



NORTHWEST ISD
**Career & Technical
Education**

NISD CTE Academy Board Report

August 15, 2023

NISD CTE Beliefs

Our Core Beliefs

- 1 Kids come first.
- 2 Continuous learning is essential to prepare for college and career opportunities.
- 3 Each student's success is the shared responsibility of students, families, schools, and communities.
- 4 Learning is influenced by environment.

CTE Program Beliefs:

- **Equitable access** for all
- Robust, **project-based education** with industry certifications
- **Technologically advanced equipment and facilities** for a relevant experience and positive outcome
- Highly qualified and distinctive **instructors** who want to mentor their students
- **Work-based learning** opportunities
- Safe, inclusive, and diverse environment where students are part of the **Northwest ISD CTE family**
- Strong **community presence** and involvement

Aviation and Aeronautics Academy



Aviation Flight

- TCC Dual-Credit 8 hours
- Certifications: Private Pilot
- Flight simulation lab on campus to extend learning opportunities for students.

Aviation Maintenance

- TCC Dual-Credit 16 hours
- Complete the General portion of FAA Airframes and Powerplant Mechanic requirements

Drone Unmanned Aircraft

- Certifications: Part 107, APSA-BPERP, Construction Analyst, Oil & Gas Analyst, Thermal Imaging level 1
- Search and Rescue, 3D Mapping, Photoshop, and Lightroom proficiency
- Summer Drone camp for students grades 3rd - 5th
- Compete at Bell Vertical Robotics Competition

Aviation and Aeronautics Academy



AOPA Scholarships

Scholarship support for NISD Pilot & Maintenance Technicians through Hillwood & AOPA each year.

Unique learning experiences such as BNSF Summer Internship for Drone Pilots, DFW Airport Emergency Response Tours & Hillwood Student Influencers



Industry Recognized Instructors:

- Mr. Donny Pharr
 - Serving on TEA Committee for program of study development
- Mr. Jeff Neaves
 - Member of the National Guard
 - Recipient of AOPA Teacher Scholarship for Private Pilot program
 - Recipient of Summer externship with Cessna/Textron



The V.R. Eaton Aviation and Aeronautics Academy Scholarship Recipients

Business Management & Entrepreneurship Academy



- 2023-24 Enrollment Growing = 272 students
- 2023 - First annual NISD BME Summit
- All 9th graders complete JA Entrepreneurship & Innovation Academy - thriving in competition against upperclassmen from EMS & FWISD
- Virtual Enterprises International - Nationally ranked
 - All 15 of our companies have met “Top 50” VEI benchmarks
 - Regular Top 8 finishes in Nationals
- Certifications - Microsoft, Entrepreneurship & Adobe



Biomedical Sciences Academy



- Hands On Focus - Industry + Laboratory Research Environment
 - 98% of Seniors pursue post secondary education of that 88% declare a health science degree
- Scientific Research Emphasis - Independent Year Long Capstone
- Scholarships Awarded
 - Class of 2023 offered 7.3 million dollars in scholarships ~ 60 seniors
- 316 students enrolled for 23-24 school year
 - *37 % from outside BNHS feeder pattern*



2023 Offering New Biotechnician Assistant Certification - [BACE certification](#)

Cosmetology Academy



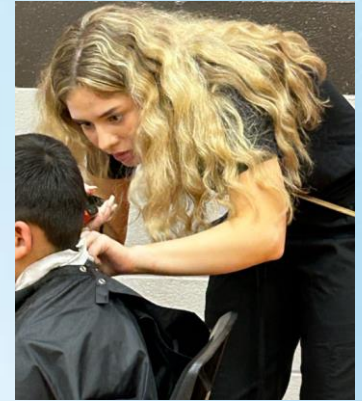
Unique 2 year program that allows students to stay at their home campus for half the day for their core academics.

