## POSITION INFORMATION

<table>
<thead>
<tr>
<th>Internal Team:*</th>
<th>SL-ITS - HR Business Partner Svcs-132501</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Code/Employee Classification:*</td>
<td>Analyst/Programmer 12 Mo</td>
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<tr>
<td>Job No:</td>
<td>0400</td>
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<tr>
<td>MPP Job Code:</td>
<td>Analyst/Programmer 12 Mo</td>
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<tr>
<td>Position Number:</td>
<td>Position no: SL-00010411</td>
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<tr>
<td>CSU Working Title:*</td>
<td>Business Intelligence Engineer</td>
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<tr>
<td>Reports To:</td>
<td>Mgr of App Dev &amp; Info Mgmt</td>
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<tr>
<td>Campus:*</td>
<td>San Luis Obispo</td>
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<tr>
<td>Division:*</td>
<td>Information Services</td>
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<tr>
<td>College/Program:*</td>
<td>ITS - Info Technology Svcs</td>
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<tr>
<td>Department:*</td>
<td>ITS-App Data &amp; Integratn Engin - 134521</td>
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<tr>
<td>FLSA Status:*</td>
<td>Exempt</td>
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</tbody>
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## SENSITIVE POSITION

| Sensitive Position: | Yes □ No □ |

## Job Summary/Basic Function:*

Under general supervision, this position designs, develops, documents, and maintains the campus enterprise data analytics and business intelligence platform. Working with campus stakeholders and other data consumers, this position determines requirements, designs solutions, performs data analysis and data mining, and creates the data pipelines to access, analyze, and visualize campus data. Primary activities include building and maintaining data sources and dashboards for university educational and administrative systems. In addition, this position will support methods to integrate applications with the campus computing infrastructure utilizing current technologies and DevOps philosophies. Emphasis will be placed on providing development support to build out a new analytics and business intelligence platform leveraging AWS.

## Minimum Qualifications:*

Bachelor’s degree and two years of relevant experience. Additional qualifying experience may be substituted for up to two years of the required education on a year-for-year basis.
Required Qualifications:

Demonstrated skill building solutions with data visualization and analytics tools (e.g., Oracle Business Intelligence Enterprise Edition, Tableau, Power BI, Looker).

Demonstrated skill manipulating and shaping data for enterprise data sources or advanced analytical modelling.

Demonstrated skill using databases/query languages to store, manipulate, and retrieve data (e.g., MySQL, Oracle, MSSQL, PostgreSQL, or Aurora).

Thorough working knowledge of software development life cycle (SDLC), structured programming, object-oriented design and development techniques, continuous improvement and change management business practices.

Thorough working knowledge of testing practices and application debugging and troubleshooting procedures.

Demonstrated ability to identify and implement critical maintenance fixes and to isolate and correct malfunctions, including interface problems.

Demonstrated skill working with Linux, UNIX and Windows operating systems.

Demonstrated ability to research and evaluate new technologies and software to meet user needs.

Demonstrated ability to work with technical and non-technical staff to identify user requirements and translate them into technology-based solutions.

Ability to use creative problem-solving skills and apply effective technical solutions.

Ability to apply campus information security policy and standards to develop specific security requirements. Ability to apply security models and frameworks to ensure appropriate database security is maintained.

Excellent verbal and written communication skills, including the ability to prepare and deliver formal and informal documentation, presentations, and training to a variety of end users.

Excellent organizational and time management skills with the ability to set own priorities to coordinate multiple assignments with fluctuating and time-sensitive deadlines.

Ability to foster and maintain positive and professional working relationships; ability to effectively handle interpersonal interactions at all levels and respond appropriately to conflicts and problems.

Ability to provide lead work direction and train others.

Interest and ability to maintain and enhance technical currency.

