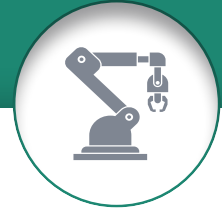


# CNC Programmer

Advanced Manufacturing  
Series

## Company Overview:

<Please insert a short paragraph talking about your company and what makes it unique. Include details that capture the core values, culture, and mission of your company, so job seekers clearly understand the environment in which they will be working.>

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## Job Summary and Responsibilities:

CNC Machine Tool Programmers prepare detailed working diagrams of machinery and mechanical devices, including dimensions, fastening methods and other engineering information to manufacture products. CNC Machine Tool Programmers are responsible for analyzing the designs, specifications and required information for mechanical equipment. CNC Machine Tool Programmers must stay up-to-date with new computer programs and determine if these programs offer advanced functions or new capabilities that should be utilized in operations. CNC Machine Tool Programmers may facilitate production by inputting production related data.

<Add any additional responsibilities or changes relevant to this role at your company.>

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## Required Competencies:

### OCCUPATIONAL COMPETENCIES

- **Computer-Aided Manufacturing:** Proficiency with computer-assisted design programs (e.g., CAD, CAM) and processes/machines (e.g., CNC machines, mills and lathes)
- **Data Entry:** Consistently and accurately input production data; basic proficiency with measurement tools (e.g., drop gauge, micrometer, caliper, optical comparator); able to use data to calculate key data fields when necessary
- **Machine Tools:** Proficiency with machine tools such as power grinders, milling cutters, drill presses, lathes, calipers, tool dies and their dial indicators



## FOUNDATIONAL COMPETENCIES

- **Critical Thinking:** Identify the best solution for a problem given the resources available (e.g., tools, materials), cost, time and risks. Understand the capabilities of machines and consider alternative, potentially new, ways of using machines or tools to solve problems. Able to assess the quality and accuracy of output
- **Operation Monitoring:** Decide what to monitor (i.e., set priorities) and at what frequency; monitor the lifecycle of key products to ensure adherence to the required specifications (e.g., dimensional accuracy). Assess the manufacturability of a given computer program (e.g., does the code look good, can the floor use this?); if needed, assess the ongoing production process for quality
- **Reading Comprehension:** Read, understand and accurately apply what you learn from blueprints, quality standards, specifications and other important written materials
- **Judgment and Decision-Making:** Consider the relative costs and benefits of potential actions and employ the most appropriate one. Be open to new ideas/input and able to question one's own decisions or preferences; follow company protocols, safety rules and leaderships' decisions
- **Monitoring:** Monitor and assess performance of yourself, others, and organizations to make improvements. Listen to advice and coaching and apply what you learn; follow set standards and protocols; share ideas on how to improve operations with others and do not act independently (lone rangers get things wrong)

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## Preferred Competencies:

### OCCUPATIONAL COMPETENCIES

**Technical Drawing:** Familiarity reading and adjusting drawings, supporting documents, notes, dimensional standards and GD&T to make and process parts

### FOUNDATIONAL COMPETENCIES

**Active Learning:** Understand the implications of new information for both current and future problem-solving and decision-making. Ideally, interested in learning new things; show interest in making things better and delivering (e.g., help institute a lean or quality process); consider how to apply what one has learned in the current production environment

*Find additional competencies for this role using Skillful's occupation deep dive at [www.skillful.com/employers](http://www.skillful.com/employers).*



## Example Activities:

- Develop detailed design drawings and specifications for mechanical equipment, dies, tools and controls, using computer-assisted drafting (CAD) equipment.
  - Analyze the capabilities and functions of new computer programs and decide if the advanced functions should be applied to current or future designs.
  - Discuss designs or plans with clients.
  - Monitor the lifecycle of key products to ensure adherence to the required specifications.
  - Analyze design or requirements information for mechanical equipment or systems.
  - Collaborate with other programmers or technical personnel to complete working diagrams or machinery
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## Required Certifications

<Note: Insert Required Certifications *but only if truly required.*>

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## Job Details:

- Location
- Department
- Job ID
- Classification
- Insert additional details of this position if applicable