



## University System of Maryland Job Class Specification

**TITLE: RESEARCH MACHINIST I**  
**FLSA: NONEXEMPT**  
**EEO6: H60**  
**IPEDS-SOC: U-514041**

**JOB CODE: N09RM1**  
**JOB TYPE: SYSTEMWIDE**  
**JOB FAMILY/SERIES: ENG**

**APPROVED BY:**  
**Chancellor Donald N. Langenberg**

**EFFECTIVE DATE: 07/01/1996**

### **JOB SUMMARY**

Under direct supervision, performs routine work which involves building, modifying, and fabricating parts for working research apparatus from detailed specifications. In consultation with shop supervisor or higher level research machinist, constructs components and devices used to detect, measure, record, or regulate physical phenomena such as temperature, pressure, velocity, vibration, illumination, and radiation.

### **PRIMARY DUTIES**

1. Operates conventional machine shop equipment, including precision tools, to produce apparatus parts to the required level of accuracy.
2. Makes precise dimensional measurements of parts and their relationships in an assembly.
3. Performs precision hand operations at the workbench to achieve proper fit and finish of parts.
4. Assembles complete devices or sub-assemblies and inspects for proper function of mechanisms per project requirements.
5. Specifies and requisitions commercial hardware required for assembly of mechanisms, subject to supervisory approval.
6. Disassembles, cleans, lubricates, adjusts and re-assembles mechanical instruments.
7. Performs routine chemical finishing operations on parts.
8. Calculates basic clearances, positions, and fits on parts features.
9. Marks up drawings to reflect as built condition as changes are made to jobs in progress.

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Note: The intent of this list of primary duties is to provide a representative summary of the major duties and responsibilities of this job. Incumbents perform other related duties assigned. Specific duties and responsibilities may vary based upon departmental needs.

### **MINIMUM QUALIFICATIONS**

**EDUCATION:** Graduation from an accredited trade or technical school in a related field.

**EXPERIENCE:** Four years machine shop experience.

**OTHER:**

### **REQUIRED KNOWLEDGE/SKILLS/ABILITIES**

Thorough knowledge of and skill in applying standard machine shop practices including safe operation of required tools and equipment. Thorough knowledge of the standard system of measurement employed in area where assigned. General knowledge of applied arithmetic, geometry, and trigonometry as it applies to machine shop practice. Skill in working with common engineering materials to standard tolerances. Ability to read and interpret standard format engineering drawings and specifications; to communicate effectively both orally and in writing; to maintain effective working relationships; to meet priorities when working on multiple projects; to wear and work in personal protective equipment.

**OTHER:** Except for qualifications established by law, additional related experience and formal education in which one has gained the knowledge, skills, and abilities required for full performance of the work of the job class may be substituted for the education or experience requirement on a year-for-year basis with 30 college credits being equivalent to one year of experience.

### **CONDITIONS OF EMPLOYMENT**