

## Computer Numerically Controlled Tool

### Programmers

51-9162.00



**Description:** Develop programs to control machining or processing of materials by automatic machine tools, equipment, or systems. May also set up, operate, or maintain equipment.

#### Other Resources:

[ONET Link](#)

[MyNextMove Link](#)

**Sample of Reported Job Titles:** CAD CAM Programmer (Computer-Aided Design Computer-Aided Manufacturing)

### Job Zone

**Title:** 3 - Medium Preparation Needed

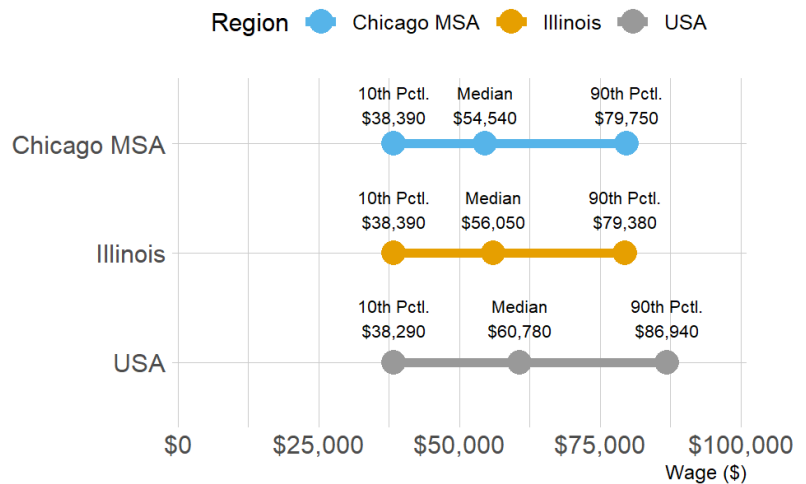
**Education:** Require training in vocational schools, related on-the-job experience, or an associate's degree.

**Experience:** Previous work-related skill, knowledge, or experience is required.

**Training:** One or two years of training involving both on-the-job experience and informal training with experienced workers needed. A recognized apprenticeship program may be associated with these occupations.

**Hot Technologies:** Aptean Made2Manage, Autodesk AutoCAD, Computer aided design CAD software, Dassault Systemes CATIA, Dassault Systemes SolidWorks

Region	Employment	Location Quotient	Median Wage
Chicago MSA	930	1.20	\$54,540
Illinois	1,240	1.21	\$56,050
USA	25,800	—	\$60,780



### Top 5 Core Tasks According to Current Job Holders

**Importance**  
**Frequency (out of 100)**

Determine the sequence of machine operations, and select the proper cutting tools needed to machine workpieces into the desired shapes.

Several times daily

88

Write programs in the language of a machine's controller and store programs on media, such as punch tapes, magnetic tapes, or disks.

Several times daily

88

Revise programs or tapes to eliminate errors, and retest programs to check that problems have been solved.

Daily

85

Analyze job orders, drawings, blueprints, specifications, printed circuit board pattern films, and design data to calculate dimensions, tool selection, machine speeds, and feed rates.

Several times daily

85

Write instruction sheets and cutter lists for a machine's controller to guide setup and encode numerical control tapes.

Daily

85