

9th Principles of Applied Engineering

26 – 27 Instructional Plan

Course Overview	Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will understand the various fields of engineering and be able to make informed career decisions. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.
Course Standards	Rule §127.391 Principles of Applied Engineering

Scope & Sequence

Units/Modules & Instructional Days		Assessments & Scanning Deadlines	Standards
Unit 1: Manual Drafting 20 days		TX_CTE_9thPOAE_F26_UE1 Scanning Deadline: September 24, 2026	Unit Standards
Unit 2: Computer-Aided Design and Drafting 20 days		TX_CTE_9thPOAE_F26_UE2 Scanning Deadline: October 29, 2026	
Unit 3: Engineering Design, Problem Solving, & Collaboration 20 days		TX_CTE_9thPOAE_F26_UE3 Scanning Deadline: November 19, 2026	
Unit 4: Exploration of the STEM Field with Focus on Electrical and Mechanical Systems 20 days		TX_CTE_9thPOAE_S27_UE4 Scanning Deadline: January 21, 2027	
Unit 5: Robotics, Process Control, & Automation 20 days		TX_CTE_9thPOAE_S27_UE5 Scanning Deadline: February 25, 2027	
Unit 6: Systems, Innovation, & Design Thinking 20 days		TX_CTE_9thPOAE_S27_UE6 Scanning Deadline: April 1, 2027	
Unit 7: Safety & Tool Mastery 14 days		TX_CTE_9thPOAE_S27_UE7 Scanning Deadline: April 22, 2027	
Final Exam Windows			
Region	Exam Window	Scanning Deadline	
Dallas – Fort Worth (DFW)	May 17 – 21, 2027	May 21, 2027	
El Paso (EP)	May 10 – 14, 2027	May 14, 2027	
Permian Basin (PB)	May 17 – 21, 2027	May 21, 2027	
San Antonio (SA)	May 12 – 18, 2027	May 18, 2027	
Rio Grande Valley (RGV)	May 17 - 21, 2027	May 21, 2027	

TEKS Alignment

Instruction in this course is aligned to the Texas Essential Knowledge and Skills (TEKS) as adopted by the State Board of Education and implemented in accordance with Texas Education Code Chapter 28.

Instructional Materials

Primary Texts (if applicable)

Supplemental instructional materials may be used to support instruction. Supplemental materials do not replace board-approved core instructional materials.

Additional information regarding instructional programs, assessments, and parent access to instructional materials is available on the district website.

Instructional Expectations

Instruction is delivered using board-approved instructional materials and aligned to the scope and sequence outlined above. Teachers are expected to ensure all required standards are taught within the course timeframe.

Assessment Overview

Student learning is monitored through formative and summative assessments aligned to course standards. Assessment results are used to inform instruction and student supports. Students participate in required state assessments when applicable.