

## **FACILITY SYSTEMS ENGINEER**

### **CLASS SUMMARY**

Under direction, implements and coordinates District facility energy conservation, prevention maintenance and Computer Assisted Drafting system; analyzes equipment used to heat, cool and light District facilities; monitors energy consumption; recommends modifications to equipment; devises methods to reduce use of energy; inputs and reports on the status of preventive maintenance procedures; inputs and maintains files of District facilities in Computer Assisted Drafting system.

### **REPRESENTATIVE DUTIES**

Conducts energy audits to monitor consumption of fuel, water and electricity and to identify District facilities that are high energy users; analyzes energy usage and consumption trends; evaluates building, heating and cooling loads to determine optimum control strategy and conservation priorities; analyzes potential energy savings from the use of more efficient lighting device, high efficiency motors, additional insulation and other approaches; compares current costs with anticipated savings and estimates the time required for savings to offset costs associated with energy saving modifications; establishes priorities and develops methods to obtain energy savings through changes in equipment and operating procedures. Meets with various levels of agency/department representatives to explain energy conservation goals and to solicit District-wide support for the conservation program; serves as an energy conservation consultant providing technical assistance to lighting contractors, architectural designers and Purchasing Department to acquire energy efficient equipment; helps write specifications for building and equipment changes to achieve energy savings; serves a liaison to utility companies and private organizations to develop new or improved methods to save water and energy; discusses energy saving ideas with management; analyzes energy conservation suggestions to determine potential for savings and feasibility of implementation; supervises the implementation of energy conservation measures. Prepares and presents written and oral reports and charts regarding technical consequences of modifying utility services. Prepares and inputs computer programs for energy management installations by analyzing the facility energy profile and optimizing the efficient use of energy at each facility; reviews all new plans and specifications for District building for compliance with energy conservation policies.

Conducts research and makes recommendations on the appropriate procedures and scheduling for preventative maintenance program; inputs, analyzes and reports on the status of the preventative maintenance program.

Assists in the planning process of converting hard copy blueprints to CAD; conducts site surveys and confirms blueprint information necessary to input facility information into CAD; inputs and maintains facility information in CAD system per developed plans; coordinates with staff,

## **FACILITY SYSTEMS ENGINEER cont'd**

architect, engineers and others to assure additions, alterations and/or deletion of facilities are formatted to be accepted in CAD system; creates CAD drawings as requested for changes or alterations

### **ORGANIZATIONAL RELATIONSHIPS**

This position will report to the Assistant Vice Chancellor Facility Planning/Campus Services with close working relationships with the Plan Manager and maintenance personnel.

### **DESIRABLE QUALIFICATIONS GUIDE**

#### **Training and Experience**

Two years experience which demonstrates the application of the knowledge and abilities listed; specific experience with American Auto-Matrix A12100 energy management software is preferred.

Bachelor's Degree in Mechanical Engineering, Electrical Engineering, Architecture or related field. Experience may be substituted for the educational requirement on a year-for-year basis for up to two years of education.

#### **Knowledge and Abilities**

Thorough Knowledge of: the operation of an AT compatible personal computer; principals and operating practices of electrical, mechanical and pneumatic controls used to heat, cool and light public buildings; local and state laws and ordinances regulating temperatures of public buildings; principles and practices of the field of energy management; principles of building construction and operation of utility systems; methods and procedures used to estimate costs of major and minor alternations and modification of electrical and HVAC equipment; computerized energy management and CAD systems,.

Ability to: Evaluate alternative conservation measures to determine priorities and select methods that best meet the District's needs; estimate costs and time required to implement energy saving changes; communicate effectively with shop personnel, District managers, vendors and representatives of public utility companies and private organizations; read and understand building and equipment plans and specifications; perform mathematical operations to compute energy consumption, consumption per square foot of building space and cost savings of conservation measures; learn operation of District selected CAD systems; remain abreast of local, state and federal changes in energy legislation and industry trend in conservation programs and rate structures.

May periodically use a District vehicle to travel to various college sites and, therefore, requires a driving record that meets minimum standards established by the District's insurance carrier.