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| Time Frame | Topic/Unit | Skills/Concepts | Major Assessments | Core Standards | Resources |
| 2 weeksSept | Safety | * Readings/lecture notes on safety and tool use and ID
* Demonstration on took use and safety
* Shop organization
 | Practical’s and summative assessment | Reading Anchor StandardsStandard 1 2 3 and 4Writing Anchor StandardsStandard 2 and 5Speaking and Listening | Ag Ed NetTools and machinesPPE’sOwner’s manuals |
| 3 weeksSept | Planning in Mechanics | * Readings/lecture notes on planning
* Design a project
* Layout/Build a project
* Calculate bill of materials
* Measurement
 | Practical’s | Anchor StandardsStandard 1 2 and 4Language Anchor StandardsStandard 1 and 4 | Ag Ed NetDrawing equipment |
| 10 weeksNov/Dec | Electricity | * Readings/lecture notes on safety, uses, principles, design, and tools
* Mr. Circuit labs (30 labs)
* Household wiring
* Schematics
 | Practical’s and summative assessment | CS Standards 1,2, 4 and 6PS Standards 1, 2, 4, 5,6 and 7 | Ag Ed NetCircuit board kitsHousehold wiring material |
| 3 weeksJan | FFA | * CDE and LDE Events
 | Practical |  | FFA website |
| 5 weeksDec | Plumbing | * Readings/lecture notes on plumbing
* Tools for Plumbing
* Materials used in plumbing
* Complete a plumbing installation
 | Practical’s and summative assessment |  | Ag Ed NetPlumbing suppliesPlumbing tools |
| 6 weeksOct | Metals | * Readings/lecture notes on metals and joining them together
* Arc welding
* Oxy/Act welding and cutting
* Plasma cutters
* ID metals
* MIG welding
* Cutting and drilling metal
* Painting metal
 | Practical’s and summative assessment |  | Ag Ed NetMetalProjectsWeldersOxy/Act systemMetal tools |
| 4 weeksOct | Wood | * Project planning
* Project build
* Painting wood
 | Practical’s |  | Ag Ed NetWoodPaint |
| 10 weeksNov/Dec | Small and Large Engines | * Readings/lecture on small and large engine operation, principles, safety, etc
* Trouble shooting exercise
* Parts ID and use
* Measurements in engines
* Rebuilding an engine
* Parts manuals and tech manuals
 | Practical’s and summative assessment | PS Standards 1, 2, 4, 5,6 and 7 | Ag Ed NetToolsPPE’sSmall engines and partsvideo |
| 10 weeksApr/May | Power Trains/Engines | * Readings/lecture notes on power trains
* Parts manuals and tech manuals
* Trouble shooting power trains
* Types of power trains
* Rates of flow
* Horse power
 | Practical’s and summative assessment | PS Standards 1, 2, 4, 5,6 and 7 | Ag Ed NetJD Power Trains manualVideo’sPower kit |
| 8 weeksMay/June | Agricultural Structures | * Readings/lecture notes on construction design, plans, materials, etc
* Cement and masonry
* Trusses and rafters
* Building layout
 | Practical’s and summative assessment | PS Standards 1,6 and 7\*\*AFNR National Standards (Agricultural Food and Natural Resources) | Ag Ed NetBuilding materialTools and machines |