

# NORTH CAROLINA CAREER AND TECHNICAL EDUCATION STANDARDS

## Agricultural Education

**Grade:** Grade 9 - 12

**Course:** Agricultural Mechanics II

**NCCTE.2018.AS32** - Agricultural Mechanics II

**NCCTE.2018.AS32.01.00** - Understand leadership qualities involved in successful employment.

**NCCTE.2018.AS32.01.01** - Understand leadership qualities and career building techniques desired by the agricultural mechanics industry.

**NCCTE.2018.AS32.01.02** - Understand parliamentary procedure.

**NCCTE.2018.AS32.02.00** - Understand the Supervised Agricultural Experience component of the agricultural mechanics program.

**NCCTE.2018.AS32.02.01** - Understand SAE components and application to work-based learning.

**NCCTE.2018.AS32.02.02** - Understand a financial statement.

**NCCTE.2018.AS32.03.00** - Apply shop safety skills in the agriculture shop.

**NCCTE.2018.AS32.03.01** - Understand OSHA safety rules, color coding, and equipment safety in an agricultural mechanics shop.

**NCCTE.2018.AS32.03.02** - Apply safety skills when practicing cold and hot metal skills..

**NCCTE.2018.AS32.04.00** - Apply metal fabrication skills in the agricultural shop.

**NCCTE.2018.AS32.04.01** - Apply proper procedures for using bolts, nuts, washers, screws, rivets.

**NCCTE.2018.AS32.04.02** - Apply the proper use of metal fabrication equipment such as plasma cutters, chop saws, grinders, bandsaws, and CNC (Computer Numerical Control).

**NCCTE.2018.AS32.04.03** - Apply proper procedures for using oxy-fuel equipment and materials for annealing, bending, brazing, soldering, tempering, hardening, cutting, and welding various materials.

**NCCTE.2018.AS32.04.04** - Apply proper procedures for using arc welding equipment and materials for SMAW, GMAW and GTAW.

**NCCTE.2018.AS32.04.05** - Apply metal fabrication skills to design plans, read symbols, and construct a project.

**NCCTE.2018.AS32.05.00** - Apply the use of agricultural power in agricultural mechanics.

**NCCTE.2018.AS32.05.01** - Understand principles of operation and troubleshooting techniques for air-cooled and water-cooled engines.

**NCCTE.2018.AS32.05.02** - Apply preventative maintenance procedures to service small engine powered tools, equipment, tractors and attachments.

**NCCTE.2018.AS32.05.03** - Apply principles and procedures for the safe use of tractors and power equipment.

**NCCTE.2018.AS32.06.00** - Apply plumbing principles used in agricultural mechanics.

**NCCTE.2018.AS32.06.01** - Understand plumbing principles and materials.

**NCCTE.2018.AS32.06.02** - Apply proper safety and industry approved techniques to install plumbing materials.



## NORTH CAROLINA CAREER AND TECHNICAL EDUCATION STANDARDS

**NCCTE.2018.AS32.07.00** - Apply concrete and masonry principles to complete agricultural mechanics projects.

**NCCTE.2018.AS32.07.01** - Understand concrete and masonry principles to construct masonry projects in agricultural mechanics.

**NCCTE.2018.AS32.07.02** - Apply concrete and masonry principles to calculate materials needed and cost for a masonry project.

**NCCTE.2018.AS32.07.03** - Apply principles to construct a concrete/masonry project.

