

TITLE: Systems Analyst / Programmer
SECTION: Information Technology Department
REPORTS TO: Director of Information Technology

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SUMMARY

Under the general direction of the Director of Information Technology or designate, the Systems Analyst / Programmer is responsible for the analysis, design, development, integration, and maintenance of information systems that support district operations. The incumbent provides technical leadership in application development, system integration, and database design, exercising considerable independent judgment and initiative.

DUTIES

1. Requirements & Analysis
 - Consult with internal stakeholders to gather and refine software requirements; conduct detailed business and technical analyses; evaluate solution options, feasibility, and alignment with district standards and privacy/security obligations.
2. Application Development & Maintenance
 - Design, develop, test, implement, and maintain secure and scalable software applications.
 - Support and improve both legacy and modern web-based systems, including enhancements, bug fixes, performance improvements, and modernization activities.
3. Systems Integration
 - Develop and maintain integrations between district systems (e.g., SIS, HR/Finance, identity management platforms, cloud services).
 - Support data exchange processes, automation, and workflow improvements across applications and systems.
4. Database Design & Administration
 - Design, implement, and maintain relational databases; develop SQL queries, stored procedures, schemas, and data models.
 - Support data integrity, availability, and database performance.
5. Documentation & Knowledge Transfer
 - Prepare and maintain technical specifications, solution documentation, and user guides.
 - Provide training and knowledge transfer to technical staff or end users as required.
6. Collaboration & Communication
 - Communicate regularly with district departments and external organizations, including vendors, other districts, consortiums, ministries, and consultants.
 - Participate in project teams and contribute to cost/benefit analyses, project planning, and technical implementation activities.
7. Support & Troubleshooting
 - Investigate and resolve application, integration, and data issues; perform root-cause analysis and contribute to continuous improvement initiatives.
8. Other Related Duties

- Perform other duties as assigned by the Director of Information Technology or designate.

QUALIFICATIONS

1. Education & Experience

- Bachelor's degree in a computer-related discipline plus over five years of relevant experience in the following areas, or an equivalent combination of education and experience:
 - Systems analysis and programming in enterprise environment.
 - Designing and developing dynamic, data-driven web applications
 - Systems integration and data exchange development

2. Technical Knowledge & Abilities

- Proficiency in modern programming languages, frameworks, and scripting technologies relevant to web-based and cloud-supported applications.
- Experience with relational databases, SQL development, and data modelling.
- Knowledge of enterprise operating environments including modern server, network, and identity systems.
- Understanding of secure coding practices, privacy legislation, and data protection standards.
- Ability to support and enhance existing legacy applications while contributing to modernization and integration efforts.

3. Analytical & Project Skills

- Ability to analyze complex data and workflows and develop logical, effective programming solutions.
- Demonstrated ability to contribute to project planning, documentation, and technical leadership within assigned scope.

4. Communication & Interpersonal Skills

- Ability to establish and maintain effective working relationships with diverse stakeholders.
- Strong verbal and written communication skills with the ability to clearly convey technical information.
- Ability to work under pressure, manage competing priorities, and meet project deadlines.