

# Job Description

## CNC Programmer

Websites: [www.iconfixtures.com](http://www.iconfixtures.com) and [www.museumsbyicon.com](http://www.museumsbyicon.com)

## Role Summary

We are seeking a skilled and detail-oriented CNC Programmer to join our fast-growing family owned company. In this critical role, you will translate engineering designs and blueprints into precise machine instructions that drive our CNC equipment, ensuring the production of high-quality custom fixtures and furnishings. Your technical expertise will enable efficient manufacturing processes, optimize tooling strategies, and maintain the exceptional craftsmanship standards that Icon Design is known for. This fully onsite position offers an exciting opportunity to work with advanced CNC technology while contributing to projects for prestigious brands and institutions worldwide.

## About Icon Design

Icon Design is a world class provider of unique, high quality custom fixtures and furnishings, supplying brands around the world. Icon is the preeminent manufacturer of consumer environments, providing superior craftsmanship, comprehensive technical capabilities, world-class project management, and turn-key retail services -- the complete solution for the retail, museum, financial, hospitality and point-of-purchase markets.

## Key Responsibilities

- Read and interpret technical blueprints, engineering fixture drawings, CAD models, and design specifications to understand product requirements and dimensional tolerances.
- Develop and write CNC programs using G-code and other programming languages for mills, lathes, routers, and other CNC equipment.
- Select appropriate cutting tools, machining strategies, and work-holding solutions based on material properties, part geometry, and production requirements.
- Input design specifications into CAM (Computer-Aided Manufacturing) software to generate accurate toolpaths and machining programs.
- Calculate and optimize machine speeds, feed rates, tool offsets, and cutting parameters to ensure quality output and efficient production.
- Conduct test runs and simulations of CNC programs to verify accuracy, identify potential issues, and make necessary adjustments before full production.
- Set up CNC machines including loading programs, installing appropriate tooling, positioning fixtures, and calibrating machine settings.
- Monitor machine operations during production runs, troubleshoot issues, and make real-time adjustments to maintain product quality and specifications.

- Perform quality control inspections on machined parts to verify dimensional accuracy, surface finish, and adherence to tolerances using precision measuring instruments.
- Design and recommend custom fixtures, jigs, and work-holding solutions to improve manufacturing efficiency and part accuracy.
- Collaborate with engineering, design, and project management teams to review manufacturability, propose value engineering solutions, and optimize production processes.
- Maintain organized documentation of CNC programs, setup sheets, tool lists, and machining parameters for future reference and production repeatability.
- Perform regular maintenance on CNC equipment to ensure optimal performance
- Train and mentor machine operators on CNC operation procedures, safety protocols, and best practices.
- Continuously identify opportunities for process improvements, cost reductions, and enhanced manufacturing capabilities.
- Maintain inventory awareness of raw materials and cutting tools in coordination with purchasing and production planning teams.

## **Desired Skills & Experience**

- Minimum five years' experience as a CNC programmer in a manufacturing environment, preferably in custom fixtures, woodworking, architectural millwork, or related industries.
- Proficiency in reading and interpreting technical blueprints, engineering drawings, and GD&T (Geometric Dimensioning and Tolerancing).
- Strong knowledge of CNC programming languages, particularly G-code and M-code, with hands-on experience programming multi-axis CNC equipment.
- Demonstrated expertise with CAD/CAM software such as Microvellum, Mastercam, Fusion 360, SolidWorks CAM, or similar platforms.
- 5+ Years AutoCAD Experience (Required)
- Comprehensive understanding of machining principles including cutting tool selection, speeds and feeds, material properties, and toolpath optimization.
- Mechanical aptitude with the ability to troubleshoot machine operations, diagnose technical issues, and implement effective solutions.
- Strong mathematical skills for calculating dimensions, tolerances, angles, and machining parameters.
- Knowledge of fixture design principles and work-holding strategies to ensure part stability and machining accuracy.
- Familiarity with precision measuring instruments including calipers, micrometers, dial indicators, and coordinate measuring machines (CMM).
- Excellent problem-solving abilities with a proactive approach to identifying and resolving manufacturing challenges.
- Ability to manage multiple projects simultaneously, prioritize tasks effectively, and meet production deadlines.

- Good communication skills for collaborating with cross-functional teams including engineers, project managers, and production staff.
- Adaptability and willingness to learn new technologies, software platforms, and manufacturing techniques.
- Furnishings and/or fixtures fabrication experience: 2 years (Preferred)
- Architectural woodworking or millwork experience: 1 year (Preferred)

## **Why Join Icon?**

- 401(k) plan with company match, comprehensive health, dental, and vision insurance, paid time off, and opportunities for professional growth.
- Work with state-of-the-art CNC equipment and advanced manufacturing technologies.
- Contribute to high-profile projects for national and international brands, museums, and institutions.
- Be part of a creative, skilled team that values craftsmanship, innovation, and technical excellence.
- Opportunities for continuous learning and professional development in an evolving manufacturing environment.
- Competitive pay: