WELDING TECHNOLOGY (48.0508)

DIVISION: Technical Studies
DEPARTMENT: Welding

DIPLOMA/CERTIFICATE OPTIONS

TCA – WELDER HELPER
TCA – THERMAL CUTTER
TCA – ARC CUTTER
TCA – ARC WELDER SKILLS UPGRADE
TCA – TACK WELDER/FITTER HELPER
TCA – PRODUCTION LINE WELDER
CTS – PRODUCTION LINE WELDER II
CTS – ARC WELDER-GTAW
CTS – ARC WELDER-GMAW
CTS – ARC WELDER-FCAW
CTS – ARC WELDER-SMAW
TD – WELDING

CURRICULUM

Course No.	Course Title	Lecture	Lab	Total Credit Hrs.	Total Clock Hrs.
WELD 1110	Occupational Orientation & Safety	2	1	3	60
WELD 1120	Basic Blueprint, Metallurgy & Weld Symbols	2	1	3	75
WELD 1130	Welding Inspection & Testing	1	1	2	60
WELD 1140	Electrical Fundamentals	1	1	2	45
WELD 1210	Oxyfuel Systems	1	1	2	60
WELD 1310	Cutting Processes – CAC/PAC	1	1	2	45
WELD 1410	SMAW Basic Beads	1	1	2	60
WELD 1411	SMAW Fillet Weld	0	3	3	105
WELD 1412	SMAW V-Groove BU/Gouge	0	3	3	105
WELD 2110	FCAW Basic Fillet Welds	1	2	3	105
WELD 2111	FCAW Groove Welds	0	3	3	105
WELD 2210	GTAW Basic Multi-Joint	1	2	3	105
WELD 2230	GTAW Aluminum Multi-Joint	1	2	3	105
WELD 2310	GMAW Basic Fillet Weld	1	2	3	105
WELD 2311	GMAW Groove Weld	0	3	3	105
CPTR 1000	Introduction to Computers	1	1	2	45
JOBS 2450	Job Seeking Skills	2	0	2	30
	PROGRAM CORE TOTALS			44	1320
WELD XXXX	Required Electives (minimum credits)			16	480
	TD – WELDING			60	1800
	Required Elective Options:				
WELD 1420	SMAW V-Groove Open	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**
WELD 1610	**SMAW Stainless Steel (SMAW-SS) Multi-Joint**	**1**	**3**	**4**	**120**
WELD 1620	**SMAW Stainless Steel (SMAW-SS) 5G Pipe**	**1**	**3**	**4**	**120**
WELD 1621	**SMAW Stainless Steel (SMAW-SS) 2G Pipe**	**0**	**4**	**4**	**120**
WELD 1622	**SMAW Stainless Steel (SMAW-SS) 6G Pipe**	**0**	**4**	**4**	**120**
WELD 2112	**FCAW Pipe 5G**	**1**	**3**	**4**	**120**
WELD 2113	**FCAW Pipe 2G**	**0**	**4**	**4**	**120**
WELD 2114	**FCAW Pipe 6G**	**0**	**4**	**4**	**120**
WELD 2220	**GTAW Pipe 5G**	**1**	**3**	**4**	**120**
WELD 2221	**GTAW Pipe 2G**	**0**	**4**	**4**	**120**
WELD 2222	**GTAW Pipe 6G**	**0**	**4**	**4**	**120**
WELD 2240	**GTAW Low Alloy (STAW-LA) 5G Pipe**	**1**	**3**	**4**	**120**
WELD 2241	**GTAW Low Alloy (STAW-LA) 2G Pipe**	**0**	**4**	**4**	**120**
WELD 2242	**GTAW Low Alloy (STAW-LA) 6G Pipe**	**0**	**4**	**4**	**120**
WELD 2250	**GTAW Stainless Steel (GTAW-SS) 5G Pipe**	**1**	**3**	**4**	**120**
WELD 2251	**GTAW Stainless Steel (GTAW-SS) 2G Pipe**	**0**	**4**	**4**	**120**
WELD 2252	**GTAW Stainless Steel (GTAW-SS) 6G Pipe**	**0**	**4**	**4**	**120**
WELD 2260	**GTAW Aluminum (GTAW-AL) 5G Pipe**	**1**	**3**	**4**	**120**
WELD 2261	**GTAW Aluminum (GTAW-AL) 2G Pipe**	**0**	**4**	**4**	**120**
WELD 2262	**GTAW Aluminum (GTAW-AL) 6G Pipe**	**0**	**4**	**4**	**120**
WELD 2320	**GMAW Pipe 2G**	**1**	**3**	**4**	**120**
WELD 2321	**GMAW Pipe 5G**	**0**	**4**	**4**	**120**
WELD 2322	**GMAW Pipe 6G**	**0**	**4**	**4**	**120**
WELD 2330	**GMAW Aluminum Multi-Joint**	**1**	**3**	**4**	**120**
WELD 2340	**GMAW Aluminum (GMAW-AL) 5G Pipe**	**1**	**3**	**4**	**120**
WELD 2341	**GMAW Aluminum (GMAW-AL) 2G Pipe**	**0**	**4**	**4**	**120**
WELD 2342	**GMAW Aluminum (GMAW-AL) 6G Pipe**	**0**	**4**	**4**	**120**

