

## About JJC

Joliet Junior College, the nation's first public community college, is the college of choice for life-changing learning opportunities. For more than 100 years, JJC has been an institution of affordable, accessible and quality education, enriching lives through high quality programs and services. JJC is a place to grow as a person, to share in a community of learning, and to be inspired by new ideas. With an average class size of 17, JJC students experience a stimulating learning environment where they are taught by the best. JJC has the second most full-time instructors for community colleges in Illinois, and more than 80 percent of professors have a master's degree or higher.

## Admissions Office

Main Campus, J-1005  
1215 Houbolt Road  
Joliet, Illinois 60431  
Phone: (815) 280-2493  
Fax: (815) 280-6740  
E-mail: [admission@jjc.edu](mailto:admission@jjc.edu)  
[www.jjc.edu](http://www.jjc.edu)

## Mechanical Production Technology

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## Machine Tool Metalworking

### Certificate of Completion (CCO)

	Math Placement by adviser interview	4.0
MFG 101	Precision Machine Tool Technology I	4.0
MFG 102	Precision Machine Tool Technology II	4.0
MFG 107	Dimension Metrology I	3.0
MFG 115	Blueprint Reading for Welding & Metalworking	3.0
MFG 150	Manufacturing Work Experience	3.0
	or Technical Elective	
WELD 114	Arc Welding I (Beginning)	1.5
WELD 121	Oxygen Acetylene Welding I (Cutting)	1.5

**Total Required Hours 23.0**

## Dimensional Metrology

### Certificate of Completion (CCO)

MFG 101	Precision Machine Tool Technology I	4.0
MFG 107	Dimension Metrology I	3.0
MFG 109	Metric Measurement	1.0
MFG 115	Blueprint Reading for Welding & Metalworking	3.0
MFG 120	Physical Metallurgy	3.0
MFG 200	Advanced Blueprint Reading & Geometric Dimensioning & Tolerancing	3.0

**Total Required Hours 17.0**

## Blueprint Reading

### Certificate of Completion (CCO)

	<b>General Education Requirements</b>	<b>3.0</b>
	<i>Must include the following:</i>	
MATH 107	Technical Mathematics	3.0

**Major Core Requirements 10.0**

MFG 101	Precision Machine Tool Technology I	4.0
MFG 115	Blueprint Reading for Welding & Metalworking	3.0
MFG 200	Geometric Dimensioning and Tolerancing	3.0

**Total Required Hours 13.0**

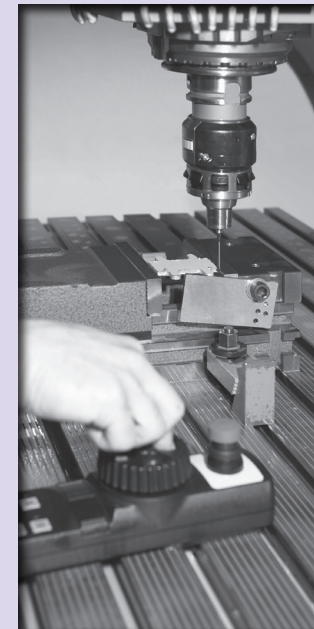
## Computer Numerical Control

### Certificate of Completion (CCO)

MFG 101	Precision Machine Tool Technology I	4.0
MFG 111	Numerical Control	3.0
MFG 112	Advanced Numerical Control	3.0
CAD 101	Computer Aided Drafting I	3.0

**Total Required Hours 13.0**

For the most up-to-date information about the Mechanical Production Technology program at JJC, visit [www.jjc.edu/info/mechanical](http://www.jjc.edu/info/mechanical).



**Associate in Applied Science (AAS)**  
Mechanical Production Technology  
Precision Machine Technology

**Certificate of Achievement (CAC)**  
Mechanical Production Technology

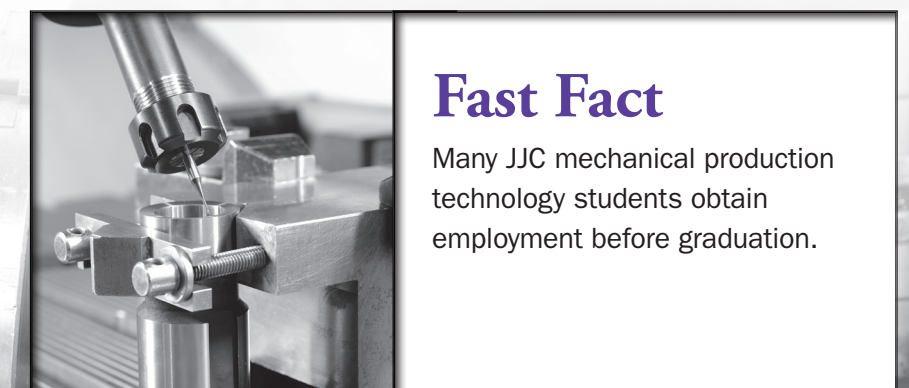
**Certificate of Completion (CCO)**  
Machine Tool Metalworking  
Dimensional Metrology  
Blueprint Reading  
Computer Numerical Control



# Mechanical Production Technology

The **Mechanical Production Technology program** at JJC provides students with an understanding of the fundamentals of manufacturing, through both hands-on experience and study of theory. Areas of study include precision machining practices, maintenance machining, CNC/CAM/EDM, stamping dies, plastic injection mold making and CAD.

