**Instrument Maker II Standard Job Description**

**Classification Title:** Instrument Maker II

**FLSA Exemption Status:**Non-Exempt

**Pay Grade:** 6

**Job Description Summary:**

The Instrument Maker II, under general supervision, designs, constructs, modifies, repairs, adjusts, calibrates, and maintains basic and complex scientific instruments and instructional and research apparatuses.

**Essential Duties and Responsibilities:**

**40% Equipment Design, Construction, and Modification**

* Design and construct basic and highly complex scientific instruments, apparatuses, and equipment.
* Modify and adjust existing equipment to meet specific research needs.
* Troubleshoot and repair mechanical components and electronic circuits in instruments.
* Locate and replace defective components, ensuring necessary adjustments and calibrations are made.

**20% Tool and Equipment Maintenance and Instruction**

* Select, order, install, repair, and modify machines and a variety of shop equipment and tools.
* Maintain and repair construction materials, component parts, electronic instruments, and measuring devices.
* Maintain a library of supply catalogs for quick reference.
* Instruct and assist graduate students and staff in the proper use of tools and equipment.

**10% Research Equipment Assistance**

* Assist with shop operations in the construction and operation of research equipment.

**10% Equipment Troubleshooting and Calibration**

* Diagnose and repair mechanical and electronic malfunctions in scientific equipment.
* Perform necessary calibrations to ensure equipment operates within specifications.

**20% Duty Title (for the department's use)**

* Remaining Percentage Can Be Determined by Department to Meet Business Needs or Can Be Incorporated into Percentages Above.

**Qualifications:**

**Required Education:**

* High school diploma or equivalent combination of education and experience.

**Required Experience:**

* Six years of related experience in the design, construction, modification, and repair of precision instruments and equipment.

**Required Licenses and Certifications:**

* None

**Required Knowledge, Skills, and Abilities:**

* Ability to multitask and work cooperatively with others.
* Knowledge of diagnostic equipment. Knowledge of welding procedures.
* Knowledge of physical and chemical properties of materials and comprehensive knowledge of a scientific field.
* Ability to work from verbal instructions and rudimentary sketches and diagrams.

**Additional Information:**

**Machines and Equipment:**

* Fabrication Equipment
* Computer
* Telephone

**Physical Requirements:**

* Ability to lift and move moderate weight objects.

**Other Requirements and Factors:**

* This position is security sensitive
* This position requires compliance with state and federal laws/codes and Texas A&M University System/TAMU policies, regulations, rules and procedures
* All tasks and job responsibilities must be performed safely without injury to self or others in compliance with System and University safety requirements

**Is this role ORP Eligible? If so, it needs to meet the criteria on the** [**Rules and Regulations of the Texas Higher Education Coordinating Board**](https://reportcenter.highered.texas.gov/reports/data/user-friendly-version-of-ch-25/)**.**

[ ]  **Yes**

[x]  **No**

**Does this classification have the ability to work from an alternative work location?**

[ ]  **Yes**

[x]  **No**