

Construction Technology II

At-A-Glance - Lamar CISD

Ongoing Skills Imbedded All Year	Professional Standards/Employability Skills/Technical Skills		
Ongoing Ways to Show			
Grading Period	Unit Name	Estimated Time Frame	TEKS
Grading Period 1 28 Days	Professional Standards/Employability Skills	8 Days	1.A, 1.B, 1.C, 1.D, 1.E, 1.F, 1.G
	CT II 1(A) The student will explain the role of an employee in the construction industry. CT II 1(B) The student will demonstrate critical-thinking skills. CT II 1(C) The student will demonstrate the ability to solve problems using critical-thinking skills. CT II 1(D) The student will demonstrate knowledge of basic computer systems. CT II 1(E) The student will explain common uses for computers in the construction industry. CT II 1(F) The student will define effective relationship skills. CT II 1(G) The student will recognize workplace issues such as sexual harassment, stress, and substance abuse.		
	Blueprint Drawings	10 Days	2.A, 2.B, 2.C, 2.D, 2.E, 2.F
	CT II 2(A) The student will recognize the difference between commercial and residential construction drawings. CT II 2(B) The student will identify the basic keys, abbreviations, and other references contained in a set of commercial drawings. CT II 2(C) The student will accurately read a set of commercial drawings. CT II 2(D) The student will identify and document specific items from a door and window schedule. CT II 2(E) The student will explain basic construction details and concepts employed in commercial construction. CT II 2(F) The student will calculate the floor area of each room in a floor plan.		
	Tools	10 Days	4.A, 4.B, 4.C, 4.D, 4.E, 4.F, 4.G, 4.H, 4.I
CT II 4(A) The student will describe the requirements for insulation. CT II 4(B) The student will describe the characteristics of various types of insulation material. CT II 4(C) The student will calculate the required amounts of insulation for a structure. CT II 4(D) The student will install selected insulation materials. CT II 4(E) The student will describe the requirements for moisture control and ventilation. CT II 4(F) The student will install selected vapor barriers. CT II 4(G) The student will describe various methods of waterproofing. CT II 4(H) The student will describe air infiltration control requirements. CT II 4(I) The student will install selected building wraps.			
Grading Period 2 25 Days	Steel Framing	10 Days	6.A, 6.B, 6.C, 6.D, 6.E, 6.F
	CT II 6(A) The student will identify the components of a steel framing system. CT II 6(B) The student will identify and select the tools and fasteners used in a steel framing systems. CT II 6(C) The student will identify applications for steel framing systems. CT II 6(D) The student will demonstrate the ability to build back-to-back, box, and L-headers. CT II 6(E) The student will layout and install a steel stud structural wall with openings to include bracing and blocking. CT II 6(F) The student will layout and install a steel stud, non-structural wall with openings to include bracing and blocking.		
	Gypsum Drywall	15 Days	7.A, 7.B, 7.C, 7.D, 7.E, 7.F, 7.G, 7.H
CT II 7(A) The student will identify the different types of drywall and their uses. CT II 7(B) The student will select the type and thickness of drywall required for specific installations. CT II 7(C) The student will select fasteners for drywall installations. CT II 7(D) The student will explain the fastener schedules for different types of drywall installations. CT II 7(E) The student will perform single-layer and multi-layer drywall installations using different types of fastening systems, including nails, drywall screws, and adhesives. CT II 7(F) The student will install gypsum drywall on steel studs. CT II 7(G) The student will explain how soundproofing is achieved in drywall installations. CT II 7(H) The student will estimate material quantities for a drywall installation.			

