



## Programmer-Analyst - Job Profile Matrix

<b>Line of Business:</b> Information Technology <b>Job Family:</b> Programmer Analyst <b>Reports to (Job Title):</b> Various reporting levels	<b>Effective Date of Job Profile:</b> 01/01/2013 <b>Last Updated:</b> 11/26/2014
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<b>Job Family Summary</b>	The Programmer/Analyst designs, develops, modifies, configures, debugs and evaluates application programs for functional business areas. Programs include reports, interfaces, conversions, enhancements, forms, and workflows (RICEFWs). Analyzes existing applications and systems and formulates logic for new systems, devises logic procedures, logical database design, performs coding and tests/debugs programs. Assist in the definition, development, and documentation of deliverables, and specifications on a project-by-project basis as defined in the IT Methodology, in collaboration with business analyst and other project team members. Consult with business analyst and architects to understand, anticipate, and meet current and future business needs. Modify and configure applications/systems as specified in the requirements and/or technical design document. Prepares and obtains approval of system and development documentation. Recommends changes in development, maintenance and system standards and processes. Anticipate client concerns and questions and provide timely, professional, straight forward (non-technical) communications. Provide on call support for production systems and provide timely solutions. Day-to-day tasks to insure systems are up and running. Respond to ad-hoc questions and intra-departmental communications. Supports bug fixes, patches, minor enhancements, and service request				
<b>SAP Job Code</b>	51697281	50010700	50010702	50279730	50491893
<b>Job Title</b>	<b>Programmer-Analyst, Associate</b>	<b>Programmer-Analyst</b>	<b>Programmer-Analyst, Senior</b>	<b>Programmer-Analyst, Expert</b>	<b>Programmer-Analyst, Principal</b>
<b>Position Title Examples</b>	<ul style="list-style-type: none"> <li>• Computer Systems Analyst Programmer, Associate</li> <li>• Applications Programmer-Analyst, Associate</li> <li>• Systems Programmer Analyst, Associate</li> </ul>	<ul style="list-style-type: none"> <li>• Computer Systems Analyst Programmer</li> <li>• Applications Programmer-Analyst</li> <li>• Systems Programmer Analyst</li> </ul>	<ul style="list-style-type: none"> <li>• Computer Systems Analyst Programmer, Senior</li> <li>• Applications Programmer-Analyst, Senior</li> <li>• Systems Programmer Analyst, Senior</li> </ul>	<ul style="list-style-type: none"> <li>• Computer Systems Analyst Programmer, Expert</li> <li>• Applications Programmer-Analyst, Expert</li> <li>• Systems Programmer Analyst, Expert</li> </ul>	<ul style="list-style-type: none"> <li>• Computer Systems Analyst Programmer, Principal</li> <li>• Applications Programmer-Analyst, Principal</li> <li>• Systems Programmer Analyst, Principal</li> </ul>
<b>PGE Job Level</b>	Associate	Career	Senior	Expert	Principal
<b>Job Responsibilities</b>	<ul style="list-style-type: none"> <li>• <u>Work Scope:</u> This is a level learning to apply standard concepts and techniques to routine assignments with limited scope and risk. Follows existing Application Development Frameworks and Coding Standards. Adheres to IT Delivery Methodology. Participates in testing processes. Applies job skills and company policies and procedures to complete variety of assigned work</li> <li>• <u>Problem Solving:</u> Resolves basic and recurring application programming analysis problems</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Work Scope:</u> Assignments involve applying standard analysis and methods to a wider range of assignments or to develop more creative solutions. Individuals may begin to be responsible for scoping work. Follows existing Application Development Frameworks and Coding Standards. Adheres to IT Delivery Methodology. Applies the fundamental concepts of a particular field or technical discipline in addressing the work assigned.</li> <li>• <u>Problem Solving:</u> Resolves application programming analysis problems of moderate scope within procedural guidelines. Seeks assistance from the supervisor or more senior programmers/analysts on unusual or</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Work Scope</u> Understands business requirements and applies them to complex programming and analysis. Follows and collaborates on existing Application Development Frameworks and Coding Standards Solid understanding of IT Delivery Methodology, compliance processes and impact to client projects. Applies professional technical concepts of particular field, procedures, and techniques.</li> <li>• <u>Problem Solving:</u> Leads complex system modifications. Assignments are based on extensive knowledge of concepts, principles or practices in a specific discipline, field or area of expertise, and require seasoned, experienced-based</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Work Scope:</u> Provides broad cross-functional and technological expertise. Assignments are broad and complex, have major associated risks with high visibility, and can be sensitive or widely varied requiring expert judgment in applying and adapting techniques. Collaborates and establishes existing Application Development Frameworks and Coding standard. Support governance of development standards and frameworks. Responsible for larger initiatives such as transitioning to new technologies. Full understanding of combined technical, business, and processes areas. Advanced and full knowledge of business requirements; translates complex business language to</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Work Scope</u> Assignments are broad and highly complex and impact multiple in-flight initiatives, have major associated risks with high visibility, and can be sensitive or widely varied requiring expert judgment in applying and adapting techniques. Application Accountable for governance of Development Frameworks and Coding standards. Collaborates with CTO organization to evaluate new and emerging technologies, standards, and roadmaps. May set industry standards. Applies expert knowledge of subject area and procedures and techniques; ability to use and define technical details of assigned work. Serves as key technical resource and thought leader across several disciplines.</li> </ul>



