MORGAN STATE UNIVERSITY JOB SPECIFICATION



ENGINEERING TECHNICIAN III

Class Code: N1026 FLSA Code: N/E (Non-Exempt)

Pay Range: 15

JOB SUMMARY

Under general supervision, performs technical engineering support of broad scope and complexity requiring ingenuity and creative thinking in devising new ways of accomplishing objectives and in adapting existing equipment and current techniques. They lead and train others. This job is typically found in an academic support or research environment.

PRIMARY DUTIES

- 1. Plans and completes projects to develop mechanical, electrical or structural components and equipment to meet specified user needs.
- 2. Develops and fabricates items of complex equipment according to specifications supplied by others who determine the purpose, basic requirements of form, size, weight, and provide pertinent technical data.
- 3. Researches and analyzes techniques, layouts and precedent designs and information and develops design approaches. Makes scale layouts, manually or using computers, to determine feasibility of component location and construction details.
- 4. Ensures adequate supplies, materials and equipment are maintained for the project; initiates and prepares documentation related to purchase transactions. Prepares estimates of time, labor, and materials to be used on assigned tasks.
- 5. Ensures the operational readiness and safety of machinery, tools, and equipment; performs maintenance and repairs on fabricated and assembled equipment.
- 6. Operates a variety of hand and power tools or mechanical equipment specific to the job requirements; tests and calibrates equipment.

Morgan State University Job Specification Engineering Technician III Page Two

- 7. Writes detailed procedures for operation and maintenance of complex and technical equipment.
- 8. Assists in the preparation of reports, analyses, technical papers, and correspondence.
- 9. Leads and trains lower level engineering technicians and subordinate personnel.
- 10. Assists in design modifications by compiling related design, specifications, and materials data pertinent to specific items of equipment or component parts.
- 11. Operates various equipment including welding machines, plasma cutters, helium leak detectors, grinders, sanders, presses, mills, lathes, meters, measuring devices and various power and hand tools.

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: High School Diploma or GED.

EXPERIENCE: Six years in related work.

REQUIRED KNOWLEDGE/SKILLS/ABILITIES

Thorough knowledge of the basic engineering principles and the materials, elements, and products applicable to the area of specialization. Thorough knowledge and skill in the application principles of applied arithmetic, geometry, and trigonometry and the system of measures applicable to the specialization; in reading and interpreting technical specifications and drawings; in fabricating and assembling electromechanical and structural components and equipment from drawings and specifications; in setting up and calibrating instruments and preparing equipment for testing; in operating equipment applicable to the job according to standard safety practices. Ability to communicate effectively orally and in writing; to prepare reports and detailed procedures; to use personal computers; to lead and train others in technical engineering support work; to work in, on, around, over and under fixed equipment and machinery; to manipulate heavy equipment, tools, and supplies and/or exert force up to 50 lbs.; to concurrently manipulate multiple controls on equipment and machinery; to work in hazardous or irritating environments, confined spaces, and adverse weather or temperature conditions; to wear and work in personal protective equipment.

Morgan State University Job Specification Engineering Technician III Page Three

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

Candidates selected for employment may be subject to medical inquiries and/or a medical examination to determine ability to perform the job. Valid Maryland Non-commercial Class C or equivalent driver's license may be required.