

**SCHERTZ CIBOLO UNIVERSAL CITY ISD**





**CAREER & TECHNICAL EDUCATION PATHWAYS**

**Levels\*:** refer to the recommended order for stackable knowledge and skills a student should obtain as they progress through the sequence. They do not represent grade bands and there is flexibility in how districts can offer courses between levels. Local Implementation Considerations:





**CTE Concentrator:** a student who completes and passes at least two courses for two credits within a program of study.

**CTE Completer:** a student who completes and passes three or more CTE courses for four or more credits, including one state-determined level 3 or 4 (advanced or upper level) CTE course within a program of study.








**CTE Completer:**

Cluster	Program of Study	8th/9th Grade (Level 1)	10th Grade (Level 2)	11th Grade (Level 3)	12th Grade (Level 4)
	<b>Applied Agricultural Engineering</b> (Agriculture Mechanics)	1701 Principles of Agriculture, Food, and Natural Resources (1 Credit)	1711 Agricultural Mechanics & Metal Technologies (1 Credit)	1712 Agricultural Structures Design & Fabrication (1 Credit) AWS D1.1 & 1.9 (IBC)	1946 Agricultural Equipment Design and Fabrication w/Lab (2 Credits) AWS D1.1 & 1.9 (IBC)
	<b>Animal Science</b>  (Animal Science & Veterinary Technology)	1701 Principles of Agriculture, Food, and Natural Resources (1 Credit)	1704 Small Animal Management (.5 Credit)	1702 Livestock Production (1 Credit)	1705 Advanced Animal Science (1 Credit) *Science credit Elanco Fundamentals of Animal Science Certification (IBC)
			1703 Equine Science (.5 Credit)	1717 Veterinary Medical Applications (1 Credit) Elanco Veterinary Medical Applications Certification (IBC)	1769 Practicum in Agriculture, Food, and Natural Resources (2 Credits) Certified Vet Assistance Level 1 Credit (IBC) needed to have taken Vet Med App in order complete hours required SR Yr
	<b>Plant Sciences</b>  (Environmental, Floriculture & Plant Science)	1701 Principles of Agriculture, Food, and Natural Resources (1 Credit)	1911 Greenhouse Operation and Production (1 Credit) BASF Plant Science Certification (IBC)	1708 Horticultural Science (1 Credit) BASF Plant Science Certification (IBC)	1716 Advanced Plant & Soil Science (1 Credit) Science credit BASF Plant Science Certification (IBC)
			1706 Floral Design (1 Credit) *Fine Arts credit Texas State Floral Association Floral Skills Knowledge Based Certification (IBC)	1707 Advanced Floral (1 Credit) Level One Floral Certification, or Level Two Certification (IBC)	1769 Practicum in Agriculture, Food, and Natural Resources (2 Credits)
	<b>Architectural Design</b>	1787 Principles of Architecture (1 Credit)	1784 Architectural Design I (1 Credit), Autodesk Associate (Certified User) AutoCAD (IBC)	1778 Architectural Design II (2 Credit), Autodesk Associate (Certified User) Revit (IBC)	1794 Practicum in Architectural Design (2 Credit),






