

Northwest Louisiana Technical College

Welding

Program Description & Curriculum

The purpose of the Welding Program is to prepare individuals for employment in the field of welding. Instruction is provided in various welding processes and techniques including oxyfuel cutting, carbon arc cutting, shielded metal arc welding, gas tungsten arc welding, flux-cored arc welding, gas metal arc welding, pipe-welding, plasma arc cutting, blueprint reading, weld symbols, and joints.

Degrees/Certificates

Technical Diploma (TD)

Certificate of Technical Studies (CTS)

Technical Competency Area (TCA)

Available degrees and certificates may vary at each campus. Check with your local campus for more information.

CIP 480508

Welding CURRICULUM				
Course #	Course Title	Lecture /Lab Hours	Credit Hours	Clock Hours
WELD 1111	Occupational Orientation and Safety	2/0	2	30
<i>WELD 1111 PLUS</i>				
WELD 1141	Electrical Fundamentals	1/1	2	75
TCA - WELDER HELPER			4	105
<i>WELD 1111 PLUS</i>				
WELD 1211	Oxyfuel Systems/ Cutting Processes	1/2	3	105
TCA - THERMAL CUTTER			5	135
<i>WELD 1111 PLUS</i>				
WELD 1141	Electrical Fundamentals	1/1	2	75
WELD 1211	Oxyfuel Systems/ Cutting processes	1/2	3	105
WELD 1131	Welding Inspection & Testing	1/1	2	45
WELD 1413	SMAW Basic Beads	1/1	2	90
WELD 1411	SMAW Fillet Weld	0/3	3	105
CTS - WELDER HELPER II			14	450
<i>CTS Welder Helper II PLUS</i>				
WELD 1122	Basic Blueprint, Metallurgy, and Weld Symbols	2/1	3	60
WELD 1421	SMAW V-Groove Open/BU/GOUGE	1/3	4	120
WELD 2100	FCAW Basic Fillet Weld/Groove Welds	1/2	3	135
WELD 2211	GTAW Basic Multi-Joint	1/2	3	120
WELD 2312	GMAW Basic Fillet/Groove Weld	1/3	4	120
WELD 1510	SMAW Pipe 2G	1/3	4	120
WELD 1511	SMAW Pipe 5G	0/4	4	120
WELD 1512	SMAW Pipe 6G	0/4	4	120
JOBS 2450	Job Seeking Skills	2/0	2	30
TD - WELDING			45	1395

<i>Additional Exit Points</i>				
WELD 1122	Basic Blueprint, Metallurgy, and Weld Symbols	2/1	3	60
WELD 1131	Welding Inspection & Testing	1/1	2	45
TCA - BASIC BLUEPRINT READING AND WELD TESTING			5	105
WELD 1413	SMAW Basic Beads/ Fillet Weld	1/2	3	105
WELD 1421	SMAW V-Groove BU/Groove V-groove Open	1/3	4	120
TCA - SMAW-ARC WELDER FILLET & V-GROOVE			7	225
WELD 2100	FCAW Basic Fillet Weld/Groove Welds	1/2	3	135
TCA - FCAW- BASIC WELDS			3	135
WELD 2211	GTAW Basic Multi-Joint	1/2	3	120
WELD 2231	GTAW Aluminum Multi-Joint	1/2	3	120
TCA - GTAW ARC WELDER			6	240
WELD 2312	GMAW Basic Fillet/Groove Weld	1/3	4	120
WELD 1413	SMAW Basic Beads/ Fillet Weld	1/2	3	105
TCA - Basic Welds			7	225
WELD 1510	SMAW Pipe 2G	1/3	4	120
WELD 1511	SMAW Pipe 5G	0/4	4	120
WELD 1512	SMAW Pipe 6G	0/4	4	120
TCA - SMAW PIPE WELDER			12	360
WELD 2312	GMAW Basic Fillet/Groove Weld	1/3	4	120
WELD 2100	FCAW Basic Fillet Weld/Groove Welds	1/2	3	135
TCA - GMAW & FCAW BASIC WELDS			7	255
<i>With approval from the Chief Academic Officer/designee, the following courses may be substituted for any of the above course requirements.</i>				
WELD 2991	Special Projects I	0/1	1	30
WELD 2993	Special Projects II	0/2	2	60
WELD 2995	Special Projects III	0/3	3	90
WELD 2996	Special Projects IV	3/0	3	45
WELD 2997	Practicum	0/3	3	135
WELD 2999	Cooperative Education	0/3	3	135