



CATALOG YEAR: 2023-2024
CERTIFICATE OF TECHNICAL STUDIES
ENTRY WELDER

Students are encouraged to utilize Degree Works (accessible via LoLA) to track their academic progress. All courses must be passed with a "C" or better.

FIRST SEMESTER

COURSE NAME	COURSE PREFIX	COURSE NUMBER	CREDIT HOURS	Industry-Based Credentials
Occupational Orientation & Welding Safety	WELD	1005	3	NCCER Core, NCCER Welding Safety
Introduction to Welding Fundamentals	WELD	1125	3	NCCER Base Metal Preparation, NCCER Joint Fit Up & Alignment, NCCER Detailed Drawings, NCCER Welding Symbols
SMAW Beads & Fillet Welds	WELD	1415	3	NCCER SMAW Beads & Fillet Welds
Introduction to Cutting Processes	WELD	1200	2	NCCER Oxyfuel Cutting, Plasma Arc Cutting, Air Carbon Cutting and Gouging
SMAW Open V Groove Welds	WELD	1425	3	NCCER SMAW Open Groove Welds
Shielded Metal Arc Electrodes, SMAW Equipment and Set Up	WELD	1405	1	NCCER Shielded Metal Arc Electrodes, SMAW Equipment and Set Up
SEMESTER CREDIT HOURS			15	

SECOND SEMESTER

COURSE NAME	COURSE PREFIX	COURSE NUMBER	CREDIT HOURS	Industry-Based Credentials
Physical Characteristics of Metals, Pre-Heating & Post Heating of Metals	WELD	1161	1	NCCER Physical Characteristics of Metals, Pre-Heating and Post-Heading of Metals
Welding Inspection and Weld Quality	WELD	1130	2	NCCER Weld Quality
SMAW Pipe 2G	WELD	1430	3	SMAW Open Root Pipe Welds
SMAW Pipe 5G	WELD	1440	3	
SMAW Pipe 6G	WELD	1450	3	
Applied Math	WELD	1000	2	
SEMESTER CREDIT HOURS			14	

CTS- Entry Welder = 29 credit hours

Students will also earn the NCCER Level I Certification upon completion of the CTS program.