



## University System of Maryland Job Class Specification

**TITLE:** CAD SPECIALIST II  
**FLSA:** NONEXEMPT  
**EEO6:** H50  
**IPEDS-SOC:** 17-3024

**JOB CODE:** N15CA2  
**JOB TYPE:** SYSTEMWIDE  
**JOB FAMILY/SERIES:** PHP DES

**APPROVED BY:** Chancellor's Designee:  
James Sansbury, Acting Director of Human Resources

**EFFECTIVE DATE:** 10/11/2005

### **JOB SUMMARY**

Under general supervision, uses computer-aided drafting (CAD) equipment, provides technical drafting support in creating complex architectural or engineering drawings and mapping (topographical, infrastructure, and utilities) maintained in a CAD system. Independently performs non-routine drafting assignments within established guidelines. Prepares drawings and analysis related to the infrastructure of the university. Performs special CAD-related tasks and assignments. Updates drawings based on construction drawings, drawing files or field survey data. May lead the work of others. Operates plotters, graphic reproduction, photographic equipment, and computer-aided design and drafting (CAD) software.

### **PRIMARY DUTIES**

1. Prepares new and revised layouts using Computer Aided Drafting (CAD) software to develop required scale and mapping limits.
2. Surveys campus grounds to confirm accuracy of map of roads and sidewalks and other physical features to ensure that modifications to existing drawings are identified and properly compiled.
3. Evaluates architectural or engineering drawings and supporting documentation to verify adherence to standards. Resolves details not completely defined in existing drawings with minimal supervision.
4. Identifies and compiles complex drawings for data required in processing engineering and architectural development projects.
5. Performs field surveys of facilities to confirm architectural or mapping accuracy of modifications and dimensions.
6. Retrieves information from internal system files, consultant files or field survey data and displays the information on computer using required computer programs to modify or otherwise edit existing architectural, infrastructure, utilities or topographical drawings. Evaluates final drawings, resolves discrepancies and verifies completeness, clarity, and accuracy. Implements required changes to resolve field problems and improve existing drawings. Recommends changes to resolve field problems.
7. Prepares, revises and creates drawings from notes and verbal instruction and formulates layouts and detailed drawings.

**N15CA2 - SYSTEMWIDE - CAD SPECIALIST II**

Page 2

- 8. Modifies drawings to attach or link data to CAD entities.
- 9. Stays abreast of new CAD technology and recommends upgrades to equipment.

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:**Two-year degree in architectural drafting, CAD training course, or equivalent amount of education and experience in preparing drawings.

**EXPERIENCE:** Five years of experience in computer-aided drafting or related experience required.

**OTHER:**

**REQUIRED KNOWLEDGE/SKILLS/ABILITIES**

Proficiency in the operation of CAD tools (upgrades to software as appropriate). Thorough knowledge of and skill in applying principles, practices, and techniques of using computer-aided design (CAD) to create documents and maps. Thorough knowledge of drafting techniques, engineering terminology, building systems, basic mathematical computations. Ability to use computers and required software. Ability to plan and conduct non-routine and routine field surveys and maintain accurate records. Ability to read and interpret complex sketches and schematic drawings from all disciplines. Ability to follow oral and written instructions and communicate both orally and in writing.

**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**

None