

## **ENGINEER-IT (BOCES)**

**DISTINGUISHING FEATURES OF THE CLASS:** This is a technical position responsible for the overall design, build, integration, and maintenance of Software Systems, Infrastructure and Data. The work involves evaluating district/enterprise needs, including existing systems, and provides recommendations regarding associated cost estimates, technical specifications and engineering reports. The incumbent acts as the lead, providing consultation and guidance to all areas. Work is performed under the general supervision of management with leeway allowed for the exercise of independent judgment in planning and implementing work duties. Does related work as required.

### **TYPICAL WORK ACTIVITIES:**

Designs and develops Software Systems, Infrastructure, and Data projects, including upgrades and expansions in accordance with district/enterprise objectives;

Designs and implements complex configurations, including hardware and software technology, business continuity, disaster recovery, and integration of technologies;

Develops system design documentation and related materials;

Reviews and analyzes technical feasibility to develop Software Systems, Infrastructure, and Data projects strategies;

Assesses and reviews Software Systems, Infrastructure, and Data projects to ensure that district needs are translated into feasibility requirements;

Consults with vendors, distributors and users regarding the purchase of hardware and software related to Software Systems, Infrastructure, and Data projects;

Responds to requests for proposals, develops cost estimates, project budgets, and resource requirements;

Acts as part of the Software Systems, Infrastructure, and Data projects team(s), assessing the impact of changing needs on reporting, including analytics and visualizations;

Provides technical advice and assistance to individuals and groups leveraging Software Systems, Infrastructure, and Data projects in the identification and solution of technology problems.

### **FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

Thorough knowledge of building and optimizing Software Systems, Infrastructure, and Data architectures;

Good knowledge of advanced software development skills;

Good knowledge of business intelligence tools to create visualization and dashboards for various data quality metrics;

Good knowledge of budgetary and procurement processes;

Ability to plan, organize, coordinate, administer and evaluate the effectiveness of program plans and provision of

services related to Software Systems, Infrastructure, and Data Systems;  
Ability to design, install, update and maintain Software Systems, Infrastructure, and Data systems;  
Ability to establish and maintain effective working relationships;  
Ability to train others in the configuration and operation of Software Systems, Infrastructure, and Data Systems;  
Ability to design, engineer, and implement Software Systems, Infrastructure, and Data solutions;  
Ability to analyze Software Systems, Infrastructure, and Data sets to recommend and implement workable solutions;  
Ability to communicate effectively both orally and in writing;  
Ability to train and direct the work of others;  
Ability to write proposals and cost estimates;  
Ability to train others in Software Systems, Infrastructure, and Data Systems;  
Organizational skills.

**MINIMUM QUALIFICATIONS:**

A) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's degree or higher in computer science, computer technology, data processing, management information systems, information resource management, infrastructure engineering, or closely related field, and two (2) years' experience in the information technology field; OR

B) Graduation from a regionally accredited or New York State registered college or university with an Associate's degree in computer science, computer technology, data processing, management information systems, information resource management, infrastructure engineering or closely related field, and four (4) years' experience in the information technology field; OR

C) Six years of experience in the information technology field; OR

D) An equivalent combination of training and experience as defined by the limits of A), B), and C) above.

**SPECIAL REQUIREMENT:** Per regulations of the Commissioner of Education, to be employed in a position designated by a school district or BOCES as involving direct contact with students, a clearance for employment from the State Education Department is required.