

# Research Program Specialist (Geographic Information Systems) Series

## California State Personnel Board Specification

Series established July 24, 1990

### Research Program Specialist (Geographic Information Systems) Series Specification - Class Titles and Codes

Schem Code	Class Code	Class
LQ93	7418	Research Program Specialist I (Geographic Information Systems)
LQ79	7419	Research Program Specialist II (Geographic Information Systems)
LQ66	7420	Research Program Specialist III (Geographic Information Systems)

## Scope

Incumbents in this parenthetical specialty serve as the principal departmental staff person possessing knowledge in the techniques and methodologies utilized in Geographic Information Systems. They may perform in a lead capacity on complex research projects involving spatial analysis. They are expected to design and test complex spatial data bases to provide data for departmental program operation and for policy analysis, and to work cooperatively with other professionals concerned with Geographic Information Systems and other advanced digital mapping and database management techniques.

## Minimum Qualifications

### Research Program Specialist I (Geographic Information Systems)

Experience and education which provide the ability to independently and successfully perform complex research and analysis projects involving various types of digital spatial data and techniques and methodologies associated with Geographic Information Systems. and Either I One year in California state service performing research duties at a level of responsibility equivalent to that of Research Analyst II (Geographic Information Systems). Or II Experience: Three years of progressively responsible technical research experience above the trainee level engaged in the collection, evaluation, compilation and analysis of digital spatial data. (A Doctoral Degree in Geography or a research-oriented field may be substituted for two years of the required experience. A master's degree in the above field may be substituted for one year of the required experience.) (Experience in California state service applied toward this requirement

must include one year of experience in a class at a level of responsibility equivalent to Research Analyst II.) and

Education: Graduation from college with any major but with extensive course work in geography or a related field. This education must include a combined total of at least six semester hours in geographic analysis techniques.

## **Research Program Specialist II (Geographic Information Systems)**

Experience and education which provide the ability to independently and successfully perform the more complex research and analysis projects involving various types of digital spatial data and techniques and methodologies associated with Geographic Information Systems. and Either I One year in California state service performing research duties at a level of responsibility equivalent to that of Research Program Specialist I (Geographic Information Systems). Or II

Experience: Four years of progressively responsible technical research experience above the trainee level engaged in the collection, evaluation, compilation and analysis of digital spatial data. (A Doctoral Degree in Geography or a research-oriented field may be substituted for two years of the required experience. A master's degree in the above field may be substituted for one year of the required experience.) (Experience in California state service applied toward this requirement must include one year of experience in a class at a level of responsibility equivalent to Research Program Specialist I.) and

Education: Graduation from college with any major but with extensive course work in geography or a related field. This education must include a combined total of at least six semester hours in geographic analysis techniques.

## **Research Program Specialist III (Geographic Information Systems)**

Experience and education which provide the ability to independently and successfully perform the most complex research and analysis projects involving various types of digital spatial data and techniques and methodologies associated with Geographic Information Systems. and Either I One year in California state service performing research duties at a level of responsibility equivalent to that of Research Program Specialist II (Geographic Information Systems). Or II Experience: Five years of progressively responsible technical research experience above the trainee level engaged in the collection, evaluation, compilation and analysis of digital spatial

data. (A Doctoral Degree in Geography or a research-oriented field may be substituted for two years of the required experience. A master's degree in the above field may be substituted for one year of the required experience.) (Experience in California state service applied toward this requirement must include one year of experience in a class at a level of responsibility equivalent to Research Program Specialist II.) and

Education: Graduation from college with any major but with extensive course work in geography or a related field. This education must include a combined total of at least six semester hours in geographic analysis techniques.

## **Knowledge and Abilities**

### **All Levels:**

Knowledge of: Techniques and methodologies of Geographic Information Systems; principles and procedures of digital spatial data entry, storage, analysis and output; programming techniques for geographic analysis; data base design and management techniques; cartographic design and production techniques.

Ability to: Identify spatial data needs for complex analyses and assess adequacy of existing data to meet these needs; develop procedures for collection and integration of disparate digital and nondigital data sources; design and test complex data base structures for storage and manipulation of spatial data; perform complex spatial analyses as required for natural resource management, land use and transportation planning, emergency response planning, or health assessments; design effective cartographic products using standard mapping practices and conventions.

## **Special Personal Requirements**

### **All Levels:**

Demonstrated ability to act independently; initiative; flexibility; and tact.

Research Program Specialist (Geographic Information Systems) Series History - Dates  
Established, Revised, and Title Changed

<b>Class</b>	<b>Date Established</b>	<b>Date Revised</b>	<b>Title Changed</b>
Research Program Specialist I (Geographic	07/24/1990	--	--

Research Program Specialist (Geographic Information Systems) Series History - Dates  
Established, Revised, and Title Changed

<b>Class</b>	<b>Date Established</b>	<b>Date Revised</b>	<b>Title Changed</b>
Information Systems)			
Research Program Specialist II (Geographic Information Systems)	07/24/1990	--	--
Research Program Specialist III (Geographic Information Systems)	07/24/1990	--	--