

## Category 3: Software/Application Development Services

The University may require IT staffing in the following software/application development services which includes but not limited to, application development (C#, Java, Microsoft.Net, SharePoint, Web, HTML, CSS, and PHP); application maintenance; database application (MS, SQL, Oracle, MySQL); new application training; custom application development and testing; and/or cloud based solutions. Following are the positions which are required for this types of services and for this group:

Following is a list of the position titles and descriptions applicable to this category:

**Business Analyst:** Perform business requirements analysis, workflow analysis, and work with users to write functional specifications. Critically evaluate information gathered from multiple sources, reconcile conflicts, decompose high-level information into specific details, abstract up from low-level information to general understanding, and distinguish between user requests from true business needs. Act as the liaison between the user and the technical team and provide support throughout the development life cycle. Deliver such artifacts as functional requirements, business requirements, use cases, GUI, screen and interface design. 'Requires a Bachelor's degree, analytical skills, ability to translate users' expressed needs into application and operational requirements.

**Business Intelligence (BI) Developer:** Develop and maintain enterprise business intelligence solutions. Provide expertise to project teams in hands-on development in business intelligence applications, technical troubleshooting, complex report development, and enterprise standard report administration. Requires Bachelor's degree, three years of IT experience, 1 year of hands-on experience with a BI product (e.g., Business Objects), database query language proficiency, and an understanding of BI/DW concepts.

**Cloud Services Specialist:** Deploy and operate large scale cloud infrastructure and application services. Monitor all servers, load balancers, and firewalls using suite of monitoring tools. Support backup strategy with existing database and critical file system. Ensure high availability and performance. Requires Bachelor's degree and 2 years of hands-on experience as a system engineer in a high-availability 24/7/365 infrastructure; extensive system administration experience; networking, firewall/security, and business continuity experience.

**Data Modeler/Analyst:** Provide technical expertise and work with subject matter experts, business analysts, and data analysts to translate business requirements into logical and physical data models for critical business systems. Provide technical leadership in the design and development of the metadata strategy and metadata repository. Set forward-looking data modeling direction; set/enforce data modeling standards; direct issue and problem resolution in support of key business processes. Requires a Bachelor's degree; expertise in modeling techniques; and collaboration, project management and technical leadership competencies.

**Database Architect:** Install, configure, upgrade, administer, monitor, maintain, and secure databases. Develop and design database strategies, monitor systems, improve database performance and capacity, and plan for future expansion requirements. Requires a Bachelor's degree; expertise with Oracle and MS SQL database solutions (including performance tuning, RAC, implementations, system interplay); thorough working knowledge of UNIX operating system, scripting, and utilities; understanding of data modeling and data warehousing concepts.

**Deployment Specialist:** Responsible for IT Service management, including deployment of IT infrastructure and applications into production; subject matter expert (SME) for Change and Release Management; manage troubleshooting of unplanned system outages; promote understanding of and adherence to change procedures; understand overall infrastructure and technologies being changed. Requires a Bachelor's degree; three years of professional IT experience; big-picture understanding. ITIL Foundation certification preferred.

**ERP Analyst:** Maintain, optimize, and provide technical and functional support for Banner enterprise-wide applications/systems and other integrated systems; help users understand/apply system processes. Perform project coordination and analytical roles for projects, conduct process and workflow analysis, enhance Banner module functionality, and assist with application/upgrade support. Requires a Bachelor's degree and 3 years of experience with business and system analysis.

**ERP Developer:** Analyze, develop, test, and deploy applications based upon established standards and practices. Translate functional requirements into detailed technical design specifications using standard design frameworks. Provide technical support and product customization for third party enterprise applications. Provide support for existing applications, including bug fixes, routine maintenance, mandated maintenance, functional issues, and performance issues. Requires a Bachelor's degree; software development experience; and working knowledge of relational database design and functional concepts.

**Functional Architect:** Maintain focus on the high level/conceptual vision of the product and its function and features throughout the development process to ensure the technology design ties to business requirements and creates a useful system. Requires Bachelor's degree and 5 years of professional IT experience, including experience with process improvement methodologies and project management.

