

Career and Technical Education
Board Report – December 2020

Brownwood ISD's Career and Technical Education (CTE) programs offer a sequence of courses that provide students with coherent and rigorous content. CTE content is aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions and afford students the opportunity to train for high skill, high wage, high demand careers. CTE programs also prepare students to be successful in a rapidly changing workforce and equip them to make informed decisions about future college and career pathways.

The 2020-2021 school year is the first year of the Strengthening Career and Technical Education for the 21st Century Act (Perkins V). The new law includes several changes and additions relevant for educators, postsecondary institutions, employers, workforce development boards, community-based organizations, and others who serve historically underserved students in secondary and postsecondary education. BISD has developed strong partnerships with local institutions and industries such as TSTC, Ranger College, Kohler, and 3M. These local stakeholders' input will be invaluable when making decisions regarding local funding and program implementation.

New CTE courses offered in the 2020-2021 school year include Graphic Design 2 and Audio Video Production 2, and Pathophysiology. In Graphic Design 2, students work on project-based assignments and create content that advances their photoshop knowledge. Students in Graphic Design 2 will take the Adobe Certification Associate in Photoshop for certification. Audio Video Production 2 is a class intended to prepare students for careers in audio/video production. The course advances technical skills in utilizing industry equipment related to lighting, audio, and writing involved in planning presentations. These students will take the Adobe Premiere Pro certification exam. Pathophysiology can be

Beginning in January, ten students will begin working towards FAA Remote Pilot certification. This program is a partnership with Ranger College and the Brownwood MDD. Students will train hands-on with drones that will be theirs to keep if they pass the FAA certification! This program of study is also a dual credit course in which students can earn 3 elective hours of college credit from Ranger.

CTE offers students opportunities to earn valued industry certifications and develop a multitude of skills while experiencing a rigorous curriculum with real world opportunities.

**See Attached Endorsement/Certification Sheet*

Brownwood ISD offers dual credit opportunities through the Health Science Program, Welding and Automotive Technology.

Brownwood ISD has seen significant growth in many areas of its CTE program, with still more room for improvement in others.

Courses	2020	2019	2018	2017	2016
Audio/Video	65	71	56	21	0
Computer Science	76	63	18	0	0
Education	73	70	66	63	83
Health Science	218	236	52	52	36
Photo/Graphic Design	94	56	31	17	0
Science	178	160	114	64	22
Welding	91	83	71	0	0
TOTAL(s)	790	766	408	217	141

(This is not an exhaustive list of courses and pathways available at BHS).

BISD is in the second year of a program teaming with Workforce Solutions of West Central Texas. The program began at the High School in 2019 and now includes the Middle School in 2020. Twice monthly, an assigned Workforce Career & Education Outreach Specialist works primarily with 10th grade students and teachers. These meetings include general discussions about local career opportunities as well as job market demands and growth trends. This program also includes individual sessions with students to discuss personalized career planning. Each year Workforce Solutions sponsors “WOW” (World of Work) expo. This year, due to health restrictions, the expo was conducted virtually. Mrs. Deen, BHS Health Science Teacher, was a panelist participant this year for the World of Work expo.

CTE students are afforded the opportunity to join Career and Technical Student Organizations (CTSOs) such as FFA, SkillsUSA, HOSA, TAFE, and FCCLA where students participate in leadership and develop life-long skills such as interpersonal relationships, teamwork, setting and achieving goals as well as competing in contests where they apply what they have learned in their respective CTE courses in real-world scenarios.

We are excited to announce we have two young ladies from Brownwood High School representing Area 5 HOSA this year. Aishwarya Nigayle, Vice President, and Taylor Pinckney, Reporter.



FFA recently competed at the Cross Timbers Leadership Development Event: Ag Issues 1st place, Spanish Creed 1st place, Senior Ag Advocacy 2nd place, Junior Ag Advocacy 2nd place, Radio Broadcasting 2nd place, JR Radio Broadcasting 2nd place, Public Relations 2nd place, with many other students participating and advancing to Area.

To showcase our kids' success to local industries and the community, we will continue BITS (Brownwood Industry Trade Show). BITS will be scheduled in February and will be an excellent opportunity for Brownwood High School and the CTE Department to showcase to local industries and the community the many technical opportunities and certifications that are offered at Brownwood ISD – the district of choice.

