POSITION DESCRIPTION

TITLE: Career and Technical Education Pre-Engineering Assistant
LOCATION: Union High School
REPORTS TO: Principal/Associate Principal(s)/Instructor
DEPARTMENT: Career and Technical Education

SUMMARY STATEMENT:
Under the supervision of the building principal(s) and Career & Technology Pre-Engineering Faculty, this position will be responsible for setting up and maintaining a fabrication room and pre-engineering laboratory for use by individual and small groups of students from the Building Pre-Engineering courses and related programs (i.e. Science Olympiad) and for assisting these students in the understanding, design, development, testing and analysis of their various Pre-Engineering and related program projects. Only instructors perform the safety demonstrations; however, the assistant will have to know and enforce the procedures.

ESSENTIAL FUNCTIONS:
1. Communicate effectively with students and staff.
2. Establish and maintain an inventory system for tools, materials, equipment and software.
3. Set up and maintain an inventory dispensing and reordering system for supplies and materials.
4. Set up and maintain the handling of tools, equipment and materials.
5. Work with various related tools, materials, equipment and software.
6. Establish and maintain safety zones and safe operating procedures for all equipment.
7. Maintain all wood, metal, electrical, and fabrication equipment safety devices and guards to assure student safety. Report student safety violations to teacher(s).
8. Provide assistance to students in the safe and correct use of tools, materials, and equipment.
9. In coordination with teachers, provide assistance to students in the understanding, design, development, testing and analysis of their pre-engineering and related program projects.
10. Set up and monitor lab clean up and maintenance procedures.
11. Assist department teachers in the set up of demonstration labs and projects related to instruction in the fabrication room and pre-engineering lab.
12. May be required to set up laboratory apparatus and chemical solutions.

OTHER RESPONSIBILITIES:
1. Perform related duties as assigned.

PHYSICAL DEMANDS REQUIRED:

<table>
<thead>
<tr>
<th>Vision (66-100%)</th>
<th>Speaking (66-100%)</th>
<th>Hearing (66-100%)</th>
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<tbody>
<tr>
<td>Sitting (33-66%)</td>
<td>Writing (Up to 33%)</td>
<td>Bending/Stooping (33-66%)</td>
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<tr>
<td>Standing (33-66%)</td>
<td>Acceptable Attendance</td>
<td>Walking (33-66%)</td>
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<td>Use of hands and/or arms for repetitive motion (66-100%)</td>
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<td>Reaching/Squatting (33-66%)</td>
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MENTAL DEMANDS REQUIRED:
Percentages of requirements of physical and mental tasks are only an estimate. Reasonable accommodations for persons with a disability will be considered in order for them to perform the essential functions of the job.

(66-100%) = Continuously  (33-66%) = Frequently  (Up to 33%) = Occasionally

**TOOLS AND EQUIPMENT NECESSARY:**
A variety of hand tools and portable power tools, telephone, and all other equipment necessary to perform the essential functions as listed above.

**MINIMUM QUALIFICATIONS:**
1. Associate’s Degree in mechanical, civil or electrical technology required, preferably a Bachelor’s Degree in mechanical, civil, or electrical engineering.
2. Three or more years of work experience in engineering design and development.
3. Previous experience working with students age 14-18, preferably on engineering or science projects such as Science Olympiad, FIRST Lego Robotics, or equivalent programs.
4. Must be able to demonstrate personal characteristics of flexibility, initiative, cooperation, and work ethic.
5. Demonstrated ability to communicate effectively.
6. Experience in the use of a variety of hand and power tools used in fabrication and assembly.
7. Demonstrated ability to maintain the various tools and equipment.
8. Demonstrated ability to work with minimum supervision and the ability to problem solve.
9. Demonstrated ability to establish positive relationships with others as part of a team.

**189-190 Days Per Year (Includes Holidays)**
7 Hrs. Per Day

**Career and Technical Education Pre-Engineering Assistant**