**Information Architect:** Lead information architecture practice; drive development of models, strategies, standards, and principals, transforming data into trusted, high-quality information that supports strategic business decision support. Conceptualize, plan, design, and implement complete and integrated architectures that support business needs, minimize redundancy, maximize capability, and ensure enterprise system sustainability. Requires a Bachelor's degree in computer science or engineering; ten years of technical expertise in information and data modeling; and business analytics.

**Integration Specialists:** Analyze, design, and document solutions which meet client requirements and which work within the established system architecture and meet technical standards. Work with project teams to analyze and review technical specifications, document integration components, and design complex multi-system integrations which provide complete business solutions. Requires a Bachelor's degree; technical analysis experience; and in-depth knowledge of business processes and implementation methodologies.

**Object Modeler:** Develop logical and physical data models based on business requirements, facilitate data modeling sessions to define and document business requirements, and work with IT staff within the organization to complete data model development. Requires a Bachelor's degree in Computer Science or a related discipline; knowledge of data modeling concepts; and experience with related technology tools.

**Programmer:** Develop and support complex batch and web applications, mobile applications, interfaces, and reports in a multi-tier distributed environment. Perform technical analysis, design, development, testing and support of software applications. Requires a Bachelor's degree in Computer Science, MIS, Engineering, or related field and at three years of software development experience.

**Project Coordinator:** Develop work plans, schedules, project estimates, resource plans, and maintain and communicate status reports for high profile enterprise IT projects. Provide business analysis support and subject matter and project management expertise. Requires a Bachelor's degree in MIS, IT, or similar discipline; Project Management Professional (PMP) certification; expert-level experience with MS Project, MS Office, and CA Clarity PPM; and five years of professional project management experience.

**Project Manager:** Provide direction for the technology development components of IT projects for the full project lifecycle. Provide resource projections, budget management, formulate project delivery strategies, establish milestones/schedules, report on project status, and monitor progress of all team members. Requires a Bachelor's degree, preferably in a technology-related discipline, and three years of project life-cycle methodology and technology project management experience.

**Quality Assurance Specialist:** Design, implement, and execute tests and compile reports to ensure applications meet end-user requirements, operate properly, and are free from defects. Document defects/system problems, provide summary reports to the project team, and document quality assurance procedures for analysis, test case design, testing, and tracking issues. Requires a Bachelor's degree and two years of testing experience.

**Security Analyst:** Focus on design, implementation, and administration of IT security policies, technologies, solutions, and processes to secure university applications, data, computers, and networks. Establish an IT security program and architecture which support strategic university business objectives; promote IT security awareness and education programs throughout the university. Provide hands-on administration of IT security hardware and networking gear. Requires a Bachelor's degree; at least 5 years of experience working in a Security Network Engineering or Network Engineering role; knowledge of information security regulations; and broad knowledge of IT trends. Industry security certification is preferred.

**SharePoint Developer:** Create a unified, supportable, and extensible SharePoint content framework. Establish mission and functions of SharePoint content governing bodies. Oversee development activities and creation of technical documentation. Serve as the SharePoint content framework architect. Manage day-to-day technical challenges and communicate risks or issues associated with development activities. Requires a Bachelor's degree; expertise in SharePoint development, design, and administration; and experience leading development of SharePoint content and its advanced features (e.g., customer workflows, InfoPath/Forms Services).

**Systems Programmer:** Maintain, optimize, and provide technical support for enterprise-wide applications/systems. Interact with vendors, and patch, upgrade, monitor, and maintain the University's enterprise applications to ensure fault tolerance and high availability. Requires a Bachelor's degree in Computer Science or related technical field and experience in a technical role in IT.

**Technical Architect:** Design and build custom elements of solutions and work with a team to deliver the complete solution to the customer. Provide technical direction and guidance, thought leadership, development oversight, and support successful project delivery. Requires a Bachelor's degree in Computer Science or a related technical field (Master's preferred); understanding of inter-relationships and impacts of systems and applications upon the enterprise-wide technical environments; experience architecting high traffic, high scalability, and high availability applications.

**Web Application Developer:** Create and maintain applications for the web using software languages and tools. Translate requirements into viable code, testing, debugging and preparing documentation following established standards and applicable regulations. Requires a Bachelor's degree in Computer Science or a related field, proficiency with at least one programming language, and knowledge of web user interfaces.