

# Classification and Qualification



# STANDARDS

The California State University System

## Drafting Technician II

*Class Code 3024*

*Date Established 03-01-72*

*Date Revised 01-01-78*

*Occupation Index Reference N-3*

### **DEFINITION:**

Under general supervision, performs complex drafting work, including complex design work required in the preparation of architectural, mechanical, civil and electrical drawings.

### **Examples of Typical Activities:**

Incumbents of positions in this class work from rough notes or sketches, and prepare complete, detailed design, including both new construction and building alterations, and mechanical and electrical systems. Incumbents utilize accepted engineering formulae; in making involved computations necessary for properly dimensioning drawings; in preparing lists of materials determined from dimensioning calculations made from scale drawings; in determining alternatives of design such as size, load capacities, strengths, etc.

As part of the design function, incumbents determine acceptable material substitutes. Incumbents may prepare construction cost estimates for simple construction or alteration projects.

Incumbents make field investigations taking on-site measurements, making sketches and collecting data such as specifications for laying out parking lots and athletic fields; alteration, improvement, maintenance and repair of buildings and facilities and as-built status of completed projects. These field investigations include the operations of transit and level in simple land leveling to determine grade elevations, set alignment and grade stakes, and balance quantities for cut and fill.

Incumbents modify master campus building and utility drawings to reflect the as-built condition.

As custodians of the master file of campus drawings, the incumbents provide authoritative information and interpretation of the contents of these files for specifications material substitutions, location of utilities, etc., to trade craftworkers, off-campus bidders on construction projects, faculty, staff, and students.

They may also be required to prepare maps, charts and tracings.

In addition, incumbents of positions in this class supervise lower level drafting technicians and/or student assistants who perform routine drafting, tracing and lettering assignments.

## **MINIMUM QUALIFICATIONS:**

### **Knowledges and Abilities:**

Comprehensive knowledge of the drafting methods, materials, techniques, instruments and symbols used in architectural, mechanical, civil and electrical drawings; general knowledge of engineering mathematics; thorough knowledge of the calculation of difficult dimensioning, and the methods used in quantity estimating; working knowledge of the various materials used in building construction; working knowledge of the laws, ordinances and other regulations applicable to building construction, maintenance and repair.

Ability to make engineering calculations; ability to plot drawings from field notes; ability to work independently and complete difficult drafting assignments; ability to legibly and accurately draft detailed architectural renderings, drawings and design; ability to analyze space requirements; ability to use a transit and level and perform surveying related to simple land leveling; ability to make clear and concise oral and written reports; ability to plan and direct the work of others; ability to supervise others; ability to acquire rapidly a general knowledge of the building codes of the State of California; ability to establish and maintain cooperative working relationships with staff, faculty, students and others.

and

### **Experience:**

Equivalent to four years of progressively responsible drafting experience including two years at the journey level preparing complete design and construction drawings for minor construction projects or for modification of existing structures or systems.

and

### **Education:**

Equivalent to the possession of an Associate Arts degree with extensive coursework in drafting technology, engineering or a related discipline. One year of specialized drafting experience, which has demonstrated that the applicant has acquired and successfully applied the fundamental knowledges and abilities of a draftsman, may be substituted for the required education.

**Work Week Group:** 4A  
**Premium O/T:** No  
**Shift Differential:** No  
**Employee Category:** Non-Academic