

WELDING TECHNOLOGY & MATERIALS SCIENCE CERTIFICATE PROGRAM



REQUIRED COURSES

Welding Economics
Blodgett Seminar: Steel Weldments

Metallurgy for the Non-Metallurgist
Mechanical Testing
Welding Inspection and Quality Control

Course Name: Offered At ASM Headquarters | Course Name: Offered At Lincoln Electric's Welding Technology And Training Center

INDUSTRY FOCUSED COURSES

Students must complete any three (3) courses within a given industry focus.

AEROSPACE Advanced Motorsports GTAW Corrosion Aluminum and its Alloys Titanium and its Alloys	AUTOMOTIVE CWI Prep Pr. Alum Basic Motorsports Advanced Motorsports GMAW GTAW	GENERAL FABRICATION CWI Prep GMAW FCAW SAW SMAW GTAW	HEAVY FABRICATION CWI Prep GMAW FCAW SAW SMAW	LIQUEFIED NATURAL GAS CWI Prep GMAW Pr. Alum SAW Stainless Steel Metallurgy for Welding and Joining
MAINTENANCE & REPAIR CWI Prep GMAW FCAW SAW SMAW GTAW Corrosion Principles of Failure Analysis	NUCLEAR CWI Prep SAW GTAW GMAW SMAW Superalloys Metallurgy for Welding and Joining Stainless Steel	OFFSHORE CWI Prep FCAW SAW SMAW GTAW Corrosion	PIPELINE CWI Prep FCAW SMAW SAW GMAW Corrosion Principles of Failure Analysis	POWER GENERATION & PROCESS CWI Prep GMAW Pr. Alum SAW GTAW Superalloys Metallurgy for Welding and Joining
PRESSURE VESSEL CWI Prep GMAW FCAW SAW SMAW	SHIP BUILDING CWI Prep GMAW Pr. Alum SAW FCAW SMAW Corrosion Stainless Steel	STRUCTURAL CWI Prep GMAW Pr. Alum FCAW SMAW Corrosion	THERMAL ENERGY CWI Prep SAW Titanium Stainless Steel Corrosion	WIND POWER CWI Prep FCAW SAW Aluminum and its Alloys Corrosion

LINCOLN COURSE ABBREVIATIONS

Advanced Motorsports: Motorsports Advanced Materials Program
Basic Motorsports: Motorsports Basic Materials Program
CWI Prep: CWI Prep Course
FCAW: Flux-Cored Arc Welding
GMAW: Gas Metal Arc Welding

GTAW: Gas Tungsten Arc Welding
Pr. Alum: Aluminum Solutions: Practical Training for Welding Aluminum Alloys
SAW: AC/DC Submerged Arc Welding Training
SMAW: Introduction to Basic Plate & Sheet Metal Arc Welding