

WELDING (WELD)

WELD 101 Foundations of Welding 4 Credit Hour(s)

Prerequisite: CRFT 101 (may be taken concurrently)

Foundations of Welding is a practical course combining lecture and hands-on instruction. Topics addressed include: Welding Safety, Oxyfuel Cutting, Plasma Arc Cutting, Air Carbon Arc Cutting and Gouging, Base Metal Preparation, Weld Quality, SMAW - Equipment and Setup, Shielded Metal Arc Electrodes, and SMAW - Beads and Fillet Welds.

Offered: Resident

WELD 201 Intermediate Welding 4 Credit Hour(s)

Prerequisite: WELD 101 and CRFT 101

Intermediate Welding is a practical course combining lecture and hands-on instruction. Topics addressed include: Joint Fit Up and Alignment, SMAW Groove Welds with Backing, SMAW Open VGroove Welds, Welding Symbols, Reading Welding Detail Drawings, Physical Characteristics and Mechanical Properties of Metals, Preheating and Postheating of Metals, GMAW and FCAW -Equipment and Filler Metals, GMAW and FCAW -Plate, GTAW -Equipment and Filler Materials.

Offered: Resident

WELD 301 Advanced Pipe Welding 4 Credit Hour(s)

Prerequisite: WELD 201 and CRFT 101

Advanced Pipe Welding is a practical course combining lecture and hands-on instruction. Topics addressed include techniques with: GTAW: Plate, SMAW -Open-Root Pipe Welds, GMAW -Pipe, FCAW -Pipe, GTAW -Carbon Steel Pipe, GTAW -Low Alloy and Stainless Pipe, and SMAW: Stainless Steel Groove Welds.

Offered: Resident

WELD 401 Advanced Topics in Welding: Aluminum 4 Credit Hour(s)

Prerequisite: WELD 301 and CRFT 101

Advanced Topics in Welding: Aluminum is a practical course combining lecture and hands-on instruction. Topics addressed include techniques with: GMAW -Aluminum Plate, GTAW -Aluminum Plate, GTAW -Aluminum Pipe, GMAW -Aluminum Pipe.

Offered: Resident