General knowledge of requirements for accessibility and other regulatory compliance.
Preferred Qualifications:

- Degree in computer science or related field (e.g., Information Science, Data Science, Statistics).
- Demonstrated experience building predictive models using modern programming languages (e.g., Python, R).
- Working knowledge of cloud technologies and DevOps application management strategies and techniques; CI/CD workflows and code management standards.
- Working knowledge of building scalable ETL pipelines, data warehousing, and schema modeling.
- Working knowledge of cloud infrastructure platforms (e.g., AWS, Azure).
- Thorough working knowledge of enterprise email architectures and application support.
- Thorough working knowledge of lean/agile work management processes.
- Understanding of AWS tools and frameworks.
- AWS Certified Solutions Architect – Associate
- AWS Certified Big Data – Specialty

Special Conditions:

- Must be willing to travel and attend training programs off-site for occasional professional development.
- Must be able to work additional hours, flexible and/or irregular hours, occasional holidays, and adjust working hours to meet special jobs or during emergency situations. May be called back periodically to perform work on an emergency basis.
- Must be able to successfully pass a pre-employment background/fingerprint check; must not have been convicted of a felony in this state or any other state or in any federal jurisdiction, which would have been a felony if committed in this state.
- The person holding this position is considered a 'mandated reporter' under the California Child Abuse and Neglect Reporting Act and is required to comply with the requirements set forth in CSU Executive Order 1083 as a condition of employment.
- This position classification has been defined as "Exempt" and is not subject to the overtime provisions of the Fair Labor Standards Act (FLSA).

License / Certification:

- Mandated Reporter:*
  - General: The person holding this position is considered a general mandated reporter under the California Child Abuse and Neglect Reporting Act and is required to comply with the requirements set forth in CSU Executive Order 1083, revised July 21, 2017.
- NCAA:* Yes    No
- Conflict of Interest:* None
- Supervises Employees:* Yes    No
## JOB DUTIES

### Application Administration and Maintenance: Develop and support enterprise applications, including implementing, integrating, and maintaining servers, application releases, web services and customized modules and reports.
- Provide technical analysis, support, and defect resolution of assigned applications, databases, tools and interfaces.
- Maintain and support assigned systems to ensure minimal downtime and loss of productivity and service.
- Analyze functional requirements; research, design, develop, test and implement applications, modifications, and interfaces. Use technology tools appropriately for application development and support.
- Install, test, maintain, and troubleshoot software.
- Use SDLC methods and procedures to facilitate application source code management and modifications.
- Analyze user system and application needs; recommend and implement appropriate solutions. Develop and conduct user needs assessments.
- Analyze security requirements and implement procedures to meet these requirements. Regularly review assigned responsibilities to identify and manage security risks. Escalate security issues as appropriate.
- Prepare and maintain documentation. Develop training materials.

### Consultation, Collaboration, & Support: Develop and implement maintenance and project plans for enterprise applications and associated systems.
- Consult and collaborate with functional customers and technical staff to identify and document requirements. Determine and evaluate alternative approaches to meet user needs and recommend optimal solutions.
- Provide support to both technical and non-technical staff.
- Leverage design expertise to collaborate with stakeholders to identify and implement procedures that facilitate a smooth delivery of services or enhancements to existing services.
- Assess vendor proposals and provide technical recommendations.
- Provide escalated tier 2 and tier 3 support to both technical and non-technical staff.

### Essential / Marginal

### Essential

1. Provide technical analysis, support, and defect resolution of assigned applications, databases, tools and interfaces. Maintain and support assigned systems to ensure minimal downtime and loss of productivity and service.
2. Analyze functional requirements; research, design, develop, test and implement applications, modifications, and interfaces. Use technology tools appropriately for application development and support.
3. Install, test, maintain, and troubleshoot software.
4. Use SDLC methods and procedures to facilitate application source code management and modifications.
5. Analyze user system and application needs; recommend and implement appropriate solutions. Develop and conduct user needs assessments.
6. Analyze security requirements and implement procedures to meet these requirements. Regularly review assigned responsibilities to identify and manage security risks. Escalate security issues as appropriate.
8. Perform other job-related duties and special projects as assigned
9. Maintain currency in the knowledge and skills necessary to facilitate industry-leading solutions