

Northwest Louisiana Technical College

Welding

Program Description & Curriculum

Revised March 2017

Effective August 2017

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 oxy-fuel 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

Course # -- Course Title	Lecture/Lab Hours	Credit Hours	Clock Hours
WELD 1111 Occupational Orientation and Safety 2/0		2	30
WELD 1111 PLUS			
WELD 1141 Electrical Fundamentals 1/1		2	75
TCA - WELDER HELPER		4	105
WELD 1111 PLUS			
WELD 1211 Oxyfuel Systems/ Cutting Processes 1/2		3	115
TCA - THERMAL CUTTER		5	145
WELD 1111 PLUS			
WELD 1141 Electrical Fundamentals 1/1		2	75
WELD 1211 Oxyfuel Systems/ Cutting processes 1/2		3	115
WELD 1131 Welding Inspection & Testing 1/1		2	45
WELD 1413 SMAW Basic Beads 1/1		2	150
WELD 1411 SMAW Fillet Weld 0/3		3	150
CTS - WELDER HELPER II		14	565
CTS Welder Helper II PLUS			
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	150

Course # -- Course Title	Lecture/Lab Hours	Credit Hours	Clock Hours
WELD 2211 GTAW Basic Multi-Joint	1/2	3	120
WELD 2312 GMAW Basic Fillet/Groove Weld	1/3	4	150
WELD 1510 SMAW Pipe 2G	1/3	4	165
WELD 1511 SMAW Pipe 5G	0/4	4	165
WELD 1512 SMAW Pipe 6G	0/4	4	165
JOBS 2450 Job Seeking Skills	2/0	2	30
TD - WELDING		45	1690

Additional Exit Points

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	1/1	2	150
WELD 1421 SMAW V-Groove BU/Groove V-groove Open 1/3	4		120
TCA - SMAW-ARC WELDER FILLET & V-GROOVE		6	270
WELD 2100 FCAW Basic Fillet Weld/Groove Welds 1/2	3		150
TCA - FCAW- BASIC WELDS		3	150

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	150
WELD 1413 SMAW Basic Beads/ Fillet Weld	1/1	2	150
TCA - Basic Welds		6	300

WELD 1510 SMAW Pipe 2G	1/3	4	165
WELD 1511 SMAW Pipe 5G	0/4	4	165
WELD 1512 SMAW Pipe 6G	0/4	4	165
TCA - SMAW PIPE WELDER		12	495

WELD 2312 GMAW Basic Fillet/Groove Weld	1/3	4	150
WELD 2100 FCAW Basic Fillet Weld/Groove Welds 1/2	3		150
TCA - GMAW & FCAW BASIC WELDS		7	300

With approval from the Chief Academic Officer/designee, the following courses may be substituted for any of the above course requirements.

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