CERTIFICATE EXIT POINTS:

Course No.	Course Title	Total Credit Hrs.
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1140	**Electrical Fundamentals**	**2**
	TCA – WELDER HELPER	**5**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1210	**Oxyfuel Systems**	**2**
	TCA – THERMAL CUTTER	**5**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1140	**Electrical Fundamentals**	**2**
WELD 1310	**Cutting Processes – CAC/PAC**	**2**
	TCA – ARC CUTTER	**7**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 2883	**Basic Skills Evaluation**	**1**
	OR	
WELD 2885	**Advanced Skills Evaluation**	**1**
	Minimum of 4 credits from Required Electives	**4**
	TCA – ARC WELDER SKILLS UPGRADE	**8**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1210	**Oxyfuel Systems**	**2**

WELD 1120	**Basic Blueprint, Metallurgy & Weld Symbols**	**3**
WELD 1410	**SMAW Basic Beads**	**2**
	TCA – TACK WELDER/FITTER HELPER	**10**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1140	**Electrical Fundamentals**	**2**
WELD 1210	**Oxyfuel Systems**	**2**
WELD 1410	**SMAW Basic Beads**	**2**
	PLUS ONE OF THE FOLLOWING COURSES:	
WELD 1411	**SMAW Fillet Weld**	**3**
WELD 2110	**FCAW Basic Fillet Welds**	**3**
WELD 2210	**GTAW Basic Multi-Joint**	**3**
WELD 2310	**GMAW Basic Fillet Weld**	**3**
	TCA – PRODUCTION LINE WELDER	**12**
Course No.	**Course Title**	**Total Credit Hrs.**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1140	**Electrical Fundamentals**	**2**
WELD 1210	**Oxyfuel Systems**	**2**
WELD 1410	**SMAW Basic Beads**	**2**
WELD 1310	**Cutting Processes – CAC/PAC**	**2**
	Elective	**2**
	PLUS 4 COURSES FROM THE FOLLOWING:	**12**
WELD 1411	**SMAW Fillet Weld**	**3**
WELD 1412	**SMAW V-Groove BU/Gouge**	**3**
WELD 2110	**FCAW Basic Fillet Welds**	**3**
WELD 2111	**FCAW Groove Welds**	**3**
WELD 2210	**GTAW Basic Multi-Joint**	**3**
WELD 2230	**GTAW Aluminum Multi-Joint**	**3**
WELD 2310	**GMAW Basic Fillet Weld**	**3**
WELD 2311	**GMAW Groove Weld**	**3**
	CTS – PRODUCTION LINE WELDER II	**25**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1140	**Electrical Fundamentals**	**2**
WELD 1210	**Oxyfuel Systems**	**2**
WELD 1310	**Cutting Processes – CAC/PAC**	**2**
WELD 2210	**GTAW Basic Multi-Joint**	**3**
	PLUS 3 COURSES FROM REQUIRED GTAW ELECTIVES	**12**
	CTS – ARC WELDER-GTAW	**24**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1140	**Electrical Fundamentals**	**2**
WELD 1210	**Oxyfuel Systems**	**2**
WELD 1310	**Cutting Processes – CAC/PAC**	**2**
WELD 2310	**GMAW Basic Fillet Weld**	**3**
WELD 2311	**GMAW Groove Weld**	**3**
	PLUS 3 COURSES FROM REQUIRED GMAW ELECTIVES	**12**
	CTS – ARC WELDER-GMAW	**27**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1140	**Electrical Fundamentals**	**2**
WELD 1210	**Oxyfuel Systems**	**2**
WELD 1310	**Cutting Processes – CAC/PAC**	**2**

WELD 2110	**FCAW Basic Fillet Welds**	**3**
WELD 2111	**FCAW Groove Welds**	**3**
	PLUS 3 COURSES FROM REQUIRED FCAW ELECTIVES	**12**
	CTS – ARC WELDER-FCAW	**27**
WELD 1110	**Occupational Orientation & Safety**	**3**
WELD 1140	**Electrical Fundamentals**	**2**
WELD 1210	**Oxyfuel Systems**	**2**
WELD 1310	**Cutting Processes – CAC/PAC**	**2**
WELD 1410	**SMAW Basic Beads**	**2**
WELD 1411	**SMAW Fillet Weld**	**3**
WELD 1412	**SMAW V-Groove BU/Gouge**	**3**
WELD 1420	**SMAW V-Groove Open**	**4**
	PLUS 3 COURSES FROM REQUIRED SMAW ELECTIVES	**12**
	CTS – ARC WELDER-SMAW	**33**