TDLR Cosmetology Operator License

- 27 TDLR credit hours / 1000 clock hour equivalency
College Level
- Cosmetology license & equipment kit provided by NISD, tuition free.
 - Cosmetology school costs apx \$30,000

Program emphasis:

- 19 Seniors earned their State License in Cosmetology in 2023
- New Cosmetology salon in the NHS renovation



Creative Media Production - CMP Academy



- Broadcast Production in an industry-standard television studio facility
- Live Production of sporting events at NISD Stadium and currently preparing students to run (7) new NISD Stadiums and Arenas video boards (2023 bond).
- Robust Commercial Photography and Graphic Design programs
- NHSTV has received national honors as a top-five live high school broadcast for over 6 years by STN
- Graduates have won an Emmy, work at local television stations, and work in college and professional stadiums across the country



Culinary Arts and Hospitality Academy



Dual Credit with TCC

- All students enrolled
- Program completers earn 24 college credits
- Graduates earn Level I Certificate

American Culinary Federation (ACF)

- Only accreditation and certification organization in USA for culinary arts
- FIRST and ONLY secondary school with this accreditation in Texas
- Graduates earn industry recognized CFC certification (Certified Fundamentals Cook)



Nationally recognized instructors

- Chef Hooker, Chef Maher and Mrs. Reese have all been asked to be National ACF Secondary Evaluators
- Chef Hooker - National Secondary Committee Chair 2024-2026, ACFFEF Accreditation Commission

Culinary Arts and Hospitality Academy



2023 Graduates

- 49% attending college
- 24% attending culinary school
- 3% enlisting in military
- 24% entering workforce

Diverse learning experiences including internships, field trips, guest speakers and senior Italy trip each Spring.



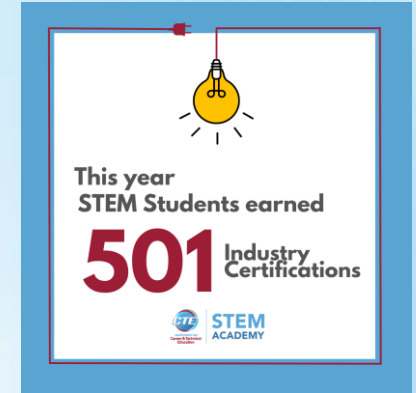
Program featured locally and nationally

- The National Culinary Review, September 2022
- 76262 Magazine
- [CBS Saturday Morning News May 23, 2023](#)

STEM Academy



- **Small learning community of Core + CTE**
 - **Core classes** - Honors, OnRamps (Dual Credit) & Advanced options
 - **CTE courses**
 - Engineering- *Project Lead the Way (PLTW) Curriculum*
 - Computer Science- *Cybersecurity specialization*
- New STEM spaces in the NHS CTE wing - 2021 Bond
- Over 100 incoming 9th grade students for Fall 2023 - 43% from outside NHS feeder pattern
- STEM Events including Women in STEM, EDD Presents, STEM Summit and Middle School Robotics Competition



Academy History & What's Next

Academies are turning 15 this year!

2009 - The academy model began with 6 academies! STEM, AMAT (currently CMP) , Culinary, Cosmetology, Collegiate & AMP (currently Biomedical Sciences) opened

2015 - Business & Aviation opened with Eaton High School opening

2021 - Collegiate Academy transitioned to Steele Early College HS

2023 - Renovated STEM Academy wing opens at NHS.

Future - Cosmetology will move to NHS and the New Construction Academy with focus on trades & construction science will open at NHS

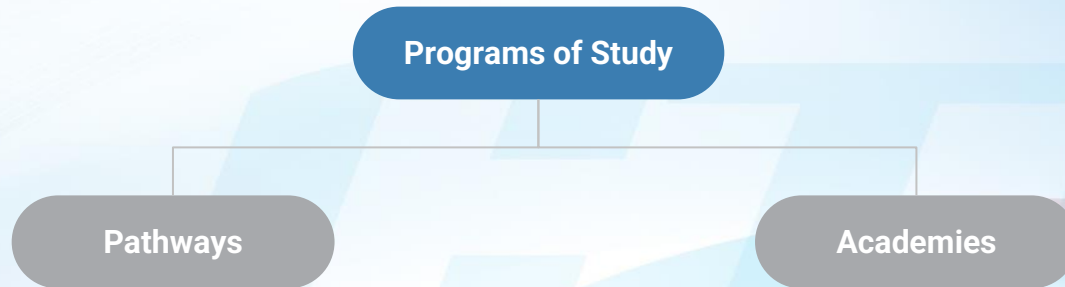
New high schools will mean new academy opportunities!