**BUSINESS & INDUSTRY ENDORSEMENT – 3 or more courses for 4 or more credits**

Cluster	Program of Study	9th Grade (Level 1)	10th Grade (Level 2)	11th Grade (Level 3)	12th Grade (Level 4)
	<b>Marketing and Sales</b>  (Marketing)	1728 Principles of Business, Marketing, & Finance (1 Credit)	1746 Fashion Marketing (.5 Credit)	1938 Social Media Marketing (.5 Credit) Stukent Social Media Marketing Certification (IBC)	1926 Practicum in Marketing (2 Credits)
			1747 Sports & Entertainment Marketing (.5 Credit)	1748 Advertising (.5 Credit)	1752/1753 Career Prep (2-3 Credits)
	<b>Accounting and Financial Services</b>  (Finance)	1728 Principles of Business, Marketing, and Finance (1 Credit)	1735 Accounting I (1 Credit) Accounting - Basic (IBC)	1736 Accounting II (1 Credit) * Math credit, Intuit QuickBooks Certified User (QBCU) (IBC)	1904 Practicum in Business Management (2 Credits)
		1733 Business Information Management I (1 Credit) Microsoft Office Specialist: Microsoft Excel, Microsoft Office Specialist: Microsoft Word (IBC) Sunsetting 8-31-2024			1900 Financial Mathematics (1 Credit) * Math credit
					1752/1753 Career Prep (2-3 Credits)
	<b>Entrepreneurship</b>	1728 Principles of Business, Marketing, and Finance (1 Credit)	1749 Entrepreneurship (1 Credit) Entrepreneurship and Small Business (IBC)	1726 Project Based Research (1 Credit)	1904 Practicum in Business Management (2 Credits)
		1733 Business Information Management I (1 Credit)			1752/1753 Career Prep (2-3 Credits)
	<b>Digital Communications</b>	1902 Principles of Arts, Audio/Video Technology, and Communications (1 Credit)	1721 Audio/Video Production I (1 Credit)	1718 Audio/Video Production II/Audio/Video Production II Lab (2 Credits) Adobe Certified Professional in Digital Video Using Adobe Premiere Pro(IBC)	1921 Practicum in Audio/Video Production (2 Credits)
		1700 Professional Communications			




**BUSINESS & INDUSTRY ENDORSEMENT – 3 or more courses for 4 or more credits**

Cluster	Program of Study	9th Grade (Level 1)	10th Grade (Level 2)	11th Grade (Level 3)	12th Grade (Level 4)
	<b>Design and Multimedia Arts (Graphic Design)</b>	1902 Principles of Arts, Audio/Video Technology, and Communications (1 Credit)	1722 Graphic Design and Illustration I (1 Credit)	1914 Graphic Design and Illustration II with lab (2 Credits) <i>Adobe Certified Professional in Graphic Design and Illustration Using Adobe, Adobe Certified Professional in Visual Design Using Adobe Photoshop (IBC)</i>	1915 Practicum in Graphic Design and Illustration (2 Credits)
	<b>Design and Multimedia Arts (Animation)</b>	1902 Principles of Arts, Audio/Video Technology, and Communications (1 Credit)	1723 Animation I (1 Credit)	1903 Animation II (1 Credit) <i>AutoDesk Maya (Local)</i>	1905 Practicum in Animation (2 Credits)
	<b>Design and Multimedia Arts (Video Game Design)</b>	1902 Principles of Arts, Audio/Video Technology, and Communications (1 Credit)	1724 Video Game Design I (1 Credit)	1989 Video Game Programming (1 Credit) <i>Unity (Local)</i>	1990 Advanced Video Game Programming (1 Credits)
	<b>Culinary Arts</b>	1909 Introduction to Culinary Arts (1 Credit)	1774 Culinary Arts (2 Credits) <i>ServSafe Food Handlers (Local)</i>	1775 Advanced Culinary (2 Credits) <i>ServSafe Manager (IBC)</i>	1789 Practicum in Culinary Arts (2 Credits)
					1906 Food Science (1 Credit) * Science credit <i>Food Safety &amp; Science Certification (IBC)</i>
	<b>Information Technology Support and Services</b>	1743 Principles of Information Technology (1 Credit)	1740 Computer Maintenance/Computer Maintenance Lab (2 Credits)	1741 Computer Technician Practicum (2 Credits) <i>CompTIA A+ Certification (IBC)</i>	1719 Practicum in Information Technology (2 Credits)
	<b>Advanced Manufacturing and Machinery Mechanics (Robotics)</b>	1788 Principles of Applied Engineering (1 Credit)	1907 Robotics I (1 Credit)	1929 Robotics II (1 Credit)	1933 Practicum in Manufacturing (2 Credits)
					1799- Scientific Research and Design (1 credit)
					1752/1753 Career Prep (2-3 Credits)
	<b>Drone</b>	1910 Introduction to Aerospace and Aviation (1 Credit)	1907 Robotics I (1 Credit)	1929 Robotics II (1 Credit)	1933 Practicum in Drone Aviation (2 Credits) <i>FAA Part 107 Remote Drone Pilot (IBC)</i>