Grading Period 3 25 Days	Steel/Metal Doors	11 Days	9.A, 9.B, 9.C, 9.D, 9.E, 9.F
	<p>CT II 9(A) The student will identify various types of door jambs and frames. CT II 9(B) The student will demonstrate the installation procedures for placing selected door jambs and frames in different types of interior partitions. CT II 9(C) The student will identify different types of interior doors. CT II 9(D) The student will identify different types of interior door hardware and demonstrate the installation procedures for them. CT II 9(E) The student will list and identify specific items included on a typical door schedule. CT II 9(F) The student will demonstrate the procedure for placing and hanging a door.</p>		
	Siding	11 Days	5.A, 5.B, 5.C, 5.D, 5.E, 5.F, 5.G, 5.H
	<p>CT II 5(A) The student will describe the purpose of wall insulation and flashing. CT II 5(B) The student will install selected common cornices. CT II 5(C) The student will demonstrate lap and panel siding estimating methods. CT II 5(D) The student will describe the types and applications of common wood siding. CT II 5(E) The student will describe fiber-cement siding and its uses. CT II 5(F) The student will describe the types and styles of vinyl and metal siding. CT II 5(G) The student will describe the types and applications of stucco and masonry veneer finishes. CT II 5(H) The student will install three types of siding commonly used in the local area.</p>		
Final Review and Test		3 Days	
Grading Period 4 33 Days	Roof	16 Days	3.A, 3.B, 3.C, 3.D, 3.E, 3.F, 3.G, 3.H, 3.I, 3.K
	<p>CT II 3(A) The student will identify the materials and methods used in roofing. CT II 3(B) The student will explain the safety requirements for roof jobs. CT II 3(C) The student will install fiberglass shingles on gable and hip roofs. CT II 3(D) The student will close up a valley using fiberglass shingles. CT II 3(E) The student will explain how to make various roof projections watertight when using fiberglass shingles. CT II 3(F) The student will complete the proper cuts and install the main and hip ridge caps using fiberglass shingles. CT II 3(G) The student will lay out, cut, and install a cricket or saddle. CT II 3(H) The student will install wood shingles and shakes on roofs. CT II 3(I) The student will describe how to close up a valley using wood shingles and shakes. CT II 3(J) The student will complete the cuts and install the main and hip ridge caps using wood shakes or shingles. CT II 3(K) The student will demonstrate the techniques for installing other selected types of roofing materials.</p>		
	Drywall	17 Days	8.A, 8.B, 8.C, 8.D, 8.E, 8.F, 8.G, 8.H
<p>CT II 8(A) The student will state the differences between the six levels of finish established by industry standards and distinguish between finish levels by observation. CT II 8(B) The student will identify the hand tools used in drywall finishing and demonstrate the ability to use these tools. CT II 8(C) The student will identify the automatic tools used in drywall finishing. CT II 8(D) The student will identify the materials used in drywall finishing and state the purpose and use of each type of material, including compounds, joint reinforcing tapes, trim materials, textures, and coatings. CT II 8(E) The student will properly finish drywall using hand tools. CT II 8(F) The student will recognize various types of problems that occur in drywall finishes and identify their causes. CT II 8(G) The student will identify the correct methods for solving each type of problem that occurs in drywall finishes. CT II 8(H) The student will patch damaged drywall.</p>			
Grading Period 5 34 Days	Ceilings	12 Days	10.A, 10.B, 10.C
	<p>CT II 10(A) The student will establish a level line. CT II 10(B) The student will explain the common terms related to sound waves and acoustical ceiling materials. CT II 10(C) The student will identify the different types of suspended ceilings.</p>		
	Suspended Ceilings	12 Days	10.D, 10.E, 10.F
	<p>CT II 10(D) The student will interpret plans related to ceiling layout. CT II 10(E) The student will sketch the ceiling layout for a basic suspended ceiling. CT II 10(F) The student will install selected suspended ceilings.</p>		
Trim	10 Days	11.A, 11.B, 11.C, 11.D, 11.E	
<p>CT II 11(A) The students will identify typeS of standard molding and describes their uses. CT II 11(B) The student will make square and miter cuts using a miter using a miter box or power miter saw. CT II 11(C) The student will make coped joints cuts using a coping saw. CT II 11(D) The student will select and use fasteners to install trim, including door trim, window trim, base trim, and ceiling trim. CT II 11(E) The student will estimate the quantities of different trim material required for selected room.</p>			

Grading Period 6 28 Days	Electrical Technology	15 Days	3A,3B,3C,3D,7A,7B,7C, 10A,10B,10C,10D,10E, 12A,12B,12C,12D, 12E
	<p>ET I 3(A) The students will identify the methods of hand bending conduit. ET I 3(B) The students will identify the various methods used to install conduit. ET I 3(C) The students will use mathematical formulas to determine conduit bends. ET I 3(D) The students will make 90-degree bends, back-to-back bends, offsets, kicks, and saddle bends using a hand bender. ET I 7(A) The students will explain the purpose and history of the National Electrical Code. ET I 7 (B) The students will describe the layout of and explain how to navigate the National Electrical Code. ET I 7 (C) The students will describe the purpose of the National Electrical Manufacturers Association and National Fire Protection Association. ET I 10(A) The students will explain the basic layout of a design drawing. ET I 10(B) The students will describe the information included in the title block of a drawing. ET I 10(C) The students will identify common symbols and the various types of lines used on drawings. ET I 10(D) The students will understand the use of architect's and engineer's scales. ET I 10(E) The students will interpret electrical drawings such as site plans, floor plans, and detail drawings. ET I 12(A) The students will describe how to determine electric service requirements for dwellings. ET I 12(B) The students will explain the grounding requirements of a residential electric service. ET I 12(C) The students will calculate and select service-entrance equipment. ET I 12(D) The students will select the proper wiring methods for various types of residences. ET I 12(E) The students will explain the role of the National Electrical Code in residential wiring.</p>		
	Cabinets	10 Days	12.A, 12.B, 12.C, 12.D, 12.E, 12.F, 12.G, 12.H
	<p>CT II 12(A) The student will state the classes and sizes of typical base and wall kitchen cabinets. CT II 12(B) The student will identify cabinet components and hardware and describe their purposes. CT II 12(C) The student will lay out factory-made cabinets, countertops, and backsplashes. CT II 12(D) The student will explain the installation of an island base. CT II 12(E) The student will recognize the common types of woods used to make cabinets. CT II 12(F) The student will identify and cut the various types of joints used in cabinetmaking. CT II 12(G) The student will build a cabinet from a set of drawings. CT II 12(H) The student will install plastic laminate on a countertop core.</p>		
Certification Review & Test		3 Days	