

***PDS TECHNICAL SERVICES***

**GENERAL SERVICES ADMINISTRATION**

**FEDERAL SUPPLY SCHEDULES**

**CONTRACT NO. GS-00F-0044L**

**INFORMATION TECHNOLOGY SERVICES #70**

**PROFESSIONAL ENGINEERING SERVICES #871**

**May 2006**

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## ABOUT PDS TECHNICAL SERVICES

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### HISTORY

PDS was founded in 1977 in the Pacific Northwest to support the Nuclear Power Industry. In 1984, PDS relocated to Irving, Texas to better serve its large national base of clients. Originally, known as Piping Design Services, the name was changed to PDS to include in its expansion the Aerospace, Defense industries and other business entities. Through acquisition and growth, PDS now has over 19 offices Nationwide serving numerous industries. Over 60% of our business is Aerospace, Defense, and Government services.

PDS sales is in excess of \$200,000,000 providing over 3,500 contract employees in 42 states to over 500 clients.

Orders and requests for proposals may be submitted through the *GSA Advantage!* website at <http://www.gsaadvantage.gov> or *GSA Advantage! E-Buy* website at <https://www.ebuy.gsa.gov>. For more information on Federal Supply Service Schedules visit <http://fss.gsa.gov/schedules>.

PDS Technical Services is a large business concern. Additional information about our company can be found at <http://www.pdstech.com>.

PDS Technical Services divisions provide contract staffing solutions to a wide variety of clients in diverse industries:

Aerospace	Environmental	Petrochemical
Aircraft	Federal Government	Pharmaceutical
Automotive	Financial	Research, Testing & Development
Industrial	Information Technology	Semiconductor
Biotech	Manufacturing	State Government
Civil	Mechanical	Telecommunications
Electronics	Nuclear	Transportation

Client Diversity, industry coverage, and employee caliber translate into high potential for contract solutions throughout the nation and around the world.

## DIVISIONS (Engineering, IT, Aircraft Services, Managed Services)

PDS/MD Technical Services specialized divisions provide flexible, high-value professional staffing solutions and services to a broad spectrum of industries, projects, and programs.

**Engineering /Technical Services Division:** The Technical Services Division provides flexible solutions to meet project requirements. Whether one technical expert is needed to complement core staff, or a complete team is needed to tackle an entire project, PDS Technical Services will efficiently meet the challenge. Technical professionals include architects, buyers, CAD operators, contract administrators, designers, drafters, engineers, illustrators, machinists, project managers, technical writers, technicians, and tool designers, etc. PDS Technical Services provides high quality on-demand support services for aircraft and back-shop maintenance requirements, testing laboratories, science centers and research laboratories.

**Information Technology Division:** The Information Technology Division provides computer software solutions to the commercial, Federal and State Governments throughout the United States. Solutions include Network Systems, Data Base Development, Applications, Web Development, Help Desk Support, Programming, Systems Analysis, Business Systems, etc.

**Aircraft Services Division:** The Aircraft Services Division provides professional engineering, logistics, technical, test, and aircraft modification services to the Aircraft Industry. Typical projects include the following:

- Aircraft Systems Analysis
- Systems Development
- Design and Drafting
- Manual and Specifications
- Development
- Systems and Equipment Testing
- Aircraft Repair, Modification, and Retrofitting
- Training Development and Instruction
- Equipment Installation
- Quality Assurance Inspection
- Maintenance Management

**Managed Services Division:** The Managed Services Division provides a broad base of services to meet the management services needs of our clients. Each managed service is "tailored" to fulfill the requirements of each individual customer. Each project includes the project management, facilities, equipment, process (developed by Aviant or customer provided), operations, training, etc. Typical managed projects include the following:

- Help Desk Services
- Human Resources
- Facility Operations
- GOCO/A-76
- Data Center Operations
- Documentation
- Distribution Centers
- Training
- Computer/Data Processing Centers
- Design and Drafting
- Laboratory Operations
- Testing and Analysis Centers

## PROJECT HISTORY

PDS history has been in Aircraft Maintenance, Engineering, Design, and Technical Services; Facilities, Petro-Chemical, Energy Power, Engineering, and Technical Services; and Federal and State services in all fields.

