Welding Technology

WLDT 106 Beginning Welding
3.0 units
Acceptable for credit: Transfer CSU
A course in the theory, practice, and application of various metal joining processes, including oxyacetylene welding, brass brazing, flame cutting, and electric arc processes, and an introduction to both Tig and Mig welding. (Fall, Spring) (Letter Grade or Pass/No Pass)

WLDT 107 Advanced Welding
3.0 units
Acceptable for credit: Transfer CSU
Prerequisite: WLDT 106 - Beginning Welding
A continuation of WLDT 106, emphasizing position welding of a variety of ferrous metals, using a variety of electrodes used in industries. (Fall, Spring) (Letter Grade or Pass/No Pass)

WLDT 189 Independent Projects
0.0 units
Acceptable for credit: Transfer CSU
Courses for students capable of independent work who demonstrate the need or desire for additional study beyond the regular curriculum. Enrollment allows students to pursue activities such as directed field experience, research, or development of skills and competencies under faculty advisement and supervision. Independent projects may be earned in most disciplines. Students wishing to enroll in Independent Projects should contact the appropriate instructor identified in the class schedule. If the project proposed is acceptable to that instructor, a contract will be developed. All contracts for these classes must be completed and submitted to the Records Office no later than the end of the second week of the semester. Students may enroll for any combination (unit value) of Independent Projects 189 and/or 389 for a total of four semesters in a specific discipline. Units are awarded depending upon satisfactory performance and the amount of time committed by the student to the course. Allowable units vary according to discipline, and are based on the following formula: 1 unit - 48 hours per semester 2 units - 96 hours per semester 3 units - 144 hours per semester (Letter Grade or Pass/No Pass)

WLDT 199 Special Topics in Welding Technology
0.5 - 3.0 units
Acceptable for credit:
- (Letter Grade or Pass/No Pass)

WLDT 300 Shop Math and Measurement
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
An introduction to the mathematics used in the Industrial Technology programs. Students will learn to solve problems using fractions, decimals, percentage, ratios and basic geometric shapes. Students will learn about the Cartesian coordinate system and how to use a variety of basic and precision measuring tools from rulers and tape measures to calipers and micrometers. This course is not open to students who have received credit for AB 381 or AT 381 or ET 381 or MT 381. (Fall, Spring) (Letter Grade or Pass/No Pass)

WLDT 301 Selected Welding Project
1.0 unit
Acceptable for credit: D - Credit - Degree Applicable
Projects selected by the student upon the recommendation of any faculty member and developed under the direct counseling and guidance of the instructional staff in the Welding Technology disciplines. All work is completed within the welding facilities under the direct supervision of the responsible instructor. The student will develop the skills necessary to complete the project. (F,S) (Fall, Spring) (Letter Grade or Pass/No Pass)

WLDT 305 Welded Sculptural Projects
1.0 unit
Acceptable for credit: D - Credit - Degree Applicable
The course is an introduction to fundamentals of conceptualizing sculptural forms and fabricating these forms using shop mechanics and tools. Students will develop skill techniques of cutting, forming, forging, welding and finishing ferrous metal. (Fall, Spring) (Letter Grade or Pass/No Pass)

WLDT 306 Layout and Fabrication Interpretation
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
Prerequisite: WLDT 106 - Beginning Welding CR C
Enables the student welders to interpret working drawings and shop drawings. Students will sketch fabrication and layout schemes for welding and jigs and/or assembly of small projects. (Letter Grade or Pass/No Pass)

WLDT 307 G.M.A.W. Welding
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
Prerequisite: WLDT 106 - Beginning Welding CR C
Provides students with the theory and practical applications of gas metallic arc welding (G.M.A.W.), and the operation of gas metal arc welding equipment. (A) (Letter Grade or Pass/No Pass)

WLDT 308 T.I.G. Welding
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
Prerequisite: WLDT 106 - Beginning Welding CR C
Provides students with the theory and practical applications of gas tungsten arc welding and the operation of gas tungsten arc welding equipment. (A) (Letter Grade or Pass/No Pass)

WLDT 309 Mini MIG (GMAW)
1.0 unit
Acceptable for credit: D - Credit - Degree Applicable
This course will give students enough MIG welding background to weld in metal sculpture and ornamental iron classes using 110 power MIG welders. (Letter Grade or Pass/No Pass)

WLDT 312 Pipe Fitting & Welding
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
Prerequisite: WLDT 107 - Advanced Welding

Designed to familiarize students with the highly specialized pipe fitting and welding industry and to provide the opportunity for students to develop the skills necessary for entering and advancing in the pipe welding field. (A) (Letter Grade or Pass/No Pass)

WLDT 315 Metal Fabrication
4.0 units
Acceptable for credit: D - Credit - Degree Applicable
Prerequisite: WLDT 107 - Advanced Welding CR C
Provides the student with the opportunity to combine previously learned skills into a system requiring the use of prints, tolerances, and specifications. (A) (Letter Grade or Pass/No Pass)

