## NORTH CAROLINA CAREER AND TECHNICAL EDUCATION STANDARDS

## Trade, Technology, Engineering, and Industrial Education

Grade: Grade 9 - 12

Course: Welding Technology III Updated
NCCTE.2020.IM63 - Welding Technology III

**NCCTE.2020.IM63.01.00** - Apply procedures to complete AWS SENSE Module 5 and 6 - Gas Metal Arc Welding and Flux Cored Arc Welding Safety

NCCTE.2020.IM63.01.01 - Perform safety inspections of GMAW equipment and accessories.

NCCTE.2020.IM63.01.02 - Perform safety inspections of FCAW equipment and accessories.

**NCCTE.2020.IM63.02.00** - Apply procedures to complete AWS SENSE Module 5 and 6 - Gas Metal Arc Welding and Flux Cored Arc Welding Equipment Setup

NCCTE.2020.IM63.02.01 - Make minor external repairs to GMAW equipment and accessories.

**NCCTE.2020.IM63.02.02** - Make minor external repairs to FCAW equipment and accessories.

NCCTE.2020.IM63.02.03 - Set up for GMAW-S and GMAW (spray) operations on carbon steel.

NCCTE.2020.IM63.02.04 - Set up for FCAW-G/GM & S operations on carbon steel.

**NCCTE.2020.IM63.03.00** - Apply procedures to complete AWS SENSE Module 5 and 6 - Gas Metal Arc Welding and Flux Cored Arc Welding Gasses

NCCTE.2020.IM63.03.01 - Describe and apply the various gasses used in GMAW

NCCTE.2020.IM63.03.02 - Describe and apply the various gasses used in FCAW

**NCCTE.2020.IM63.04.00** - Apply procedures to complete AWS SENSE Module 5 and 6 - Gas Metal Arc Welding and Flux Cored Arc Welding Filler Wire

NCCTE.2020.IM63.04.01 - Describe and apply the various electrodes/filler metals used in GMAW

NCCTE.2020.IM63.04.02 - Describe and apply the various electrodes/filler metals used in FMAW

**NCCTE.2020.IM63.05.00** - Perform procedures to complete AWS SENSE Module 5 - Gas Metal Arc Welding (GMAW) Short Circuit Fillet and Groove Welds

NCCTE.2020.IM63.05.01 - Operate GMAW-S and GMAW (spray) equipment on carbon steel.

**NCCTE.2020.IM63.06.00** - Perform procedures to complete AWS SENSE Module 5 - Gas Metal Arc Welding (GMAW) Spray Fillet and Groove Welds

NCCTE.2020.IM63.06.01 - Operate GMAW-S and GMAW (spray) equipment on carbon steel.

**NCCTE.2020.IM63.06.02** - Make GMAW-S fillet welds in all positions and GMAW (spray) fillet welds in the 1F and 2F positions on carbon steel.

**NCCTE.2020.IM63.06.03** - Make GMAW-S groove welds in all positions and GMAW (spray) groove welds in the 1G position on carbon steel.

**NCCTE.2020.IM63.06.04** - Pass GMAW-S and GMAW (spray) welder performance qualification test on carbon steel.

**NCCTE.2020.IM63.07.00** - Perform procedures to complete AWS SENSE Module 6 - Flux Cored Arc Welding (FCAW) Gas and Self Shielded Fillet and Groove Welds

NCCTE.2020.IM63.07.01 - Operate FCAW-G/GM & S equipment on carbon steel.

NCCTE.2020.IM63.07.02 - Make FCAW-G/GM & S fillet welds in all positions on carbon steel.

## NORTH CAROLINA CAREER AND TECHNICAL EDUCATION STANDARDS

NCCTE.2020.IM63.07.03 - Make FCAW-G/GM & S groove welds in all positions on carbon steel.

NCCTE.2020.IM63.07.04 - Pass FCAW-G/GM & S welder performance qualification test on carbon steel.