

2018-2019 TTC Catalog - Welding (WLD)

WLD 001 - Welding Non Equivalent

Lec: 0 **Lab:** 0 **Credit:** *

Indicates credit given for welding course work transferred from another college for which there is no equivalent course at TTC. *Hours vary depending on external course.

Division: Manufacturing and Maintenance

WLD 110 - Welding Safety and Health

Lec: 1.0 **Lab:** 0 **Credit:** 1.0

This course introduces safety and health hazards associated with welding and related processes.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 111 - Arc Welding I

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers the safety, equipment and skills used in the shielded metal arc welding process. Fillet welds are made to visual criteria in several positions.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 114 - Advanced Arc Welding

Lec: 0 **Lab:** 3.0 **Credit:** 1.0

This course is a continued study of out-of-position shielded metal arc welding.

Prerequisite or Corequisite

WLD 111

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 118 - Gas Metal Arc Welding Ferrous I

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers the equipment setup and fundamental techniques for gas metal arc welding on ferrous metals.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 119 - Gas Metal Arc Welding Ferrous II

Lec: 0 **Lab:** 3.0 **Credit:** 1.0

This course covers the techniques used in preparation for gas metal arc welder qualification on ferrous metals.

Prerequisite or Corequisite

WLD 118

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 120 - Flux Cored Arc Welding I

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers the equipment setup and fundamental techniques for flux cored arc welding.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 123 - Gas Metal Arc Welding Non-Ferrous II

Lec: 0 **Lab:** 3.0 **Credit:** 1.0

This course covers the techniques used in preparation for gas metal arc welder qualification on nonferrous metals.

Prerequisite or Corequisite

WLD 120

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 132 - Inert Gas Welding Ferrous

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers setup and adjustment of equipment and fundamental techniques for welding ferrous metals.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 133 - Inert Gas Welding Ferrous Tubing

Lec: 0 **Lab:** 3.0 **Credit:** 1.0

This course covers the techniques used in gas tungsten arc welding of ferrous tubing.

Prerequisite or Corequisite

WLD 132

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 137 - Inert Gas Welding Aluminum Tubing

Lec: 0 **Lab:** 3.0 **Credit:** 1.0

This course covers the techniques used in gas tungsten arc welding of aluminum tubing.

Prerequisite or Corequisite

WLD 152

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 141 - Weld Quality

Lec: 2.0 **Lab:** 0 **Credit:** 2.0

This course introduces weld quality assurance.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 145 - Field Welding

Lec: 1.5 **Lab:** 1.5 **Credit:** 2.0

This course covers welding with portable welding machines in field use.

Prerequisite

WLD 114

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 150 - Specialized Welding

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers flux cored and gas metal arc welding.

Prerequisite

WLD 119

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 152 - Tungsten Arc Welding

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers gas tungsten arc welding of carbon steel or stainless steel with stainless steel filler metal..

Prerequisite or Corequisite

WLD 132

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 170 - Qualification Welding

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers the procedures and practices used in taking welder qualification tests.

Prerequisite

WLD 114

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 201 - Welding Metallurgy

Lec: 2.0 **Lab:** 0 **Credit:** 2.0

This course covers the weldability of metals, weld failure, and the effects of heat on chemical, physical and mechanical properties.

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 222 - Advanced Fabrication Welding

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers the layout, construction, and assembly of metal projects using metal working and welding equipment.

Prerequisite

WLD 170

Corequisite

WLD 226

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 225 - Arc Welding Pipe I

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers the techniques used in shielded metal arc welding of groove welds on pipe.

Prerequisite

WLD 170

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 226 - Arc Welding Pipe II

Lec: 0 **Lab:** 3.0 **Credit:** 1.0

This course covers the techniques used in shielded metal arc welding of fillet welds on pipe.

Prerequisite or Corequisite

WLD 222

or

WLD 225

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 228 - Inert Gas Welding Pipe I

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers the techniques used in gas tungsten arc welding of groove welds on ferrous pipe.

Prerequisite

WLD 133

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 229 - Inert Gas Welding Pipe II

Lec: 1.5 **Lab:** 1.5 **Credit:** 2.0

This course covers the techniques used in gas tungsten arc welding of groove welds on alloyed steel and nonferrous pipe.

Prerequisite

WLD 137

and

WLD 152

Corequisite

WLD 228

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 231 - Gas Metal Arc and Flux Cored Arc Welding Pipe I

Lec: 1.0 **Lab:** 9.0 **Credit:** 4.0

This course covers the techniques used in gas metal arc and/or flux cored arc welding of groove welds on pipe.

Prerequisite

WLD 119

and

WLD 120

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 232 - Gas Metal Arc-Flux Cored Arc Welding Pipe II

Lec: 1.5 **Lab:** 1.5 **Credit:** 2.0

This course covers the techniques used in gas metal arc and/or flux cored arc welding of fillet welds on pipe.

Prerequisite or Corequisite

WLD 150

or

WLD 231

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

WLD 240 - Robotic Welding and Manufacturing

Lec: 3.5 **Lab:** 1.5 **Credit:** 4.0

This course covers robotic welding systems, safety, operations and applications.

Grade Type: Letter Grade

Restrictions: Restricted to Welding and Production Technology Majors

Division: Manufacturing and Maintenance
