ADVANCED MANUFACTURING:
WELDING AND FABRICATION

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PROGRAM OVERVIEW

The welding industry continues to be a critical component of manufacturing worldwide. Employment opportunities continue to thrive, and the demand for trained welding technicians in the field continues to increase. The Manufacturing Industrial Technology program trains students to work as professionals in this field using the Gas Metal Arc Welding (MIG), Gas Tungsten Arc Welding (TIG), and/or Flux-Cored Arc Welding (FCAW) processes.

By fulfilling the program requirements, students will have gained the skills necessary for certification thru the American Welding Society (AWS) Certified Welder Program and the Los Angeles Department of Building and Safety Certified Welder Examination using GMAW, GTAW, and FCAW. In addition to those conventional skills, the program will expose students to advanced automated welding techniques such as CNC plasma cutting, robotic welding, and friction stir welding.

PROGRAM LEARNING OUTCOMES (PLOs)

Upon completion of the Certificate program, students are able to:

• Demonstrate safe work habits that reflect concern and care for self, others, and the environment.
• Produce industry quality weldments on carbon steel plate in various joint and groove configurations using the plasma arc cutting, GMAW, FCAW, GTAW, and SAW processes.
• Produce industry-quality welds using GTAW on stainless steel and aluminum sheet.
• Demonstrate the qualifying knowledge and skills in the GMAW, FCAW, GTAW, and SAW processes necessary for acquiring the local and national industry certifications (such as American Welding Society, American Society of Mechanical Engineers, and the American Petroleum Institute) recognized by employers in advanced manufacturing industries.
• Interpret blueprints and verbal orders, including weld symbols, in order to fabricate using tools of the welding trade.

USEFUL LATTC LINKS:

College Catalog: http://college.lattc.edu/catalog/
Financial Aid Office: http://college.lattc.edu/financialaid/
Counseling Department: http://college.lattc.edu/counseling/
General Education Information: http://college.lattc.edu/catalog
Advanced Transportation & Manufacturing Pathway: http://pathways.lattc.edu/catalog-programs/atm1/

To register: http://college.lattc.edu/student/new-students/register-now/

For additional information consult a LATTC college counselor.