

1529 – Mathematical Statistician (Informatics)

Major Duties for This Position May Include:

- Designs experiments, tests hypotheses, and builds scalable data science models.
- Conducts advanced data analysis and designs complex algorithms using artificial intelligence (e.g., machine learning) methods. Identifies relevant data available, including internal and external data sources, leveraging new data collection processes such as smart meters and geo-location information, or social media and unstructured web-based data.
- Communicates and works with business subject matter experts to educate the organization both from IT and business perspectives on new approaches, such as testing hypotheses and statistical validation of results.

Related Competencies

- Data Analysis and Interpretation
- Data Monitoring
- Statistical Software
- Data Quality
- Customer Service

Basic Requirements

Degree of which included 24 semester hours of mathematics and statistics, of which at least 12 semester hours that are in mathematics and 6 semester hours in statistics.

or

Combination of education and experience of which include at least 24 semester hours of mathematics and statistics, including at least 12 hours in mathematics and 6 hours in statistics, as shown above, plus appropriate experience or additional education.

Minimum Qualifications

In additions to meeting the basic requirements above, applicants must meet the minimum qualifications requirement as defined below:

GS-07 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-05 grade level in the Federal Service. Specialized experience for this position includes assisting with gathering and evaluating data to develop public health information systems.

Or Education

One full year of graduate level education.

Or Superior Academic Achievement

Based on a bachelor's degree that is demonstrated through class standing (upper 1/3 of class); grade point average (3.0/4.0 overall or 3.5/4.0 in major), or election to membership in a qualifying national scholastic honor society.

Or Combination

You may qualify on a combination of education and experience, the total percentage of experience at the required grade level compared to the specialized experience requirement, as well as the percentage of completed education compared to the educational requirement must equal at least 100 percent.

GS-09 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-07 grade level in the Federal Service. Specialized experience for this position includes:

- Assisting with analyzing data sets/information using informatics, systems, and a variety of reporting tools to improve public health
- Assisting with gathering and/or interpreting quantified information on scientific and public health issues and programs

Or Education

2 years of progressively higher-level graduate education leading to a master's degree *or* master's or equivalent graduate degree. **TRANSCRIPTS REQUIRED**

Or Combination

You may qualify on a combination of education and experience. The total percentage of experience at the required grade level compared to the requirement, must equal at least 100 percent. Only graduate level education more than the first 18 semester hours (27 quarter hours) may be combined to be considered for qualifying education. **TRANSCRIPTS REQUIRED.**

GS-11 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-09 grade level in the Federal Service. Specialized experience for this position includes:

- Analyzing data sets/information using informatics, systems, and a variety of reporting tools to improve public health

- Gathering and/or interpreting quantified information on scientific and public health issues and programs

Or Education

Ph.D. or equivalent doctoral degree or three (3) full years of progressively higher-level graduate education leading to such a degree. **TRANSCRIPTS REQUIRED.**

Or Combination

You may qualify on a combination of education and experience. The total percentage of experience at the required grade level compared to the requirement, must equal at least 100 percent. Only graduate level education more than the first 36 semester hours (54 quarter hours) may be combined to be considered for qualifying education. **TRANSCRIPTS REQUIRED.**

GS-12 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-11 grade level in the Federal Service. Specialized experience for this position includes:

- Analyzing complex data sets/information using informatics, systems, and a variety of reporting tools to improve public health
- Collaborating or consulting on the application of statistical techniques or methods relevant to public health.

Note: There is no substitution of education for specialized experience at the GS-12 level.

GS-13 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-12 grade level in the Federal Service. Specialized experience for this position includes:

- Coordinating efforts to apply informatics standards, policies, and procedures to improve interoperability between public health agencies and other healthcare delivery
- Experience analyzing and reporting statistical data and collaborating or consulting on the application of statistical techniques or methods relevant to public health.

Note: There is no substitution of education for specialized experience at the GS-13 level.

GS-14 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-13 grade level in the Federal Service. Specialized experience for this position includes:

- Data science work that requires application of data mining techniques, statistical analysis, and building high quality prediction systems integrated with public health surveillance systems.

Note: There is no substitution of education for specialized experience at the GS-14 level.

GS-15 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-14 grade level in the Federal Service. Specialized experience for this position includes:

- Managing, planning, developing, coordinating, and evaluating public health surveillance programs and activities related to notifiable conditions and syndromic surveillance, data science and analytical activities.

Note: There is no substitution of education for specialized experience at the GS-15 level.

Experience refers to paid and unpaid experience. Examples of qualifying unpaid experience may include volunteer work done through National Service programs (such as Peace Corps and AmeriCorps), as well as work for other community-based philanthropic and social organizations. Volunteer work helps build critical competencies, knowledge, and skills; and can provide valuable training and experience that translates directly to paid employment. You will receive credit for all qualifying experience, including volunteer experience.