 4

- Practicum in Fashion Design (2CR) #8162
- Career Preparation I (3CR) #8009

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	Work-Based Learning Activities
 Join a website development or coding club Participate in SkillsUSA or TSA 	 Intern with a multimedia or animation studio Obtain a certificate or certification in graphic design

NISD Performance Acknowledgement (A-F)

- National Retail Federation Foundation-Business of

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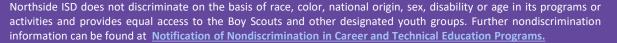
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- National Retail Federation Foundation- Retail Industry Fundamentals
- Retail Merchandising-Job Ready (NOCTI 440)

Aligned Occupations

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

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. 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 & Interactive Media - Graphic Design





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.

NISD Secondary Courses for High School Credit

Level 1

 Principles of Arts, A/V Technology, and Communications #8176, Dual Credit #8184

Level 2

Graphic Design and Illustration I #8155

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Graphic Design and Illustration II/Lab (2CR) #8156

Level 4

- Practicum in Graphic Design and Illustration (2CR) #8157
- Career Preparation I (3CR) #8009

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	Work-Based Learning Activities
 Join a website development or coding club Participate in SkillsUSA or TSA 	 Intern with a multimedia or animation studio Obtain a certificate or certification in graphic design

NISD Industry-Based Certifications

- Adobe Certified Professional: After Effects
- Adobe Certified Professional: Illustrator
- · Adobe Certified Professional: InDesign
- Adobe Certified Professional: Photoshop

Aligned Occupations

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

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



Health and Wellness





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.

NISD Secondary Courses for High School Credit

Level 1

- Principles of Human Services #8459 (MIddle School)
- Principles of Human Services #8450 (High School)

Level 2

- Lifetime Nutrition and Wellness (.5CR) #8448 AND
- Interpersonal Studies (.5CR) #8452

Level 3

Applied Nutrition and Dietetics #8449

Level 4

- Food Science #8430
- Practicum in Human Services (2CR) #8458
- Career Preparation I (3CR) #8009

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
Participate in American Association of Family and Consumer Sciences or the Family Career and Community Leaders of America	 Job shadow a dietitian or nutritionist Work part-time at a counseling services center, health department or hospital

NISD Industry-Based Certifications (A-F)

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



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%

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



Law Enforcement





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.

NISD Secondary Courses for High School Credit

Level 1

Principles of Law, Public Safety, Corrections, and Security #8550

Level 2

Criminal Investigation #8554

Level 3

- Law Enforcement I #8552
- Forensic Science #8553

Level 4

Law Enforcement II #8556

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

Work-Based Learning Activities

- Join the Texas Public Service Association or local criminal justice clubs
- Attend court hearings and other legal procedures

NISD Industry-Based Certifications (A-F)

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%

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



Marketing & Sales









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.

NISD Secondary Courses for High School Credit

Level 1

Principles of Business, Marketing, and Finance #8206

Level 2

Marketing #8219

Level 3

- Social Media Marketing (.5 CR) #8224 AND
- Sports and Entertainment Marketing (.5 CR) #8655

Level 4

Practicum in Marketing (2 CR) #8657

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

NISD Industry-Based Certifications (A-F)

- Business of Retail: Certified Specialist
- Customer Service and Sales: Certified Specialist
- Entrepreneurship and Small Business Certification
- Microsoft Office Specialist: Excel Expert
- Quickbooks

NISD Performance Acknowledgment

Microsoft Office Specialist: ExcelMicrosoft Office Specialist: PowerPoint

Microsoft Office Specialist: Word



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%

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



Programming & Software Development





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.

NISD Secondary Courses for High School Credit

Level 1

- AP Computer Science Principles #7104
- Onramps Computer Science #7320

Level 2

Advanced Computer Science I #7110

Level 3

- AP Computer Science A, MATH/LOTE #7214 & #5970
 OR
- Computer Science II H #7210

Level 4

Computer Science III H #7310

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 coding club at school	Obtain an industry- based certification

NISD Industry-Based Certifications (A-F)

IT Specialist: JavaIT Specialist: Javascript

Oracle Certified Associate: Java SE 8 Programmer

NISD Performance Acknowledgment

IT Specialist- Python

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%

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. 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



Renewable Energy





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.

NISD Secondary Courses for High School Credit

Level 1

- Principles of Applied Engineering #8729 (Middle School)
- Principles of Applied Engineering #8700 (High School)

Level 2

AC/DC Electronics-Renewable Energy #8744

Level 3

Solid State Electronics-Renewable Energy #8745

Level 4

Practicum in STEM-Renewable Energy (2CR) #8727

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 SkillsUSA or a local science club	Research four renewable energy companies and compare them

NISD Industry-Based Certifications

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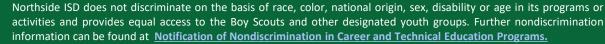


Aligned Occupations

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

Science, Technology, Engineering, and Mathematics Career Cluster

The Engineering 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. 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





Teaching and Training





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.

NISD Secondary Courses for High School Credit

Level 1

- Principles of Human Services #8459 (Middle School)
- Principles of Human Service #8450 (High School)

Level 2

Child Development #8462

Level 3

Instructional Practices (2CR) #8252

Level 4

- Practicum in Education and Training #8253
- Career Preparation I (3CR) #8009

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

Work-Based Learning Activities

- Participate in the Texas Association of Future Educators or Family, Career, and Community Leaders of America
- Teach a community education class
- Intern as a teaching assistant or tutor
- Serve as a camp counselor

NISD Industry-Based Certifications (A-F)

- Early Childhood Education and Care-Basic
- 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%

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



Web Development





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.

NISD Secondary Courses for High School Credit

Level 1

Principles of Information Technology #8500

Level 2

Web Design #8526

Level 3

Web Game Development #8519

Level 4

- Practicum in Information Technology #8510 (2CR)
- Career Preparation I #8009 (3CR)

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

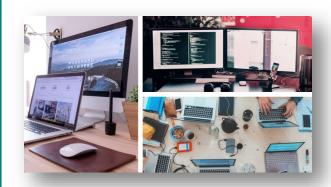
Exploration Activities

Work-Based Learning
Activities

- Join TSA
- Participate in a coding or computer programming club
- Create a web page
- Earn an Oracle or web certification

NISD Industry-Based Certifications (A-F)

 Certified Web and Mobile App Developer Apprentice



Aligned Occupations

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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%

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. 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 – August 2022



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.

NISD Secondary Courses for High School Credit

Level 1

Introduction to Welding #8601

Level 2

Welding I #8613 (2CR), #8614 Dual Credit (2CR)

Level 3

Welding II #8615 (2CR), #8617 Dual Credit (2CR)

Level 4

- Practicum in Manufacturing #8616 (2CR), #8618 Dual Credit (2CR)
- Career Preparation I #8009 (3CR)

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	Work-Based Learning Activities
 Participate and compete in SkillsUSA Job shadow a machinist 	 Work in a local business or industry apprenticeship Join the American Welding Society

NISD Industry-Based Certifications (A-F)

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

NISD Performance Acknowledgment

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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%

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