Planning for the Future



Planning future CTE Academies includes 6 major considerations:

1. **Labor Market Data** - high growth / high wage careers
2. **Academic Rigor** - Academies should result in technical level entry to workforce and/or a competitive advantage into post-secondary beyond entry level
3. **Student Interest & Marketability**
4. **TEA CTE Programs of Study**
5. **Facility Needs & Resource requirements** - including personnel & staffing
6. **Business & Industry Partners**



**NISD CTE
currently has:**

7 Academies
16 additional
Programs of
Study

Total = 23
Programs of
Study offered

TEA State list of
options includes
19 more choices

Green = Offered
Red = Duplicate

Program Name	Program Name	Program Name
Agribusiness	Early Learning	Govt & Public Administration
Animal Science	Teaching & Training	Law Enforcement
Applied Ag Engineering	Oil & Gas Exploration	Legal Studies
Environmental & Natural Resource	Refining & Chemical Processes	Adv Manufacturing
Food Science & Technology	Exercise Science	Manufacturing Technology
Plant Science	Health Informatics	Welding
Architectural Design	Healthcare Diagnostics	Biomedical Science
Carpentry	Healthcare Therapeutic	Cybersecurity
Construction Management	Medical Therapy	Engineering
Electrical	Nursing Science	Programming & Softw Dev
HVAC	Culinary Arts	Renewable Energy
Masonry	Lodging & Resort Management	Automotive
Plumbing	Travel & Tourism	Aviation maintenance
Graphic Design & Multimedia	Family & Community Services	Diesel & Heavy Equipment
Digital Communications	Health & Wellness	Distribution & Logistics
Accounting Financial Services	Information Technology	Aviation Flight
Business Management	Networking	Aviation Drone
Entrepreneurship	Web Development	Cosmetology
Marketing and Sales	Emergency Services EMT	Printing & Imaging

Current Labor Market Data for our Region

Automotive	49-3031	Bus/Truck Mechanics & Diesel Engine Specialists	24%	\$52,493	Industry Credential
Automotive	49-1011	First-Line Supervisors of Mechanics	22%	\$68,656	Some College
Automotive	49-3023	Automotive Service Technicians / Mechanics	17%	\$42,727	Industry Credential
Diesel / Heavy Equip	49-3042	Mobile Heavy Equipment Mechanics	18%	\$53,021	Industry Credential
Distr. and Logistics	13-1081	Logisticians	46%	\$70,279	Bachelor's
Distr. and Logistics	11-3071	Transportation and Distribution Managers	24%	\$94,902	Bachelor's
Distr. and Logistics	11-3061	Purchasing Managers	22%	\$131,850	Bachelor's
Legal Studies	23-1022	Arbitrators, Mediators, and Conciliators	45%	\$51,528	Bachelor's
Legal Studies	23-2011	Paralegals and Legal Assistants	44%	\$53,728	Associate's
Legal Studies	23-1011	Lawyers	34%	\$115,727	Doctoral
Refining Chemical	51-8093	Petroleum Pump System Operators	27%	\$77,052	Associate's
Refining Chemical	51-8013	Power Plant Operators	6%	\$68,526	Industry Credential
Refining Chemical	51-8092	Gas Plant Operators	3%	\$66,300	HS Diploma
Emergency Services	33-2021	Fire Inspectors and Investigators	25%	\$65,566	Industry Credential
Emergency Services	33-1021	First-Line Supervisors of Firefighting	23%	\$82,769	Associate's
Emergency Services	33-2011	Firefighters	21%	\$59,072	Industry Credential
Emergency Services	29-2041	EMT and Paramedics	33%	\$35,078	Industry Credential
Govt / Public Admin	11-9141	Real Estate, and Community Assoc. Managers	17%	\$56,938	Some College
Govt / Public Admin	13-2021	Property Appraisers and Assessors	15%	\$59,200	Bachelor's
Law Enforcement	33-1012	First-Line Supervisors of Police	22%	\$87,946	Bachelor's
Law Enforcement	33-3021	Detectives and Criminal Investigators	21%	\$72,703	Some College
Law Enforcement	33-3051	Police and Sheriffs Patrol Officers	21%	\$68,181	Associate's
Renewable Energy	49-9081	Wind Turbine Service Technicians	60%	\$49,160	Associate's
Renewable Energy	47-2231	Solar Photovoltaic Installers	44%	\$52,720	HS Diploma

Questions?

