

		ISSUED: 11/5/2021
TITLE: Data Engineer	SALARY TABLE: IP	CLASS CODE: PE390
UNION: P & A, Local 1979, U.A.W	SALARY GRADE: 15	EEO CODE: 30
JOB GROUPING: None	FLSA: Exempt	EMPLOYEE CLASS: PE

JOB PURPOSE

Provide advanced data design, architecture, delivery, and analytical solutions that support the University's strategic planning and decision making. This lead level position will collaborate with WSU leadership, data scientists, technical analysts, and other professionals from various business areas. This position will report to the Director of Business Intelligence and Data Analytics in Computing & Information Technology.

ESSENTIAL FUNCTIONS	% Time
Define and prepare advanced data delivery, design, development, implementation, and technical support of analytical solutions to support key strategic initiatives. Develop scalable data pipelines and construct new API integrations to support continuing increases in data volume and complexity.	25%
Analyze large and complex datasets using statistical tools and techniques. Utilize various scripting languages (Python, R, SQL, JavaScript, PHP) and Business Intelligence tools/applications (IBM Cognos Analytics, Microsoft Power BI, SAS BI, Tableau) to translate findings into high performance visualizations and reports.	25%
Support and maintain the Business Intelligence platform, focusing on systems stability, data quality, data governance and platform functionality. Design, develop, implement, manage and monitor Business Intelligence dashboards and complex reporting solutions.	15%
Collaborate with University leaders and functional teams to identify opportunities for leveraging University data to drive business solutions. Manage large scale BI projects to support the University strategic plan.	15%
Research and communicate findings related to new data infrastructure and analysis methodologies, BI emerging technologies, and new applications. Recommend appropriate technologies to support the implementation of a BI strategy.	10%
Mentor and train team members as well as business partners in data analysis methodologies, business intelligence concepts and report/dashboard development as needed. Attend meetings.	5%
Other related duties as assigned.	5%

MINIMUM QUALIFICATIONS

Education Bachelor's degree

A Bachelor's degree from an accredited University in Computer Science, Data Science, Information Systems, Mathematics, Statistics, or a closely related field is required. A master's degree is strongly preferred.

Experience Expert (established subject matter expert, 7+ years experience)

Requires a minimum of five to seven years' experience in data warehouse, data mining, data modeling, business analytics and BI software development and deployment.

Knowledge, Skills and Abilities

Expert level understanding of data sources, database design, and development logic and constructs especially as related to data warehouse technology. Able to download, merge, manipulate, analyze and report on large amounts of complex data. Extensive experience with API integrations.

Extensive experience with associated computer languages (Python, R, SQL, JavaScript, PHP) and BI reporting analytics solutions (i.e., Cognos Analytics, Power BI, Tableau, SAS BI, MS Excel). Expert knowledge of data extraction methodologies for reporting and dashboard development.

Knowledge and experience performing root cause analysis on internal and external data and processes to answer specific questions and identify opportunities to improve data reliability, efficiency, and quality.

Advanced understanding of cutting-edge methods of data management, development, implementation, and analysis across a large, complex institution.

Excellent analytical and problem-solving skills. Ability to find creative solutions to solve problems while staying within practice guidelines.

Excellent interpersonal and written communication skills with the ability to effectively engage with a variety of business areas and leadership. Skilled in writing procedures, guidelines and application documentation. Able to communicate technical and analytical information verbally and in written reports.

Analytical thinker with excellent organizational, project management, communication, mentorship, and human relations skills.

The ability to serve and engage others in a multicultural environment. An openness to change and growth by learning from others. Ability to collaborate with others in the accomplishment of a common task or program.

Ability to train and provide guidance to team members and end users with the use of business intelligence toolsets.

Ability to produce consistent quality work and meet established deadlines with strong attention to detail and follow-up on each task and assignment. Ability to manage and protect confidential information.

Working Conditions

Typical office environment.