welding codes

Flux Core Arc Welding equipment and welding variables, shielding gases, Course instruction and related information will include gas metal and certification code welding on plate and structural steel in all positions.

PREREQUISITE: WLDG 120, WLDG 122. (Sp) This course covers Gas Metal Arc Welding (GMAW), Shielded Metal Arc Welding (SMAW), and Flux Core Arc Welding (FCAW) of structural steel and stresses fabrication of structural steel in accordance with industry standards.

WLDG 151 Shop Practices: 3 Credits (2 Lec, 1 Lab)
This is an on-going course during normally scheduled shop hours. It is intended to match spring semester students with live, practical shop experiences involving subject matter previously covered in other courses. Emphasis will be on productivity.

WLDG 185 Qualification Test Prep: 2 Credits (2 Lec, 1 Lab)
(2 Lec) S Prerequisites: WLDG 110, WLDG 111, WLDG 121, WLDG 205 Corequisites: WLDG 120, WLDG 122 This is an advanced course in Gas Metal Arc Welding (GMAW), Shielded Metal Arc Welding (SMAW), and Flux Core Arc Welding (FCAW) procedures to prepare for industrial certification. This includes welding single vee groove weld-but joints with backing strips in the flat, horizontal, vertical, and overhead position following the American Welding Society (AWS) and the American Society of Mechanical Engineers (ASME) code specifications.

WLDG 205 Applied Metallurgy: 2 Credits (2 Lec)
This course covers basic metallurgical principles and their relationship to the following processes: welding, machining, forming, heat treating, and finishing of ferrous and nonferrous metals. Includes applied metallurgy lab testing exercises.

WLDG 281 Weld Testing Certification Lab: 2 Credits (2 Lab)
PREREQUISITES: Limited to students with at least 3 years welding experience, or previous certification, or consent of instructor. Students will prepare, practice and qualify for plate and pipe, according to AWS D1.1, APT 1104, and ASME Section IX codes and standards. Gallatin College

WLDG 292 Independent Study: 1-3 Credits (1-3 Other)
The WLDG 292 student is required to work with the instructor to develop a project plan tied to specific skill goals. In preparation for developing their course plan, students will be asked to identify deficiencies in skills. Such an individualized and reflective approach allows the student to develop skills according to what is most needed to continue to improve as a welder in the lab, and as a student in the classroom. Repeatable up to 4 credits.