

**PROGRAMMER/ANALYST I/II****Class Definition**

Under supervision, works closely with departments to determine if work systems are adaptable to computerized data processing: Business Systems, Geographic Information Systems (GIS), and/or the Internet/Intranet Systems; develops recommendations for business process reengineering; develops and/or implements complex computer programs.

**Distinguishing Characteristics**

Positions in these classes are flexibly staffed. Programmer/Analyst I incumbents are expected to progress with appropriate training, experience and satisfactory performance to Programmer/Analyst II, the journey level of the class series. These classes differ from Programmer/Analyst III in that incumbents in the latter provide lead direction to lower level staff and are assigned the more advanced and complex projects.

**Typical Tasks**

(This list is neither inclusive or exclusive. Consequently, this information may not reflect Essential Functions for this class.)

Performs on project teams and may assume project management.

Meets with user department personnel; analyzes department processes, procedures, and programs to determine the feasibility of conversion to electronic processing.

Designs, codes, documents, modifies and tests computer programs in accordance with the City's pre-established standards.

Prepares written procedures for installation of new or revised applications; trains end users; assists in formulating departmental technical standards.

Develops complete operational and program documentation in accordance with the City's pre-established standards.

Develops client interfaces for GIS, Internet, and business systems applications in various programming languages.

Performs special studies for City departments utilizing GIS spatial analysis or other tools.

Develops computer applications for the Internet or Intranet.

Installs new vendor purchased application software; maintains changes and upgrades to the software; monitors software performance; troubleshoots system problems; and interfaces with the vendor when necessary to expedite implementation of needed fixes/changes.

Communicates orally with end users and prepares written communication through reports, memoranda, and correspondence.

Performs related duties as required.

### **Knowledge, Abilities, and Skills**

(By the end of the probationary period, incumbents must demonstrate adequate knowledge, abilities, and skills to perform tasks at the journey level.)

Knowledge of the principles and methods used to develop GIS, Internet and/or business systems applications.

Knowledge of work stations, personal computers and other peripheral hardware.

Knowledge of programming languages applicable to systems in use in the City of Fresno.

Knowledge of database analysis and design.

Knowledge of the principles and practices of office automation, work flow design, and business process reengineering.

Ability to analyze business processes , recognize, evaluate and define problems, and prepare effective recommendations based upon findings.

Ability to develop, implement, document and modify computer systems and procedures in accordance with City standards.

Ability to develop and implement telecommunication systems and procedures for medium to large computer systems.

Ability to perform special studies utilizing GIS spatial analysis.

Ability to prepare clear, concise, and comprehensive records, reports, correspondence, and other written materials.

Ability to make clear and persuasive oral presentations.

Ability to train clients/users and assist in training entry level information technology staff.

Ability to establish and maintain effective working relationships with others in the performance of assigned duties.

**Minimum Qualifications**

Programmer/Analyst I: Graduation from an accredited college or university with a Bachelor's degree with major course work in computer applications and systems; decision science, information management, industrial technology, geography, planning, civil engineering or related field; OR two years of experience which included the preparation of business, Internet, or Geographic Information Systems programming and analysis; OR nine months experience in programming and analysis as an Information Services Aide for the City of Fresno.

Programmer/Analyst II: One year of experience equivalent to that of a Programmer/Analyst I with the City of Fresno; OR graduation from an accredited college or university with a Bachelor's degree with major course work in computer applications and systems, decision science, information management, industrial technology, geography, planning, civil engineering or related field, and one year of experience which included the preparation of business, Internet or Geographic Information Systems programming and analysis. Additional qualifying experience may be substituted for the required education on a year-for-year basis.

**Necessary Special Requirements**

Possession of a valid California Drivers License may be required at time of appointment.

Recruitment may be limited to a specific area of expertise as required by operational needs. The specific areas of expertise are listed below:

1. Business Application Systems
2. Geographic Information Systems
3. Internet/Intranet

APPROVED: (Signature on File)  
Director

DATE: 08/31/1998