Agricultural Mechanics & Metal Technologies
At-A-Glance - Lamar CISD

Ongoing Skills Imbedded All Year	**Professional Standards/Employability Skills/Technical Skills**		
	AMMT 2(A) The student will plan, propose, conduct, document, and evaluate a supervised agricultural experience program as an experiential learning activity. AMMT 2(B) The student will apply proper record-keeping skills as they relate to the supervised agriculture experience. AMMT 2(C) The student will participate in youth leadership opportunities to create a well-rounded experience program. AMMT 2(D) The student will produce and participate in a local program of activities using a strategic planning process.		
Ongoing Ways to Show	AET record book.		
Grading Period	**Unit Name**	**Estimated Time Frame**	**TEKS**
Grading Period 1 28 Days	**Safety and Career Development**	**28 Days**	1D, 1A, 1C, 1E, 1F, 1B, 2A, 2B, 2C, 2D, 7A; AWS
	AMMT 1(D) The student will demonstrate knowledge of personal and occupational health, safety, and first-aid practices in the industry. AMMT 1(A) The student will identify career development and entrepreneurship opportunities in the field of power, structural, and technical agricultural systems. AMMT 1(C) The student will examine licensing, certification, and credentialing requirements to maintain compliance with industry requirements. AMMT 1(E) The student will identify employers' expectations, and appropriate work habits. AMMT 1(F) The student will demonstrate characteristics of good citizenship, including advocacy, stewardship, and community leadership. AMMT 1(B) The student will apply competencies related to resources, information, interpersonal skills, problem solving, critical thinking, and systems of operation of power, structural, and technical agricultural systems. AMMT 2(A) The student will plan, propose, conduct, document, and evaluate a supervised agricultural experience program as an experiential learning activity. AMMT 2(B) The student will apply proper record-keeping skills as they relate to the supervised agriculture experience. AMMT 2(C) The student will participate in youth leadership opportunities to create a well-rounded experience program. AMMT 2(D) The student will produce and participate in a local program of activities using a strategic planning process. AMMT 7(A) The student will identify materials used in agricultural construction. AWS The student will identify materials used in welding.		
Grading Period 2 25 Days	**Carpentry**	**4 Days**	7C
	AMMT 7(C) The student will demonstrate basic carpentry skills.		
	Tools & Equipment	**4 Days**	10A
	AMMT 10(A) The student will select, use, and maintain appropriate tools, equipment, and facilities.		
	Metal	**10 Days**	9A, 10B
	AMMT 9(A) The student will identify types of metal. AMMT 10(B) The student will identify and determine properties, types, and uses of metal.		
	Welding Equipment	**4 Days**	AWS
	AWS The student will select and maintain welding equipment.		
	Welding Terms	**3 Days**	AWS
	AWS The students will demonstrate knowledge of basic welding terminology.		
	Oxy-Fuel	**8 Days**	9C
	AMMT 9(C) The student will select and operate oxy-fuel welding and cutting equipment to meet standards.		

Grading Period 3 25 Days	**Electric Arc**	**10 Days**	9D
	AMMT 9(D) The student will select and operate electric-arc welding equipment to meet standards.		
	Plasma Arc	**7 Days**	AWS
	AWS The student will select plasma arc cutting equipment and operate to meet standards.		
Grading Period 4 33 Days	**Project Process**	**5 Days**	11A
	AMMT 11(A) The student will analyze site, equipment, and permit requirements.		
	CAD	**4 Days**	11B
	AMMT 11(B) The student will operate computer-aided drafting design software.		
	Designs/Sketches	**3 Days**	11C
	AMMT 11(C) The student will develop, read, and interpret designs and sketches.		
	Material Costs	**4 Days**	11D
	AMMT 11(D) The student will estimate material needs and costs.		
	Material	**4 Days**	11E
	AMMT 11(E) The student will measure, mark, and cut material.		
	Nonmetallic Fabrication	**4 Days**	11F
	AMMT 11(F) The student will perform specialized nonmetallic fabrication techniques.		
	Metallic Fabrication	**5 Days**	AWS
	AWS The student will perform specialized metallic fabrication techniques.		
	Cost & Bid	**4 Days**	7B; AWS
	AMMT 7(B) and AWS The student will identify elements of a cost estimate and prepare a bid package for a planned project.		
Grading Period 5 34 Days	**Fences**	**2 Days**	8A
	AMMT 8(A) The student will select fencing materials.		
	Install Fences	**2 Days**	8B
	AMMT 8(B) The student will plan and install fences.		
	Tools Instructions	**8 Days**	3A, 3B
	AMMT 3(A) The student will select, use, maintain and store appropriate hand tools to perform a given task. AMMT 3(B) The student will select, use, maintain, and store appropriate power equipment such as tools powered by electric, pneumatic, and internal combustion engines.		

Lab Safety and Scientific Processes
Readiness Standards
Supporting Standards

	Tools/Measuring	**7 Days**	3C; AWS
	AMMT 3(C) The student will select and use measuring and marking devices. AWS The student will apply accurate readings of measuring devices, both U.S. customary and metric.		
	Measure/Cut	**15 Days**	9B; AWS
	AMMT 9(B) The student will cut, file, shape, and drill metal. AWS The student will identify acceptable cuts.		
Grading Period 6 **28 Days**	**Electricity**	**3 Days**	4A
	AMMT 4(A) The student will identify principles of electric and wiring terminology.		
	Electric Wiring	**2 Days**	4B, 4C
	AMMT 4(B) The student will install electric wiring components and fixtures to comply with government regulations and applicable codes. AMMT 4(C) The student will maintain electric motors.		
	Plumbing Tools	**3 Days**	5A
	AMMT 5(A) The student will identify and select plumbing tools.		
	Plumbing Equipment	**2 Days**	5B
	AMMT 5(B) The student will identify plumbing fixtures.		
	Cost Estimate	**1 Day**	6A
	AMMT 6(A) The student will project cost estimates for materials.		
	Concrete	**3 Days**	6B
	AMMT 6(B) The student will form and pour concrete slabs.		
	Welding	**11 Days**	9E
	AMMT 9(E) The student will perform specialty welding and cutting techniques to meet standards.		
	Paint	**3 Days**	7D
	AMMT 7(D) The student will paint and protect a project with coating.		