

Welding

College of Lake County Grayslake · Vernon Hills · Waukegan · Online

Program Overview

Engineering, Math & Physical Sciences
Division, Room T102, (847) 543-2044
www.cclillinois.edu/credit/programs/wld.asp

WELDING

(Certificate) Plan 24WL

This certificate program and the specialty certificates prepare the student for employment and advancement in welding and welding related occupations. Advanced standing in the program can be arranged for experienced welders.

MCD 112	Basic Metallurgy	3
MCD 113	Basic Metallurgy II	3
MCD 111	Manufacturing Processes	3
MTH 114	Applied Mathematics I	3
WLD 113	Welding Blueprint Reading	3
WLD 117	Applied Fabricating and Processing	3
WLD 170	General Welding	3
WLD 171	Gas Welding, Cutting and Brazing	3
WLD 172	Shielded Metal Arc Welding	3
WLD 174	Advanced Shielded Metal Arc Welding	3
WLD 175	Gas Metal Arc Welding	3
WLD 176	Welding Certification	1-3
WLD 178	Gas Tungsten Arc Welding	3
	Technical Elective*	2-3

Total Hours for Certificate 36-39

Welding Electives

Select 2-3 hours from the list below with advisor approval:

CAD 110	CAD/CAM Concepts	3
EGR 121	Engineering Graphics	3
ELC 172	Applied AC Circuit Theory	2
ELT 170	DC Circuit Fundamentals	2
EWE 220	Cooperative Work Experience I	3
MTT 111	Machine Shop I	3
ROB 111	Introduction to Robotics	3

The following three specialty certificates allow students to attain proficiency to meet more specific job requirements or career objectives in welding and welding related occupations.

GAS TUNGSTEN ARC WELDING (Certificate) Plan 24WM

MTH 114	Applied Mathematics I	3
WLD 113	Welding Blueprint Reading	3
WLD 117	Applied Fabricating and Processing	3
WLD 170	General Welding	3
WLD 171	Gas Welding, Cutting and Brazing	3
WLD 176	Welding Certification	1-3
WLD 178	Gas Tungsten Arc Welding	3

Total Hours for Certificate 19-21

GAS METALARC WELDING (Specialty Certificate) Plan 24WN

MTH 114	Applied Mathematics I	3
WLD 113	Welding Blueprint Reading	3
WLD 117	Applied Fabricating and Processing	3
WLD 170	General Welding	3
WLD 175	Gas Metal Arc Welding	3
WLD 176	Welding Certification	1-3

Total Hours for Certificate 16-18

SHIELDED METALARC WELDING (Certificate) Plan 24WO

MTH 114	Applied Mathematics I	3
WLD 113	Welding Blueprint Reading	3
WLD 117	Applied Fabricating and Processing	3
WLD 170	General Welding	3
WLD 172	Shielded Metal Arc Welding	3
WLD 174	Advanced Shielded Metal Arc Welding	3
WLD 176	Welding Certification	1-3

Total Hours for Certificate 19-21

Typical Jobs *

- Welder
- Fabricator
- Finishing Technician
- Fitter-Welder
- Mig Welder
- Robot Operator
- Braze Operator
- Machine Operator
- Spot Welder
- Technical Associate

Salary Range *

\$19,700 - \$61,300

Job Outlook *

Job prospects should be excellent as employers report difficulty finding enough qualified people. In addition, many openings are expected to arise as a large number of workers retire over the next decade.

Employers

More than six out of ten jobs are found in manufacturing industries.

* Career information is based on data from the Bureau of Labor Statistics for the Chicagoland area.



Welding

What it's About

Joining Metal Parts

Because of its strength, welding is used in the building of ships, automobiles and aircraft. It is also used to manufacture thousands of other products. In addition, welding is used to join beams in the construction of buildings, bridges and other structures.

Select and Set Up Equipment

Welders use arc, gas and flame torches, as well as other types of welding equipment. Solderers generally use soldering irons. Welders perform manual welding, in which they entirely control the work. They also perform semi-automatic welding, in which they use machinery to help perform some tasks.

Position and Secure Work Piece

Welders may use a hoist or crane to move large pieces. For small pieces, they may use hand tools to clamp them into place.

Repair Broken or Cracked Metal Parts

Welders fill holes and seams in metal products.

Arc and Flame Cutters

Cutters use heat to cut and trim metal objects to specific dimensions. Cutters also cut up large objects, such as ships, cars or aircraft.

Advancement in this Field

Entry Level

Assembly/Production Welder
Fabrication Welders
Industrial Machinery Welders
Pipe Fitters

Mid Level

Journeyman Fabrication Welders
Journeyman Industrial Machinery Welders
Journeyman Pipe Fitters

Senior Level

Foreman/Supervisor/ Shop or Business Owner
Educational Requirements: A.S. B.S.

How to Register

1. Submit an Application for Admission

Apply at www.clcillinois.edu/apply.asp

2. Learn your CLC Student ID and PIN

When your application has been processed (usually within two working days), you will receive your seven-digit ID number in the mail. Your PIN is initially set to your six-digit date of birth (mmddyy). You will need both the ID and PIN to register.

3: Meet Proficiencies/Prerequisites

The Admissions Office will accept one of the following documents to prove proficiency:

- High school transcript showing class rank in top 1/3
- ACT scores of 17 or above on math and verbal
- SAT scores of 450 on math and verbal tests
- GED transcript showing 550 or above on reading, language and math tests
- U.S. college transcript showing completion of an associate's degree or higher, or U.S. college transcript showing completion of 30 credits with no grade less than a 'C'
- Take CLC's Academic Proficiency Test for Language and the Math Placement Test

4: Attend an Advisement Session

High school graduate planning to attend full time?

Call (847) 543-2486 or (847) 543-2090 for times.

Returning adult or part-time student? Call the

Counseling Center at (847) 543-2060.

5: Meet with an Advisor

Advisors assist with educational planning.

6: Complete Registration

There are two ways to register:

- Online at www.clcillinois.edu/selfserv.asp
- In person at the Admissions Office, B101

7: Pay Tuition and Fees

- Pay in person at the Cashier's Office
- Pay online at myStudentCenter
- Enroll in the FACTS installment payment plan
- Apply for Financial Aid

For more info, visit www.clcillinois.edu

Contact Info

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Grayslake, IL 60030

Randall Roettger

Department Chair

Room: D221

Phone: (847) 543-2512

rroettger@clcillinois.edu

Student Experiences

"I can fix things and be creative. I'm never bored and always challenged. I like figuring out how to improve on the design to prevent future repairs. I like getting lost for a whole day in my shop, creating my latest unique product. I knew welding could be my passion before I started the CLC program; but now, as I complete the program, I know it is my passion."

- Robin Jaranson

"My favorite class is Applied Fabricating and Processing. We learn how to use different drilling and cutting machines. We make something from a print and weld it using different welding methods. The instructors are experienced, highly skilled and dedicated to the craft."

- Vito Tanzi