# MORGAN STATE UNIVERSITY JOB SPECIFICATION



## MARINE SYSTEMS CONTROL SPECIALIST

Class Code: 1068 Pay Range: 10 FLSA Code: N/E (Non-Exempt)

### **JOB SUMMARY**

Under general supervision, provide technical support to assure that proper environmental controls are maintained for research experiments in marine/estuarine research facilities.

### **PRIMARY DUTIES**

- 1. Operate and maintain complex fresh/sea water circulation systems, including control of flow rate, water pressure, temperature, salinity, discharge, and disposal.
- 2. Provide needs for experiments, including design and construction of one-of-a-kind apparatus for specialized experiments.
- 3. Construct support systems as required for optimal operation of sea-water research laboratory, and assist users with experiment design and set-up.
- 4. Install, operate, and maintain systems to assure proper environmental conditions are maintained.
- 5. Monitor electronic and computer systems related to experiments.
- 6. Monitor systems for corrosion effects, and rebuild and repair systems as necessary.
- 7. Write operating specifications for new work procedures.

#### 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.

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## MINIMUM QUALIFICATIONS

EDUCATION: High School Diploma or GED

### **EXPERIENCE:**

A minimum of three years of journey level engineering or technical experience in a marine research environment, with concentration on equipment hardware and set-up, and experience operating and maintaining a complex sea-water system. Must qualify as a journey level tradesperson in the temperature control, plumbing, or HVAC trades.

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

General knowledge of practical algebra, geometric construction, and essentials of trigonometry; and the ability to read manuals, safety rules, instructions in use and maintenance of shop tools and equipment and to understand methods and procedures in mechanical drawing and layout work, blueprints, schematics, etc. Must be competent in operation, troubleshooting, service, and repair of listed systems. Ability to adjust work operation to meet emergency or changing programs or production requirements within available resources and with minimum sacrifice to quantity or quality of service. Ability to work in, on, around, over and under fixed equipment or machinery; to work at heights up to 50 feet; manipulation of heavy equipment, tools, supplies and/or exertion of force up to 70 pounds; to concurrently manipulate multiple controls on machinery and equipment; to work in hazardous or irritating environments, confined spaces and under adverse weather or temperature conditions; 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**

Candidates selected for employment may be subject to medical inquiries and/or medical examinations and drug test (per U.S. Coast Guard requirements) to determine physical ability to perform the job. Weekend, holiday, shift work, on-call and overnight travel will be required.