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	<p>of narrow scope within procedural guidelines. Assignments typically fall within standard, well-tested parameters for resolution.</p> <ul style="list-style-type: none"> <li>• <u>Internal/External Contact:</u> Interacts with clients and project team members; typically includes discussing and reporting progress of fixes</li> <li>• <u>Freedom of Action:</u> Seeks assistance from the supervisor or more experienced programmers/analysts on unusual or more difficult problems</li> </ul>	<p>more difficult problems.</p> <ul style="list-style-type: none"> <li>• <u>Internal/External Contact:</u> Interacts with clients and project team members; typically includes discussing and reporting progress of fixes</li> <li>• <u>Freedom of Action:</u> Seeks advice from the supervisor or more experienced programmers/analysts only on unusual or most difficult problems</li> <li>• The incumbent independently plans work to meet assigned specific objectives; progress is reviewed periodically for technical accuracy and adequacy in process, projects and reviewed upon completion.</li> </ul>	<p>judgment in applying and adapting techniques. Resolves application programming analysis problems of broad scope within procedural guidelines. May seek assistance from the supervisor or more skilled programmers/analysts on unusual or especially complex problems that cross multiple functional/technology areas.</p> <ul style="list-style-type: none"> <li>• <u>Internal/External Contact:</u> May attend client meetings on behalf of team or manager. Collaborates with Project Manager on complex project timelines, identifying critical path, resource assignments, risks, and dependencies representative.</li> <li>• <u>Freedom of Action:</u> Oversee, mentor, and provide guidance to less experienced programmer-analysts</li> <li>• The incumbent independently plans work to meet assigned general objectives; progress is reviewed upon completion and solutions may provide an opportunity for creative/non-standard approaches.</li> </ul>	<p>functional and technical designs. Solid understanding of PG&amp;E Delivery Method and compliance processes and impact to client projects. May recommend and implement process improvements to methodology and compliance processes. Applies significant technical concepts of subject area and procedures and techniques; ability to use and define technical details of assigned work. Serves as key technical resource with areas of specialization.</p> <ul style="list-style-type: none"> <li>• <u>Problem Solving:</u> Resolves application development problems of complex scope through cross-functional team participation.</li> <li>• <u>Internal/External Contact:</u> Regularly represents team and/or manager at client meetings. Collaborates with Project Manager on complex large project timelines, identifying critical path, resource assignments, risks, and dependencies.</li> <li>• <u>Freedom of Action:</u> Regularly called on to apply creativity or new approaches to technical assignments that may be unique. May lead others on technically complex projects or work. Solid understanding of the impact to all application areas of systems/sub-systems modifications and enhancements; understands impact to business; has broad, over-arching understanding of impact to IT. Leads teams of programmer-analysts</li> <li>• The incumbent determines methods and procedures on new assignments with accepted technical guidelines and company policies/procedures.</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Problem Solving:</u> Sets technical and process direction of multi-functional applications development areas. Manages, develops, and coordinates policies and standards.</li> <li>• <u>Internal/External Contact:</u> Ability to influence senior leadership and is politically savvy. Works on long-term projects that drives technical direction</li> <li>• <u>Freedom of Action:</u> Acts as a thought-leader and contributes to the strategic vision of the respective domain of the business technology area. Identifies application development problems as well as desired outcomes before the solution can be developed and actions taken. Regularly called on to apply creativity or new approaches to technical and administrative assignments that may be unique. May lead complex application development projects or tasks with multiple components requiring coordination of various functions and assessment of stakeholder impact.</li> <li>• The incumbent collaborates with others to develop individual goals that will achieve company strategy; will only seek guidance on critical and politically sensitive issues.</li> </ul>
<b>Education Minimum</b>	Minimum: BA/BS in Computer Science,	Minimum: BA/BS in Computer Science, Management	Minimum: BA/BS in Computer Science, Management	Minimum: BA/BS in Computer Science, Management	Minimum: Bachelor's degree required.