There are many **career options** for MPT students, which include: production machining, maintenance machining, CNC/CAM/EDM, precision machinist, die making and mold-making. Graduates would be qualified for jobs with starting salaries of approximately \$35,000 per year with benefits, and be in demand nationwide because of thousands of unfilled, high-paying, secure jobs in the high tech world of manufacturing.



## Fast Fact

Many JJC mechanical production technology students obtain employment before graduation.



### Applied Learning

Whether pursuing an AAS degree or certificate, our students study a range of manufacturing-related disciplines, which will prepare them for employment in manufacturing. As new technologies are incorporated into the industry, it becomes more crucial for workers to possess a comprehensive knowledge of the business. For students who don't have time for an AAS degree but desire to pursue further education in a specific area, earning a certificate in blueprint reading or computer numerical control, for example, may be the ideal solution.

## Mechanical Production Technology

### Associate in Applied Science (AAS)

#### General Education Requirements 20.0

Must include the following:

ENG 130	Technical Writing and Communication	3.0
Or ENG 101	Rhetoric	3.0
ENG 230	Advanced Technical Writing and Communication	3.0
Or ENG 102	Rhetoric	3.0
MATH 107	Technical Mathematics I	3.0
MATH 108	Technical Mathematics II	3.0
PHYS 103	Technical Physics	4.0
	Social Science Elective	

#### Major Core Requirements 39.0

MFG 115	Blueprint Reading for Welding & Metalworking	3.0
CAD 101	Computer Aided Drafting	3.0
or EGR 101	Engineering Graphical Communications	3.0
MFG 101	Precision Machine Tool Technology I	4.0
MFG 102	Precision Machine Tool Technology II	4.0
MFG 103	Precision Machine Tool Technology III	5.0
MFG 104	Manufacturing Processes	5.0
MFG 107	Dimensional Metrology I	3.0
MFG 111	Numerical Control	3.0
MFG 112	Advanced Numerical Control	3.0
MFG 120	Physical Metallurgy	3.0
WELD 114	Arc Welding I (Beginning)	1.5
WELD 121	Oxygen Acetylene Welding I (Cutting)	1.5

#### Major Core Electives 6.0

Suggested courses:

MFG 109	Metric Measurement	1.0
MFG 150	Manufacturing Work Experience	3.0

IMT course  
Any Technical course

#### Total Required Hours 65.0



### Continuing Education

For students who plan to continue their education in mechanical production technology, JJC offers a full articulation agreement with Purdue Calumet University. Through the agreement, students can pay in-state tuition and transfer up to 90 credit hours from JJC to pursue Purdue's mechanical engineering technology degree. The transfer agreement requires that students complete either the Mechanical Production Technology AAS degree or the Precision Machine Technology AAS degree at JJC. Once the student has completed one of the AAS degrees, they can attend both JJC and Purdue simultaneously to complete the required course work for Purdue's Mechanical Engineering Technology Bachelor of Science degree.

## Precision Machine Technology

### Associate in Applied Science (AAS)

#### General Education Requirements 15.0

Must include the following:

ENG 130	Technical Writing and Communication	3.0
Or ENG 101	Rhetoric	3.0
ENG 230	Advanced Technical Writing and Communication	3.0
Or ENG 102	Rhetoric	3.0
MATH 119	Technical Mathematics	5.0
MATH 139	Plane Trigonometry	4.0
CIS 126	Microsoft Office	3.0
	Social Science Elective	

#### Major Core Requirements 52.0

MFG 115	Blueprint Reading for Welding & Metalworking	3.0
MFG 200	Advanced Blueprint Reading & Geometric Dimensioning & Tolerancing	3.0
CAD 101	Computer Aided Drafting I	3.0
CAD 120	Computer Aided Drafting II	3.0
CAD 250	PRO-E Modeling	3.0
MFG 280	PRO-E Manufacturing, Fundamentals of Milling	3.0
Or MFG 290	PRO-E Manufacturing, Fundamentals of Turning	3.0
MFG 120	Physical Metallurgy	3.0
MFG 101	Precision Machine Tool Technology I	4.0
MFG 102	Precision Machine Tool Technology II	4.0
MFG 103	Precision Machine Tool Technology III	5.0
MFG 104	Manufacturing Processes	5.0
MFG 107	Dimensional Metrology I	3.0
MFG 109	Metric Measurement	1.0
MFG 111	Numerical Control	3.0
MFG 112	Advanced Numerical Control	3.0
WELD 114	Arc Welding I (Beginning)	1.5
WELD 121	Oxygen Acetylene Welding I (Cutting)	1.5

#### Total Required Hours 67.0

## Mechanical Production Technology

### Certificate of Achievement (CAC)

#### General Education Requirements 6.0

MATH Elective (Placement by adviser interview)  
General Education Elective

#### Major Core Requirements 42.0

CAD 101	Computer Aided Drafting	3.0
or EGR 101	Engineering Graphical Communications	3.0
MFG 101	Precision Machine Tool Technology I	4.0
MFG 102	Precision Machine Tool Technology II	4.0
MFG 103	Precision Machine Tool Technology III	5.0
MFG 104	Manufacturing Processes	5.0
MFG 107	Dimensional Metrology I	3.0
MFG 111	Numerical Control	3.0
MFG 112	Advanced Numerical Control	3.0
MFG 115	Blueprint Reading for Welding & Metalworking	3.0
MFG 120	Physical Metallurgy	3.0
MFG 150	Manufacturing Work Experience or Technical Elective 3.0	
WELD 114	Arc Welding I (Beginning)	1.5
WELD 121	Oxygen Acetylene Welding I (Cutting)	1.5

#### Total Required Hours 48.0