

WLD

Courses

WLD 100 Fundamentals of Welding

3 Credits. 2 Lecture Hours. 3 Lab Hours.

A course on fundamental principles of welding and joining processes. Topics include: welding techniques and equipment, welding safety, OSHA training, and career exploration.

Prerequisites: None

WLD 105 Print Reading and & Weld Design

3 Credits. 2 Lecture Hours. 2 Lab Hours.

A course on interpreting various types of prints used in the welding industry. Topics include: print reading, measurements, types of welds and joints, and welding symbols.

Prerequisites: AFM 092 or appropriate placement test score

WLD 110 Shielded Metal Arc Welding

4 Credits. 2 Lecture Hours. 6 Lab Hours.

A course on techniques and operations associated with Shielded Metal Arc Welding (SMAW). Topics include: operating principles of gas and arc welding and cutting equipment, gas and arc welding processes, groove welds, and fillet welds.

Prerequisites: WLD 100, and AFM 092 or appropriate placement test score

WLD 120 Gas Metal Arc Welding

4 Credits. 2 Lecture Hours. 6 Lab Hours.

A course on techniques and operations associated with Gas Metal Arc Welding (GMAW). Topics include: operating principles, equipment and accessories, and GMAW Spray Transfer techniques.

Prerequisites: WLD 100 and WLD 110

WLD 130 Flux Cored Arc Welding

4 Credits. 2 Lecture Hours. 6 Lab Hours.

A course on techniques and operations associated with Flux Cored Arc Welding (FCAW). Topics include: operating principles, equipment and accessories, and FCAW-G/GM (dual shield), and FCAW-S (self-shielded) operations.

Prerequisites: WLD 100 and WLD 110

WLD 191 Part-Time Cooperative Education 1: Welding

1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking an associate's degree participate in their first part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 100

WLD 192 Part-Time Cooperative Education 2: Welding

1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking an associate's degree participate in their second part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 191

WLD 193 Part-Time Cooperative Education 3: Welding

1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking an associate's degree participate in their third part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 192

WLD 194 Part-Time Cooperative Education 4: Welding

1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking an associate's degree participate in their fourth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 193

WLD 195 Part-Time Cooperative Education 5: Welding**1 Credit. 1 Lecture Hour. 20 Lab Hours.**

Students seeking an associate's degree participate in their fifth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 194

WLD 196 Part-Time Cooperative Education 6: Welding**1 Credit. 1 Lecture Hour. 20 Lab Hours.**

Students seeking an associate's degree participate in their sixth part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 195

WLD 198 First Year Special Topics in Welding**1-9 Credits. 0 Lecture Hour. 0 Lab Hour.**

A course on selected topics related to Welding, which gives students opportunities to study information not currently covered in other courses. Grades issued are A, B, C, D, or F.

Prerequisites: Vary by section

WLD 199 First Year Independent Project in Welding**1-9 Credits. 0 Lecture Hour. 0 Lab Hour.**

A project related to Welding that is completed by one or more students to meet specific educational goals. Projects must have prior approval and supervision by Welding faculty. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: Vary by section

WLD 210 Gas Tungsten Welding**4 Credits. 2 Lecture Hours. 6 Lab Hours.**

A course on techniques and operations associated with Gas Tungsten Arc Welding (GTAW). Topics include: safety; shielding gases; GTAW machines and set up; selection of filler rods; GTAW weld positions; and GTAW beads, bead patterns, and joints.

Prerequisites: WLD 120 and WLD 130

WLD 220 Metal Fabrication**3 Credits. 2 Lecture Hours. 3 Lab Hours.**

A course on metal fabrication techniques used in industry. Topics include: thermal cutting, oxy-fuel gas cutting, plasma arc cutting, and metal fabrication safety.

Prerequisites: WLD 105 and MET 111

WLD 230 Pipe Welding**4 Credits. 2 Lecture Hours. 6 Lab Hours.**

A course on techniques associated with pipe welding operations. Topics include: nomenclature, safety, pipe welding positions, layout and preparation, and completing horizontal welds (2G), vertical welds (5G), and welds on a 45 degree angle (6G).

Prerequisites: WLD 210

WLD 250 Welding Inspection and Certification**3 Credits. 2 Lecture Hours. 3 Lab Hours.**

A course on welding techniques as applied to the American Welding Society Structural Steel Code D1.1. Topics include: weld discontinuities, visual examination of tack, intermediate layers, completed welds, and required documentation. Students perform welder qualification tests and practice inspecting weld defects.

Prerequisites: WLD 210

WLD 291 Full-Time Cooperative Education 1: Welding**2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their first full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 100

WLD 292 Full-Time Cooperative Education 2: Welding**2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their second full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 291

WLD 293 Full-Time Cooperative Education 3: Welding**2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their third full-time field learning experience related to their degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 292

WLD 294 Internship 1: Welding**2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their first unpaid field learning experience related to their degree. Students must follow applicable policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 100

WLD 295 Internship 2: Welding**2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in their second unpaid field learning experience related to their degree. Students must follow applicable policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: WLD 294

WLD 298 Second Year Special Topics in Welding**1-9 Credits. 0 Lecture Hour. 0 Lab Hour.**

A course on selected topics related to Welding, which gives students opportunities to study information not currently covered in other courses. Grades issued are A, B, C, D, or F.

Prerequisites: Vary by section

WLD 299 Second Year Independent Project in Welding**1-9 Credits. 0 Lecture Hour. 0 Lab Hour.**

A project related to Welding that is completed by one or more students to meet specific educational goals. Projects must have prior approval and supervision by Welding faculty. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: Vary by section