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<b>Desired</b>	Management Information Systems, or equivalent experience and/or field of study	Information Systems, or equivalent experience and/or field of study.	Information Systems, or equivalent experience and/or field of study;	Information Systems, or equivalent experience and/or field of study.  Certification and/or post graduate work may be desirable.	MBA preferred.
<b>Experience Minimum</b>  <b>Desired</b>	<b>Minimum:</b> 1 year of programming analysis experience	<b>Minimum:</b> 2 years of programming analysis experience  <b>Desired:</b> Proven knowledge with programming principals to enhance system performance  Multiple programming languages experience	<b>Minimum:</b> 5 years of programming analysis experience  <b>Desired:</b> Proven knowledge with programming principals to enhance system performance  Multiple programming languages experience	<b>Minimum:</b> 7 years of programming analysis experience  Proven knowledge with programming principals to enhance system performance  Multiple programming languages experience  <b>Desired:</b> Leading development teams	<b>Minimum:</b> 10 years application/systems development and analysis experience  Proven track record of successfully performing complex application development over previous five years  Multiple programming languages Experience  Leading development teams
<b>License/Certification Minimum</b>  <b>Desired</b>	<b>Minimum:</b> None  <b>Desired:</b> May require certification applicable to the application being supported.	<b>Minimum:</b> None  <b>Desired:</b> May require certification applicable to the application being supported.	<b>Minimum:</b> None  <b>Desired:</b> May require certification applicable to the application being supported.	<b>Minimum:</b> None  <b>Desired:</b> May require certification applicable to the application being supported.	<b>Minimum:</b> None  <b>Desired:</b> May require certification applicable to the application being supported.
<b>Supervisory Responsibility</b>	None	None	None	None; Provides guidance to less experienced programmer and is team lead on cross-functional projects and initiatives	Mentors less experienced programmers; acts as lead on major projects
<b>Knowledge, Skills, Abilities Minimum</b>  <b>Desired</b>	<b>Minimum:</b> <ul style="list-style-type: none"> <li>Basic understanding of technical components of the job. Basic understanding of software, how it works, and how it often breaks.</li> </ul> <b>Desired:</b> <ul style="list-style-type: none"> <li>Ability to create basic test beds, create test scenarios, create regression tests, document and assess software reliability</li> </ul>	<b>Minimum:</b> <ul style="list-style-type: none"> <li>Working knowledge of the technical components of the job.</li> <li>Solid understanding of software, how it works, and how it often breaks.</li> </ul> <b>Desired:</b> <ul style="list-style-type: none"> <li>Ability to create moderately complex test beds, create test scenarios, create regression tests, document and assess software reliability</li> <li>Ability to enhance the end-user</li> </ul>	<b>Minimum:</b> <ul style="list-style-type: none"> <li>Advanced understanding of software, how it works, and how it often breaks.</li> </ul> <b>Desired:</b> <ul style="list-style-type: none"> <li>Ability to create complex test beds, create test scenarios, create regression tests, document and assess software reliability</li> <li>Ability to enhance the end-user</li> </ul>	<b>Minimum:</b> <ul style="list-style-type: none"> <li>Expert understanding of software, how it works, and how it often breaks.</li> </ul> <b>Desired:</b> <ul style="list-style-type: none"> <li>Ability to create complex test beds, creates test scenarios, create regression tests, document and assess software reliability.</li> <li>Ability to enhance the end-user</li> </ul>	<b>Minimum:</b> <ul style="list-style-type: none"> <li>In depth understanding of software, how it works, and how it often breaks.</li> <li>Ability to create the most complex test beds, create test scenarios, create regression tests, document and assess software reliability</li> <li>Highly developed presentation skills; demonstrated comfort level for presentations to senior leadership level meetings</li> <li>Strong mentoring skills.</li> </ul>