**BROWNWOOD HIGH SCHOOL
ENDORSEMENTS/CERTIFICATIONS**

Endorsement	Sequence/Pathway	Level 1	Level 2	Level 3	Level 4	CERTIFICATIONS
STEM (Science, Technology, Engineering & Math)	Science Option	Biology /Biology Pre AP	Chemistry/ Chemistry Pre AP	Physics/Pre-AP Physics Principles of Technology	Anatomy & Physiology, AP Biology, Pathophysiology or DC	
	Math Option	Algebra 1/Alg 1 Pre AP or Geometry/Pre AP Geometry	Geometry/Pre AP Geometry or Alg II/Pre AP Alg II	Alg II/Pre AP Alg II or PreCal/ Pre AP PreCal	*Pick Two AQR or PreCal and Pre-AP Statistics or AP Calculus or College Algebra (DC)	
	Programming and Software Development	Fundamentals of Computer Science Computer Science 1 Prereq: 8th Grade Algebra 1	Computer Science 2 Computer Science 2	Mobile Application Development Mobile Application Development	Computer Science 3 Computer Science 3	MTA-Introduction to Programming Using Java
Business & Industry	Plant Science	Principles of Agriculture, Food, and Natural Resources	Floral Design	Greenhouse Operations and Production	Advanced Plant Soil Science	TSFA Floral Skills, TSFA Level one, and TSFA Level two
	Animal Science	Principles of Agriculture, Food, and Natural Resources	Small Animal Management and Equine Science	Livestock Production	Advanced Animal Science	OSHA 30 Certification
	Digital Communications	Principles of Art, Audio Video Tech & Communications	Audio Video Production I	Audio Video Production II	Practicum of Audio/Video	Adobe Certified Associate Premiere Pro
	Design & Multimedia Arts	Principles of Art, Audio Video Tech & Communications	Commercial Photography I	Commercial Photography II	Graphic Design 1 Graphic Design 2	Adobe Certified Associate in Photoshop
	Business Management	Business Information Management I	Business Information Management II	Business Management	Career Prep	A*S*K Fundamental Business Concepts; (MOS)-Excel Expert; (MOS)-Word Expert
	Accounting and Financial Services	Business Information Management I	Accounting I	Accounting II	Career Prep	
	Culinary Arts	Introduction to Culinary Arts	Culinary Arts	Advanced Culinary Arts	Food Science or Career Prep	Pre-Professional Certification in Culinary Arts Certification; ServSafe
	Welding	Introduction to Welding	Welding 1	Welding 2	Career Prep	AWS D1.1 Certification AWS D9.1 Certification
	Architectural Design	Principles of Architecture	Architectural Design I	Architectural Design II	Career Prep	OSHA 30 Construction Certification
	Automotive	Principles of Transportation Systems	Automotive Basics	Automotive Technology I: Maintenance and Light Repair	Automotive Technology 2: Automotive Service	OSHA 30 Certification; ASE Entry-Level Certification: Engine Repair (ER); Automatic Transmission/Transaxle (AT); Brakes (BR); Electronic/Electrical Systems (EE); Heating and A/C (AC); Manual Drive Train and Axles (MD); Mechanical and Electrical Components (ME)
Public Service	Teaching and Training	Principles of Education and Training	Human Growth and Development	Instructional Practices	Practicum in Education and Training	Education Fundamental Certification; CPR;
	Healthcare Therapeutic	Principles of Health Science	Medical Terminology	Anatomy and Physiology	Pathophysiology	
		Principles of Health Science	Medical Terminology	Health Science Theory	Practicum in Health Science-CNA or Practicum in Health Science-Pharmacy Tech	Pharmacy Technician or Certified Nurse Aide/Assistance Certification; NCHSE ; CPR
		Principles of Health Science	Medical Terminology	Health Science Theory-Health Science Clinical	Practicum in Health Science-CNA or Practicum in Health Science-Pharmacy Tech	
Arts & Humanities	Fine Arts	Any first year fine art including Art, Band, Choir, or Theater	Fine Art Year 2	Fine Arts Year 3	Fine Arts Year 4	
	Foreign Language	Four levels of the same language; or two levels of the same language and two levels of a different language				
	Social Studies	5 Social Studies Classes				
Multidisciplinary Studies	Four advanced courses within one endorsement area or among endorsement areas but not in a coherent sequence.					
	Four credits in each of the four foundation subjects (Must include English IV, Chemistry, Physics)					
	Four credits in advanced placement or dual credit courses. The four credits in AP and/or DC must include courses in English, Math, Science, Social Studies, Economics, LOTE or Fine Arts					