**PUBLIC SERVICES ENDORSEMENT – 3 or more courses for 4 or more credits**

Cluster	Program of Study	9th Grade (Level 1)	10th Grade (Level 2)	11th Grade (Level 3)	12th Grade (Level 4)
	<b>Teaching and Training</b> <b>(Teaching/Education)</b>	1768 Principles of Human Services (1 Credit)	1779 Child Development (1 Credit)	1771 Instructional Practices (2 Credits) (Ready, Set, Teach) Early Childhood Education and Care - Basic (IBC)	1772 Practicum in Education & Training (2 Credits) (Ready, Set, Teach) Educational Aid I (IBC)
	<b>Family and Community Services</b> <b>(Counseling/Mentor)</b>	1768 Principles of Human Services (1 Credit)	1779 Child Development (1 Credit)	1757 Counseling and Mental Health (1 Credit)	1726 Project Based Research (1 Credit)
				1781 Practicum in Human Services I (PALs) (2 Credits) Pre-Professional Certification in Early Childhood Education (IBC)	1786 Practicum in Human Services II (PALs) (2 Credits) First Aid/CPR (Local)
	<b>Healthcare Therapeutic Services</b> <b>Certified Clinical Medical Assistant (CCMA),</b> <b>Certified Dental Assistant (CDA), Patient Care Technician(PTC),</b> <b>Pharmacy Technician</b>	1754 Principles of Health Science (1 Credit)	1755 Medical Terminology (1 Credit)	1756 Health Science Theory (1 Credit) * Required for Practicum Classes	1931 Practicum in Health Science (2 Credits) Certified Clinical Medical Assistant (CCMA), Certified Dental Assistant (CDA), Pharmacy Technician, Patient Care Technician(PTC) (IBC) , First Aid, HIPAA, CPR, Bloodborne Pathogens (Local)
					1790 Anatomy & Physiology (1 Credit) * Science credit
					1759 Medical Microbiology (1 Credit) * Science credit
					1760 Pathophysiology (1 Credit) * Science credit
	<b>Emergency Services</b>	1762 Principles of Law, Public Safety, Corrections, & Security (1 Credit)	1985 Disaster Response (1 Credit)	1986 Firefighter I (2 Credits)	1987 Firefighter II ( 2 Credits) <u>AND 1988</u> Emergency Medical Technician – Basic ( 3 Credits) <i>Emergency Medical Technician - Basic and Basic Structure Fire Protection (IBC)</i>
	<b>Law Enforcement</b>	1762 Principles of Law, Public Safety, Corrections, & Security (1 Credit)	1763 Law Enforcement I (1 Credit)	1764 Law Enforcement II (1 Credit) Non-Commissioned Security Officer Level II (IBC)	1765 Forensic Science (1 Credit) *Science credit
					1940 Practicum in LPSCS (2 Credit)

**STEM ENDORSEMENT – 3 or more courses for 4 or more credits**

Cluster	Program of Study	9th Grade (Level 1)	10th Grade (Level 2 )	11th Grade (Level 3)	12th Grade (Level 4)
	<b>Engineering Design</b>	1788 Principles of Applied Engineering (1 Credit)	1785 Engineering Design & Presentation I (1 Credit) <i>Autodesk Associate (Certified User)</i> <i>AutoCAD:</i> <i>Autodesk Associate (Certified User)</i> <i>Inventor for Mechanical Design (IBC)</i>	1744 Engineering Design & Presentation II (2 Credit) <i>Autodesk Associate (Certified User)</i> <i>AutoCAD:</i> <i>Autodesk Associate (Certified User)</i> <i>Inventor for Mechanical Design (IBC)</i>	1745 Engineering Design & Problem Solving (1 Credit) * Science credit
	<b>Programming and Software Development (Computer Science)</b>	1282 Computer Science I (1 Credit)	1992 Computer Science II (1 Credit)	1283 AP Computer Science A (2 Credits) <i>College Credit</i> 1997 Computer Science III (1 Credit) <i>Oracle Certified Associate Java SE 8 Programmer (IBC)</i>	1741 Practicum in Information Technology (2 Credits)
	<b>Cyber Security</b>	1743 Principles of Information Technology (1 Credit)	1913 Foundation of Cybersecurity (1 Credit) <i>CompTIA Security+ (IBC)</i>	1918 Networking (1 Credits) <i>CompTIA Network+ (IBC)</i>	1934 Cybersecurity Capstone (1 Credit), <i>CyberSecurity Fundamentals: An ISACA Certificate (IBC)</i>

