

Arizona Department of Education

Career and Technical Education

Recommended Equipment List

Program: Heavy Equipment Operations
 CIP#: 49.0202.00

NOTE: The following items and descriptions are the recommended equipment guidelines for each CTE Heavy Equipment Operations program. Please note that this list of recommended items does not necessarily need to be supported financially by Federal Perkins or State Priority funding sources. In many cases, local school district funds are used to purchase items on a regular basis (i.e. furniture, consumables, etc.) Further, please understand that this is not an exhaustive list.

Please contact ADE-CTE Program Specialist for Construction Science Technologies, if you have questions regarding the appropriateness of any item you are considering for addition to your CTE Heavy Equipment Operations program.

Recommended Equipment and Software

Item	Items
Highest Priority* MUST HAVE	
Personal protective equipment (PPE)	Construction plans including:
Hard hat	Topographical and grade information
Safety glasses	Sight level
Ear protection	Automatic level
Gloves	Laser level
Safety harness	Tripod Pocket
Reflective safety vest	Leveling rod
Barricades	Hand level
Temporary traffic control devices	Leveling rods
Flags and/or paddles	Measuring tape
Respirator cartridges	18" ruler
Samples of marked surveyor stakes:	String
Center line stakes	Two-way communication - hands-free
Offset stakes	Orange traffic cones
Grade stakes	General maintenance hand tools
Slope stakes	Engineering scales
Edge of pavement stakes	100 feet tape measure
High Priority* REALLY SHOULD HAVE	
Jars with different types of soil	Slings
Set of site plans including excavation drawings	Rigging hooks
Marked grade and finish stakes	Shackles
Markers	Various soil types
Lower Priority* NICE TO HAVE	
Calculators	Three containers of soil binders,
Functional skid steer	One each of cement, lime, and calcium chloride
Palletized materials	Three containers of soil
Empty container to collect water	
Lowest Priority* NOT COMPLETELY NECESSARY	
Various pieces of heavy equipment:	Tractor Attachments:
Construction Tractors	Drawbar/hitch types
Dump Trucks	PTO types
Roller/Compactors	Fuel Engine oil
Scrapers	Hydraulic fluid
Backhoe Loaders	Water

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Item	Items
Excavators	Lubricating grease
Dozers	Grease guns
Loaders	Trailer
Forklifts	
Motor Graders	
Trenchers	
Tractor	

***NOTE:**

Equipment and tools list from NCCER HVAC level 1, internet search, SkillsUSA contest list and Arizona Instructors
Suggested tools and equipment may not reflect all necessary tools and equipment needed