

**Certificate of Proficiency (COP)****Production Technician**

The Production Technician Certificate of Proficiency is designed to prepare production operators for industries using high technology equipment and processes. Producers of coated steel, biofuels, energy, petrochemicals, pulp and paper, pharmaceuticals, food, and dimensional lumber are some of the industries that use automation to control production processes.

**Certificate Requirements**

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

**Program Requirements**

CS 110	Intro to Microcomputer Apps	3
HLTH 105	First Aid, CPR and Bloodborne Pathogens	1
MFG 100	Foundational Skills for the Trades	3
MFG 105	Industrial Safety	3
MFG 120	Quality Assurance	4
MFG 140	Industrial Hydraulics	4
PMFG 110	Industrial and Predictive Maintenance Fundamentals	5
PMFG 150	Electrical/Electronic Fundamentals	6
PMFG 151	Process Control Equipment	5
PMFG 154	Instrumentation Fundamentals & PLCs	5
PMFG 201	Electrical Control Equipment	3
PMFG 202	Electric Motors	2
PMFG 210	Advanced Industrial Maintenance	5

Diversity and Distribution Lists are available in the Lower Columbia College Academic Catalog and at [lowercolumbia.edu/catalog](http://lowercolumbia.edu/catalog).

*Total credits required to earn this certificate: 64.*

**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.
- Identify the various components commonly used in process manufacturing operations.
- Describe basic concepts related to mechanical, hydraulic/pneumatic, instrumentation and electrical systems.
- Describe basic process control strategies.
- Perform basic maintenance tasks on common process manufacturing devices.
- Demonstrate competency in documenting and communicating work performed using trade specific language.

**Revised June 2019 (Effective Summer 2019)**

**Planner**

Advisor: Kam Todd, (360) 442-2745, ktodd@lowercolumbia.edu

Fall Quarter			Winter Quarter			Spring Quarter			Summer Quarter		
✓	Courses	Crs	✓	Courses	Crs	✓	Courses	Crs	✓	Courses	Crs
	MATH 106 (A)	5		CS 110 (A)	3		MFG 120 (Sp)	4			
	MFG 140 (F)	4		PMFG 110 (W)	5		PMFG 210 (Sp)	5			
	MFG 105 (A)	3		PMFG 201 (W)	3		PFMG 202 (Sp)	2			
	MFG 100 (A)	3		ENGL 110 (A)	5		HLTH 105 (A)	1			
				PMFG 154 (W)	5						
<b>Total:</b>		<b>15</b>	<b>Total:</b>		<b>21</b>	<b>Total:</b>		<b>12</b>	<b>Total:</b>		

Fall Quarter			Winter Quarter			Spring Quarter			Summer Quarter		
✓	Courses	Crs	✓	Courses	Crs	✓	Courses	Crs	✓	Courses	Crs
	BUS 144 (A)	5									
	PMFG 150 (F)	5									
	PMFG 151 (F)	5									
<b>Total:</b>		<b>15</b>	<b>Total:</b>			<b>Total:</b>			<b>Total:</b>		

**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.