CNC Machinist

Set up and program CNC (computer numerical control) machines that cut metal parts to a thousandth of an inch.

TYPICAL PAY	PAY RANGE	TIME TO QUALIFY
$58,750	**$39k to $80k**	**1 to 4 years**
a year, full time	starting to experienced	after high school

DEMAND	LICENCE NEEDED	WHERE YOU WORK
Limited	**No**	**Machine shops, factories, aerospace plants, tool rooms**
job outlook	anyone can do it	

How you get there

1. **High school diploma** — Grade 12
   Take shop or manufacturing class if your school still has one. Geometry and trigonometry matter more here than most trades.
2. **Pick your route** — Decision point
   A community college certificate of a year or less, a two-year associate degree, or a registered apprenticeship with a shop.
3. **Learn the manual machines first** — First term
   Good programs still start you on a manual lathe and mill. You cannot program a cut you have never made by hand.
4. **Learn CNC (computer numerical control) setup and programming** — 6 to 18 months
   Machine code, work offsets, tool libraries, and computer-aided design and manufacturing software.
5. **Earn credentials on the job** — Ongoing
   The National Institute for Metalworking Skills credentials are earned by passing a written test and machining a part to print. Employers use them to decide pay.

Pros and cons

+ Cheap and fast to train, and an apprenticeship costs nothing at all
+ You make physical parts that go into planes, cars and implants
+ Overtime and shift pay can push earnings well above the median
- Employment is expected to stay flat nationally, so job hunting takes work
- Noise, coolant, metal chips and standing all day
- Manufacturing is cyclical and layoffs follow downturns

Good to know

A thousandth of an inch is the unit of the trade
Machinists talk in thousandths, and a human hair is about three of them thick. On aerospace work the tolerance can be a tenth of a thousandth.

The machines still speak a 1950s language
The code that drives CNC (computer numerical control) machines descends from punched-tape programming developed for the Air Force at the Massachusetts Institute of Technology in the 1950s. Ma...

Optional boosts

Programming. Five-axis machining. Swiss-style turning. Inspection and quality.

Where these numbers come from

My Next Move: Machinists (51-4041.00)
National Institute for Metalworking Skills
Portland Community College: Machine Manufacturing Technology
Apprenticeship.gov: United States Department of Labor

Numbers checked September 2026. Pay figures are typical full-time annual amounts in United States dollars, based on Bureau of Labor Statistics wage data and published pay scales. They vary by state, employer and experience. Tuition is for in-state students at public schools unless the card says otherwise. Sources, links and the click-through version: https://career.help/us/careers/cnc-machinist

Scan for the full clicker