In review of this combined "heritage" of experience, we have enclosed a sampling of PDS' contract history for your consideration.

*The Boeing Company*

*PDS TECHNICAL SERVICES*

P.O. Box 516  
St. Louis, MO 63166

- Project Description - Provided support personnel on a large variety of aircraft systems including electronic, flight control, electrical, computer, propulsion, fuel, structures, mechanisms, etc. Aircraft equipment supported by PDS Technical Services include: F-18, F-15, F-5, and C-17. Services were performed through conception, engineering, and production of Boeing equipment and systems. Skill sets include: maintenance management, system design, structural design, strength engineer, manufacturing engineer/operations, industrial engineer, electronic engineer, M&P engineer, test engineer, software engineer, engineering analyst, logistics engineer, maintenance engineer, liaison engineer, quality engineer, reliability engineer, tool designer, technician, etc.
- Contract values - \$4,000,000 per year average during the 13-year period (total \$52,000,000)
- Project duration - Continuous from 1987 to present
- Point of Contact - Karen Payne, Boeing Procurement Agent (314) 233-0605

*General Dynamics*  
8220 East Roosevelt Street  
Scottsdale, AZ 85257

- Project Description - Provides Engineering and Technical Support to General Dynamics in various fields including, communication systems; information security systems; and related integrated systems. Technology includes secure communication through area networks into intrusted Global interconnected networks. Also provided are advanced integrated communications solutions ranging from the management of complete space communication systems integration to the design, development and production of products and systems for both domestic and international, government and commercial applications.

PDS currently services General Dynamics with approximately thirty (30) Technical and Engineering Solution Providers at Scottsdale, AZ and Columbia, MD locations. Additional projects are expected in Orlando, FL and Huntsville, AL.

- Contract Values - \$2,500,000
- Project Duration - 12/2001 to present
- Point of Contact - Paulette Dorris, Human Resources (480) 441-1364

*Gulfstream Aerospace*  
4150 Donald Douglas Drive  
Long Beach, CA 90808

- Project Description - Provided in excess of 100 maintenance engineers, technicians, and aircraft personnel on a wide variety of aircraft.
- Contract Values - \$2,400,000
- Project Duration - 1995 to Present
- Point of Contact - Jim Littrell, Manager (310) 331-4393 (Currently employed at Northrop Grumman)

*The Boeing Company*  
5000 E. McDowell Road  
Mesa, AZ 85215

- Project Description - Provided engineering, planning, information technology, technicians and aircraft services for the Apache Helicopter
- Contract Values - \$19,000,000
- Project Duration - 1989 to present
- Point of Contact - Wayne Parham, Purchasing (480) 891-2707

### **SAMPLING OF FEDERAL GOVERNMENT PROJECT SOLUTIONS CONTRACTS**

- GSA - IT-Solutions #9T2Z1-5JAA-00 - Development and maintenance of materials in support of Technology based training and part-task trainers - Detachment 1 - Air Force Combat Command Training Support Squadron (DET-1-ACC-TRSS) - Luke Air Force Base, AZ
- GSA - IT-Solutions #5TS5702C008-00 - Infrastructure and Technical Architecture Support - Air Mobility Command - Scott Air Force Base, IL
- GSA – IT-Solutions #5TS5702C204-00 – C-17 PIO/Acquisition Logistics Management Support – Air Mobility Command – Scott Air Force Base, IL
- GSA - IT Solutions #5TS5702C228 - HQ AMC/XPR Foreign Military Sales (FMS) Support

