

Spec. Code: 2314
Occ. Area: 14
Work Area: 501
Prob. Period: 6 mo.
Prom. Line: none
Effective Date: 01/29/97

MODEL MAKER

Function of Job

Under general supervision from a designated supervisor, to do precision work requiring a high degree of mechanical, constructional, and electrical skill in the development of scientific equipment.

Characteristic Duties and Responsibilities

1. makes complete full-scale working models of electrical devices, for purposes of research, from blueprints and written specifications
2. develops, designs, and builds experimental equipment requiring the use of precision instruments and performs skilled mechanical work of fine tolerance
3. repairs, adjusts, and regulates scientific instruments
4. calibrates instruments to coincide with standards
5. uses all machinists' hand tools skillfully, including those of micro-measurement
6. performs lathe work with precision tolerances and shapes metal parts to precision dimensions
7. performs work in the construction phases of two digital computing, or related machines, electronic chasses layout, and other related functions
8. exercises technical supervision of laboratory employees, electronic technicians, and other skilled personnel
9. assists, trains, and supervises subordinates and other assigned personnel as required
10. performs other related duties as assigned

MINIMUM ACCEPTABLE QUALIFICATIONS

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. high school graduation or equivalent

- 2. experience sufficient to qualify as a journeyman machinist, with a minimum of nine years of actual work at the trade, including apprentice or approved training program experience, five years of which must have been in the design and construction of precision instruments

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

- 1. knowledge of construction phases of models
- 2. thorough knowledge of machine tools, calipers, micrometers, gauges, and other measuring devices
- 3. ability to read and interpret complex formulas, drawings, charts, and designs
- 4. ability to work from ideas and draw own sketches and designs
- 5. ability to make varied mathematical computations involved in designing and constructing apparatus, models, and other equipment
- 6. supervisory ability
- 7. administrative ability