Machinist - COP

2022-23

Program map for Machinist Certificate of Proficiency (COP)

The Machine Trades certificate program is another route to employment as a machinist, millwright, tool and die maker, or other occupation related to manufacturing. Graduates may work as advanced apprentice machinists, machine operators, or programmers.

See also: (lowercolumbia.edu/programs/trades)

- Degree Requirements for Manufacturing, Trades and Transportation programs (lowercolumbia.edu/programs/trades)
- Course descriptions in LCC Catalog (lowercolumbia.edu/publications/catalog/courses)
- Distribution lists in LCC Catalog (lowercolumbia.edu/publications/catalog/distribution-lists)

 Please note that many course sequences only begin in fall quarter. Please check with your program advisor for more information.

 Please review both the "By Quarter Overview" and "Detailed Class Sequence" tabs below.

By Quarter Overview
First Quarter

- COLL 101: College Success 101 (2 credits)
- MASP 107: Machining for Related Occupations (2-6 credits) AND/OR MASP 111: Machine Shop I (2-10 credits)
- MFG 115: Manufacturing Process (5 credits)
- ENGL 110: Industrial Communication (5 credits)

Second Quarter

- BLPT 150: Machinist Blueprint Reading (5 credits)
- MASP 111: Machine Shop I (2-10 credits)
  - *MASP 107**
- MATH 106: Industrial Mathematics (5 credits)
  - *MATH 079 or TECH 079 with a C or better or instructor permission**
- MFG 105: Industrial Safety (3 credits)

*Pre- and/or co-requisite(s)

Third Quarter

- BUS 144: Management of Human Relations: DIV (5 credits)

- MASP 112: Machine Shop II (2-10 credits)
  - *10 credits of MASP 107 and/or MASP 111**

*Pre- and/or co-requisite(s)

Fourth Quarter

- MASP 113: Machine Shop III (2-10 credits)
  - *10 credits of MASP 112**
- HLTH 105: First Aid, CPR and Bloodborne Pathogens (1 credit)
- WELD 142: SMAW - Stick Welding with E6010 (6 credits)

*Pre- and/or co-requisite(s)

Detailed Class Sequence
1. College Success 101

COLL 101 (2 credits)

2. Machining for Related Occupations AND/OR Machine Shop I

MASP 107 (2-6 credits) AND/OR MASP 111 (2-10 credits)

3. Manufacturing Process

MFG 115 (5 credits)

4. Industrial Communication

ENGL 110 (5 credits)

5. Machinist Blueprint Reading

BLPT 150 (5 credits)

6. Machine Shop I

MASP 111 (2-10 credits)
Pre- and/or co-requisite(s): MASP 107

7. Industrial Mathematics

MATH 106 (5 credits)
Pre- and/or co-requisite(s): MATH 079 or TECH 079 with a C or better or instructor permission

8. Industrial Safety

MFG 105 (3 credits)

9. Management of Human Relations: DIV

BUS 144 (5 credits)

10. Machine Shop II

MASP 112 (2-10 credits)
Pre- and/or co-requisite(s): MASP 107 and/or MASP 111

11. Machine Shop III

MASP 113 (2-10 credits)
Pre- and/or co-requisite(s): 10 credits of MASP 112

12. First Aid, CPR and Bloodborne Pathogens

HLTH 105 (1 credit)

13. SMAW - Stick Welding with E6010

WELD 142 (6 credits)

(lowercolumbia.edu/program-maps/trades)

Program Maps for Manufacturing, Trades and Transportation (lowercolumbia.edu/program-maps/trades)

- Advanced Manufacturing Technology - AAS (Engineering Technician and Multicraft Trades Option) (lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-Technology-Engineering-Tech-Multicraft-Trades)
- Advanced Manufacturing Technology - AAS (Multicraft Trades and Production Technician Option) (lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-Technology-Multicraft-Trades-Production-Tech)
- Advanced Manufacturing Technology - AAS (Production Technician and Engineering Technician Option) (lowercolumbia.edu/program-maps/trades/AAS-Advanced-Manufacturing-Technology-Production-Tech-Engineering-Tech)
- Automotive Technology - AAS (lowercolumbia.edu/program-maps/trades/AAS-Automotive-Technology)
- Automotive Technology - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAST-Automotive-Technology-to-BAS-OLTM)
- Automotive Technology - COP (lowercolumbia.edu/program-maps/trades/COP-Automotive-Technology-Maintenance-Light-Repair)
- Commercial Truck Driving - COC (lowercolumbia.edu/program-maps/trades/COC-Commercial-Truck-Driving)
- Computer Numerical Control - COP (lowercolumbia.edu/program-maps/trades/COP-Computer-Numerical-Control)
- Diesel/Heavy Equipment Technology - AAS (lowercolumbia.edu/program-maps/trades/AAS-Diesel-Heavy-Equipment)

- Diesel/Heavy Equipment Technology - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAS T-Diesel-Heavy-Equipment-to-BAS-OLTM)
- Diesel/Heavy Equipment Preventative Maintenance - COP (lowercolumbia.edu/program-maps/trades/COP-Diesel-Heavy-Equipment-Preventative-Maintenance)
- Engineering Technician - COP (lowercolumbia.edu/program-maps/trades/COP-Engineering-Technician)
- Machine Trades - AAS (lowercolumbia.edu/program-maps/trades/AAS-Machine-Trades)
- Machine Trades - AAS-T (BAS-OLTM Option) (lowercolumbia.edu/program-maps/trades/AAST-Machine-Trades-to -BAS-OLTM)
- Machinist - COP (lowercolumbia.edu/program-maps/trades/COP-Machinist)
- Multicraft Trades - COP (lowercolumbia.edu/program-maps/trades/COP-Multicraft-Trades)
- Production Technician - COP (lowercolumbia.edu/program-maps/trades/COP-Production-Technician)
- Welding - AAS (lowercolumbia.edu/program-maps/trades/AAS-Welding)
- Welding - COP (lowercolumbia.edu/program-maps/trades/COP-Welding)