

Certificate of Proficiency (COP)
Multicraft Trades

Lower Columbia College (LCC) Multicraft Trades Certificate program is designed to prepare individuals to go to work, enter an apprenticeship training program, or enroll in one of LCC's vocational programs. This program promotes a diverse and skilled workforce and prepares participants to meet basic qualifications for entry employment in a skilled trades profession.

Build Your Pathway: This program is a key asset for local workforce systems' career pathway strategies. Through partnerships with K-12 Career & Technical Programs and industry partners, this program is valuable training approach for students to build pathways to family wage careers. Participants can use this program as an entryway to a local apprenticeship, a skilled trade career, or into a LCC degree program such as Advanced Manufacturing, Diesel/Heavy Equipment Technology, Machine Trades, or Welding.

Certificate Requirements

- **Communications:**
5 credits – ENGL& 101 English Composition I OR ENGL 110 Industrial Communications (recommended)
- **Quantitative Skills:**
5 credits – MATH 106 Industrial Mathematics
- **Human Relations/ Social Science:**
5 credits – BUS 144 Management of Human Relations

Program Requirements

BLPT 150 <i>OR</i>	Machinists Blueprint Reading <i>OR</i>	5
BLPT 160	Blueprint Reading for Welders	
COLL 289	Employment Portfolio Seminar	1
HLTH 105	First Aid, CPR and Bloodborne Pathogens	1
MASP 107 <i>AND/OR</i> MASP 111	Machining for Related Occupations (2-6 cr variable) <i>AND/OR</i> Machine Shop I (2-10 cr variable) for a combined total of 10 credits	10
MFG 100	Foundational Skills for the Trades	3
MFG 105	Industrial Safety	3
MFG 288	Cooperative Education	2
TECH 100	Advanced Principles of Technology	5
WELD 105	Related Welding I	6

Diversity and Distribution Lists are available in the Lower Columbia College Academic Catalog and at lowercolumbia.edu/catalog.

Total credits required to earn this certificate: 51

Students completing this program should acquire the following skills and abilities:

- Communicate professionally in writing and speaking as appropriate to an industrial technology work environment (GS).
- Apply objective, valid methods of inquiry and problem solving to draw rational, ethical, and coherent conclusions (GS).
- Apply mathematical information to perform tasks in industrial technology (GS).
- Interact effectively with individuals and groups (GS).
- Display work appropriate behavior including positive attitude, timeliness and teamwork.

- Apply industry standard safety and hazardous material handling guidelines.
- Apply knowledge of computer programs to create professional, academic, or business documents following current industry standards.
- Interpret industrial blueprints.
- Demonstrate competency in set up and operation of manual machine tools to manufacture parts per specification.
- Describe basic manufacturing, machining, and welding processes.
- Perform basic welding techniques commonly used for incidental welding in industry.
- Perform work as an entry-level machine operator.
- Demonstrate competency in documenting and communicating work performed using trade specific language.

Revised February 2020 (Effective Winter 2020)

Planner

Fall Quarter			Winter Quarter			Spring Quarter			Summer Quarter		
√	Courses	Crs	√	Courses	Crs	√	Courses	Crs	√	Courses	Crs
	MFG 100 (A)	3		BLPT 150 or BLPT 160	5		TECH 100 (A)	5			
	MFG 105 (A)	3		MASP 107 and/or MASP 111 (A)	10		ENGL 110 (A)	3			
	MATH 106 (A)	5		WELD 105 (A)	3		MFG 288 (A)	2			
	HLTH 105 (A)	1					COLL 289 (A)	1			
	WELD 105 (A)	3									
	Total:	15		Total:	18		Total:	18		Total:	

Notes:

Program planning is based on information available at the time of preparation. It is the student's responsibility to meet with their LCC advisor. Consult the LCC catalog for LCC graduation requirements.

Legend:

- A - Course usually offered all quarters.
- F - Course usually offered Fall Quarter.
- W - Course usually offered Winter Quarter.
- Sp - Course usually offered Spring Quarter.
- S - Course usually offered Summer Quarter.