WLDT 316 Metal Yard Sculptures
0.5 units
Acceptable for credit: D - Credit - Degree Applicable
An introduction to craft and art of creating metal yard sculptures. Emphasis is on creative discovery from fabricated primarily non-ferrous metals, found metal objects, and/or commercially available components. (F) (Letter Grade Only)

WLDT 317 Ornamental Iron 1
1.0 unit
Acceptable for credit: D - Credit - Degree Applicable
Basics of ornamental iron work including fabrication techniques and safety training. (Letter Grade or Pass/No Pass)

WLDT 318 Welding and Metal Sculpture
1.0 unit
Acceptable for credit: D - Credit - Degree Applicable
This course will provide an introduction to the art of welding. The student will be able to do light gas welding and brazing to construct individual projects. (Fall) (Letter Grade or Pass/No Pass)

WLDT 319 Blacksmithing Projects
1.0 unit
Acceptable for credit: D - Credit - Degree Applicable
An opportunity to use blacksmithing in the fabrication of projects developed and assigned by the instructor. (Fall) (Letter Grade or Pass/No Pass)

WLDT 320 Pipe Welding
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
Prerequisite: WLDT 107 - Advanced Welding
An introductory course in the theory and practice of pipe welding designed to provide the student with an opportunity to acquire basic pipe welding skills used in the highly specialized pipe welding industry. (Letter Grade or Pass/No Pass)

WLDT 330 Welding Certification
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
Prerequisite: WLDT 107 - Advanced Welding ; or WLDT 307 - G.M.A.W. Welding ; or WLDT 308 - T.I.G. Welding
Provides the advanced student with the theory and practical application of welding procedures and techniques in preparation for certification in the following areas: gas metal arc welding or shielded metal arc welding or gas tungsten arc welding. These meet the codes as provided by the American Welding Society, American Petroleum Institute, American Society of Mechanical Engineers Standards. (Letter Grade or Pass/No Pass)

WLDT 331 Advanced Welding Certification Lab
2.0 units
Acceptable for credit: D - Credit - Degree Applicable
Prerequisite: WLDT 330 - Welding Certification CR C
Provides the advanced student with the practical application of welding procedures and techniques in preparation for certification in the following areas: gas metal arc welding or shielded metal arc welding or gas tungsten arc welding. These meet the codes as provided by the American Welding Society, American Petroleum Institute, American Society of Mechanical Engineers Standards. (Letter Grade or Pass/No Pass)

WLDT 333 Welding Certification - SMAW
1.0 unit
Acceptable for credit: D - Credit - Degree Applicable
This course is to encourage individuals who are near or at completion of preparation for taking their SMAW Certification test either for employment or the completion of their school program. (Letter Grade or Pass/No Pass)

WLDT 334 Welding Certification - GMAW
1.0 unit
Acceptable for credit: D - Credit - Degree Applicable
This course is to encourage individuals who are near or at completion of preparation for taking their GMAW Certification test either for employment or the completion of their school program. (Letter Grade or Pass/No Pass)

WLDT 335 Flux Core Arc Welding
1.0 unit
Acceptable for credit: D - Credit - Degree Applicable
Prerequisite: WLDT 106 - Beginning Welding
Introduces students to craft flux core welding. Topics include types, uses, safety considerations, and fabrication techniques. (Letter Grade or Pass/No Pass)

WLDT 370 SkillsUSA
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
Repeatable: 3.00
SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. This SkillsUSA course prepares students for employment and inter-collegiate competition in Career Technical Education. Students will learn to plan projects, work in teams, solicit community support and develop a range of skills valued by employers. Students registered for this class may not register for AB 370, ARCH 370, AT 370, EL 370, ET 370 or MT 370 during the same semester. Participation in the SkillsUSA competition is required. This course may be repeated up to three times for credit with different competitions. (Letter Grade or Pass/No Pass)

WLDT 389 Independent Projects
0.0 units
Acceptable for credit: D - Credit - Degree Applicable

Courses for students capable of independent work who demonstrate the need or desire for additional study beyond the regular curriculum. Enrollment allows students to pursue activities such as directed field experience, research, or development of skills and competencies under faculty advisement and supervision. Independent projects may be earned in most disciplines. Students wishing to enroll in Independent Projects should contact the appropriate instructor identified in the class schedule. If the project proposed is acceptable to that instructor, a contract will be developed. All contracts for these classes must be completed and submitted to the Records Office no later than the end of the second week of the semester. Students may enroll for any combination (unit value) of Independent Projects 189 and/or 389 for a total of four semesters in a specific discipline. Units are awarded depending upon satisfactory performance and the amount of time committed by the student to the course. Allowable units vary according to discipline, and are based on the following formula: 1 unit - 48 hours per semester 2 units - 96 hours per semester 3 units - 144 hours per semester (Letter Grade Only)