

## WLD - WELDING (WLD)

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### **WLD 102 Introduction to Welding 2 SHC**

This course covers the principles of welding, cutting, and basic procedures for safety in using welding equipment.

Lecture Hours: 1

Lab/Clinical Hours: 3

### **WLD 103 Print Reading I 1 SHC**

This is a basic course which includes the fundamentals of print reading, the meaning of lines, views, dimensions, notes, specifications, and structural shapes. Welding symbols and assembly drawings as used in fabrication work are also covered.

Lecture Hours: 1

Lab/Clinical Hours: 0

### **WLD 105 Print Reading II 1 SHC**

This course includes print reading, including welding symbols and their applications to pipe fabrication. Basic sketching of piping symbols, single line and double line pipe drawings, material estimating, template layout and how templates are used in pipe layouts are included.

Prerequisites: WLD 103.

Lecture Hours: 0

Lab/Clinical Hours: 3

### **WLD 108 Gas Metal Arc Welding I 4 SHC**

This course covers equipment setup and the fundamental techniques for welding ferrous and non-ferrous metals.

Lecture Hours: 2

Lab/Clinical Hours: 6

### **WLD 109 Gas Metal Arc Welding II 3 SHC**

This course covers all position welding and advanced techniques for welding ferrous and non-ferrous metals.

Corequisites: WLD 108.

Lecture Hours: 0

Lab/Clinical Hours: 9

### **WLD 111 Arc Welding I 4 SHC**

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.

Lecture Hours: 1

Lab/Clinical Hours: 9

### **WLD 113 Arc Welding II 4 SHC**

This course is a study of arc welding of ferrous and/or nonferrous metals. Emphasis is placed on the out-of-position welding of fillet welds.

Lecture Hours: 2

Lab/Clinical Hours: 6

### **WLD 115 Arc Welding III 4 SHC**

This course covers the techniques used in preparation for structural plate testing according to appropriate standards. Emphasis is placed on the shielded metal arc welding of beveled plate in the horizontal and vertical positions.

Lecture Hours: 1

Lab/Clinical Hours: 9

### **WLD 117 Specialized Arc Welding 4 SHC**

This course covers arc welding processes for industrial purposes.

Emphasis in this course is placed on out-of-position welding of beveled plate in the 45 degree and overhead positions.

Lecture Hours: 2

Lab/Clinical Hours: 6

### **WLD 132 Inert Gas Welding Ferrous 4 SHC**

This course covers set up and adjustment of equipment and fundamental techniques for welding ferrous metals. This is a basic course in tungsten inert gas arc welding with emphasis placed on the welding of fillet welds in the flat, vertical and overhead positions.

Lecture Hours: 2

Lab/Clinical Hours: 6

### **WLD 136 Advanced Inert Gas Welding 2 SHC**

This course covers the techniques for all positions of welding ferrous and nonferrous metals. Emphasis is placed on the inert gas welding of beveled plate in all positions.

Lecture Hours: 1

Lab/Clinical Hours: 3

### **WLD 142 Maintenance Welding 3 SHC**

This course covers gas and arc welding processes used in maintenance shops.

Lecture Hours: 2

Lab/Clinical Hours: 3

### **WLD 154 Pipefitting and Welding 4 SHC**

This is a basic course in fitting and welding pipe joints, either ferrous or nonferrous, using standard processes. Emphasis is placed on the fitting and welding of pipe in the 2G, 5G and 6G positions using the shielded metal arc welding process.

Lecture Hours: 2

Lab/Clinical Hours: 6

### **WLD 208 Advanced Pipe Welding 3 SHC**

This course is a study of advanced pipe welding. It also covers the processes to fit and weld ferrous and nonferrous metals. Emphasis is placed on the tungsten inert gas welding of pipe in the 2G, 5G and 6G positions.

Lecture Hours: 1

Lab/Clinical Hours: 6

### **WLD 212 Destructive Testing 2 SHC**

This course covers the destructive testing methods used in the evaluation of welds. Emphasis is placed on the guided bent test, tensile test and nick break test of plate and pipe in all positions.

Lecture Hours: 0

Lab/Clinical Hours: 6

### **WLD 229 Inert Gas Welding Pipe II 2 SHC**

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

Lecture Hours: 0

Lab/Clinical Hours: 6