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		experience	experience	experience	<p>Desired:</p> <ul style="list-style-type: none"><li>• Diverse business acumen; Strong technical skills; System wide vision; superior risk management skills; formal presentations.</li><li>• Skilled in evaluating IT processes, implementing improvements and achieving cost savings.</li><li>• Ability to enhance the end-user experience</li><li>• Excellent communication (oral and written) and collaboration skills</li></ul>
Supplemental					



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Technical Competencies	Technical Competency Descriptions	Proficiency Level*				
		Associate	Career	Senior	Expert	Principal
Coding	Translates technical design specifications into application code instructions; develops and maintains programming code.	Proficient	Proficient	Advanced	Master	Master
Consulting Skills	Uses expertise to counsel or guide individuals with regard to problems to be resolved on legal, financial, scientific, technical, or other professional principles.	Novice	Proficient	Advanced	Master	Master
Project Risk Management	Identifies risks associated with project development and respond to risk changes over the course of a project. Understands impact of changes to scope and can conduct variance analysis against cost, time, effort etc.	Novice	Proficient	Advanced	Master	Master
Systems Analysis	Analyzes business and user needs and translates them into proper system requirement specifications.	Proficient	Proficient	Advanced	Master	Master
Testing and Evaluation	Applies principles, methods, and tools for analyzing and developing systems test and evaluation procedures and technical characteristics of IT systems, including identifying critical operational issues.	Proficient	Proficient	Advanced	Master	Master
Project Documentation and Reporting	Maintains project files at a level of detail necessary to pass an audit; for example, maintains SAP and PMD with current cost and schedule information.	Novice	Proficient	Advanced	Master	Master
Trouble-Shooting	Determines causes of operating errors and decides what to do about it.	Novice	Proficient	Advanced	Master	Master
Project/Program Management	Understands the principles, theories, practices, and techniques involved in planning, managing, and implementing projects and programs.	Novice	Novice	Proficient	Advanced	Advanced
System Monitoring and Support	Maintain system availability and performance to meet service level targets. Ensure system outages or problems are analyzed for cause, trends, and duration.	Proficient	Proficient	Advanced	Master	Master
Advocacy and Persuasion	Effectively influences others to achieve understanding, acceptance, and commitment to act in support of ideas, programs or causes.	Novice	Novice	Proficient	Advanced	Master

### \*Proficiency Levels

**Novice:** Demonstrates general understanding of knowledge, principles, and/or applications of the area; is able to complete routine assigned tasks with minimal guidance or supervision.

**Proficient:** Demonstrates solid understanding of knowledge, principles, and/or applications of the area; is able to complete moderately complex projects, with minimal guidance and supervision.

**Advanced:** Demonstrates advanced understanding of knowledge, principles, and/or applications of the area; is able to understand complex ideas and make recommendations in this area. May guide efforts of others on the team.

**Master:** Demonstrates mastery of knowledge, principles, and/or applications of the area; is able to lead and direct others in this area.