



Cowley College Degree Grid

Welding Technology is an associate degree or certificate program that combines practical, theoretical, and technical training in welding fabrication. Manual, semiautomatic, and automatic processes using oxy fuel and arc welding processes in SMAW, GMAW, GTAW, and plasma are covered. Advanced courses deal with application of welding codes to develop the expertise needed to understand specifications used in industry. Training is done on both structural and piping materials in mild steel, stainless and aluminum alloys. Program graduates typically find employment as welding technicians, robotic welding technicians, and technical sales reps. As such, they are responsible for one or more of the following: welding metal alloys; fabricating metals to specifications; troubleshooting faulty weldments; writing procedures; interpreting conventional and computer-aided prints; and selling and servicing equipment.

WELDING TECHNOLOGY (Vocational Certificate)

COURSE NUMBER	COURSE NAME	SEMESTER			
		1	2	3	4
TECHNICAL REQUIREMENTS					
<u>WEL3613</u>	SMAW (Shielded Metal Arc Welding/Structural)	3			
<u>WEL3615</u>	Basic Welding Processes	3			
<u>WEL3632</u>	Shielded Metal Arc Welding/Pipe	3			
<u>INR3716</u>	Technical Math	3			
<u>WEL3620</u>	Gas Welding Processes		3		
<u>WEL3623</u>	GTAW (Gas Tungsten Arc Welding/Structural)		3		
<u>WEL3642</u>	Gas Tungsten Arc Welding/Pipe		3		
<u>INR3760</u>	Industrial Materials		3		
<u>WEL3622</u>	GMAW (Gas Metal Arc Welding/Structural)			3	
<u>WEL3633</u>	Gas Metal Arc Welding/Pipe			3	
<u>WEL3635</u>	Arc Welding Processes			3	
<u>INR3717</u>	Blueprint Reading			3	
<u>WEL3640</u>	Advanced Welding Processes				3
<u>WEL3644</u>	Special Alloy Welding/Inspection				6
<u>INR3713</u>	Applied Economics				3
<u>INR3718</u>	OSHA 10	1			
TOTAL HOURS 49		13	12	12	12