

DEKALB TECHNICAL COLLEGE
Clarkston Campus

**WELDING AND JOINING TECHNOLOGY
TECHNICAL CERTIFICATES OF CREDIT**

The Welding and Joining Technology Technical Certificates of Credit programs are sequences of courses that prepare students for careers in the welding industry. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention, and advancement. The programs emphasize a combination of welding theory and practical application necessary for successful employment.

GAS TUNGSTEN ARC WELDING (GTAW) TECHNICIAN

Course Number	Course	Class Hours	Lab Hours	Total Hours	Credit Hours	Prerequisites/Corequisites
MAT 100	Basic Mathematics	30	0	30	3	*
WLD 100	Introduction to Welding Technology	40	40	80	6	
WLD 103	Blueprint Reading I	10	40	50	3	MAT 100
WLD 108	Blueprint Reading II	10	40	50	3	WLD 103
WLD 110	Gas Tungsten Arc Welding GTAW/TIG	<u>20</u>	<u>50</u>	<u>70</u>	<u>4</u>	WLD 100
TOTAL		110	170	280	19	

*Approved admission level English, reading and/or mathematics competency required.

CIP CODE: 48.050801

MAJOR CODE: BTW1

REQUIRED CREDIT HOURS: 19

10/07

The curriculum is subject to change to meet changing conditions. As set forth in its catalog, DeKalb Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, veteran status, or citizenship status (except in those special circumstances permitted or mandated by law).

COURSE DESCRIPTIONS

WLD 100 – INTRO TO WELDING TECHNOLOGY (6)

Provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include: industrial safety practices, hand tool and power machine operations, measurement, laboratory procedures, introduction to codes and standards, welding career potentials and certification eligibility, basic electricity and power sources, metals characteristics, preparation, and testing procedures. Laboratory demonstrations parallel class work.

WLD 103 - BLUEPRINT READING I (3)

Prerequisite/Corequisite: MAT 100
Introduces the knowledge the skills necessary for reading welding and related blueprints and sketches. Topics include: basic lines, sketches, basic views, notes and specifications, dimensions, structural shapes, isometrics, sectional views, joint design, and detail and assembly prints.

WLD 108 - BLUEPRINT READING II (3)

Prerequisite: WLD 103
Emphasizes welding symbols and definitions through which the engineer or designer communicates with the welder. Welding symbols are considered an integral part of blueprint reading for the welder. Topics include: weld symbols and abbreviations, basic joints for weldment fabrications, fillet welds, groove welds, back or backing and melt-thru welds, plug and slot welds, surfacing welds, flash welds and upset welds, and flange, spot, projection and seam welds.

WLD 110 - GAS TUNGSTEN ARC WELDING (GTAW/TIG) (4)

Prerequisite: WLD 100
Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standard welds. Topics include: safety and health practices, metals weldable using GTAW, shielding gases, metal cleaning procedures, GTAW machines and equipment set-up, selection of filler rods, GTAW weld positions, and production of GTAW beads, bead patterns, and joints in all positions.

ESTIMATED PROGRAM COSTS

GAS TUNGSTEN ARC WELDING (GTAW) TECHNICIAN

Tuition/Fees.....	\$544.00
Books.....	128.00
Total.....	\$672.00

Tuition/fees and cost of books/supplies are estimates only and are subject to change without notice. Tuition is based on Georgia residency.

10/07