### **SAMPLING OF OTHER CURRENT FEDERAL, STATE, AND COUNTY SERVICES**

- U.S. Justice Department – Forensic Fire Lab Operation and Technician Support
- USPHS Indian Health Service – Procedures and Processes Development
- National Institute of Health – Facility Engineering Design, Drafting, and Specification Development for VA Hospital modifications on a national basis.
- U.S. Treasury, Fed Source – Seattle, WA and San Antonio, TX – Provided the services of Technicians, Aircraft Management Support Personnel, Aviation Technical Specialists, and Presentation Development personnel.
- State of Arizona – Currently supports the State in the areas of Web Development, Cobol Programming, and CAD design
- Arizona Municipalities – Currently supports various departments of over 10 cities including the City of Scottsdale. In the last 10 years, the number of PDS employees at the City of Scottsdale has varied from 40 to over 150 depending on need. Support has been in the areas of Civil Engineering, Survey, GIS, Public Works, Building Inspection Services, Computer Programming, Accounting, CAD Drafting, and more...

- State of Texas – Have been providing services to the State of Texas for the past ten (10) years. Service solutions involved projects in Information Technology, Engineering, Design, Management Systems, Administrative, Light Industrial, etc. Approximately 10 – 15 different departments have utilized our services.

## **SAMPLING OF STATE GOVERNMENT PROJECT SOLUTIONS**

- LIS: Project Management, Bill Tracking Intranet, Microsoft NT Design/Support
- Public Health: Immunization Tracking – Project Management, DB2, Visual Age
- Public Health: Labs – PKU tracking, Blood Lead Screen, Project Management, DB2
- DHS – (Super Agency) Cornerstone/WIC, Statewide Women, Infant, Children rewrite
- Public Aid – Medicaid, Y2k Project Lead for mainframe programs
- Public Aid – Medicaid, Y2K LAN/WAN
- State Board of Education, Procurement tracking, Visual Basic, SQL
- CMS, Bureau of Insurance, Procurement tracking, Access
- CMS, Training Center, LAN/WAN support, training center setup
- CMS, Networking Services, Project Management, Rollout of Governor’s LAN-WAN NetWare 4.xDesign/implementation, Cabletron, Sniffer, Cisco Routers, Seprum, Win95 upgrade, Ghost, PC installers
- CMS, DataCenter, Y2K project through 1999
- Public Aid, WAN support, Cisco Switching and Routing (Statewide rollout)
- Public Aid, LAN support, NewWare NDS design and implementation
- Illinois General Assembly & Legislative—Information System Internet/Intranet Project
- Illinois Department of Public Health – Center for Disease—Database development for the TOTS Program (Tracking Our Toddlers’ Shots)
- Illinois Department of Public Health—Re-engineered the Department of Public Health Newborn Screening System. This was a mainframe “legacy” system developed in Nomad and composed of elements from the CHLPP (screening).

## **SECURITY INFORMATION**

The following facilities have been issued a Top Secret Clearance:

<u>Location</u>	<u>Facility Code</u>
• St. Louis, Missouri	O22N9
• Dallas, Texas	5V247

## **CENTRAL CONTRACTOR REGISTRATION (CCR)**

PDS Technical Services (DUNS #09-903-5891) has been approved by the Defense Logistics Agency, Battle Creek, Michigan.

**CONTRACT INFORMATION (Contract No. GS-00F-0044L)**

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**Applicable NAICS and SIC Codes**

**Information Technology Services**

<b>NAICS Code</b>	<b>SIC Code</b>	<b>Description</b>
541511	7371	Custom Computer Programming Services
541512	7373, 7379	Computer Systems Design Services
541513	7376	Computer Facilities Management Services
541519	7379	Other Computer Related Services

See the INFORMATION TECHNOLOGY SERVICES section for complete descriptions of the services available.

**Professional Engineering Services**

<b>NAICS Code</b>	<b>SIC Code</b>	<b>Description</b>
54133	8711	Engineering Services
54134	7389	Drafting Services
54142	7389	Industrial Design
54143	7336	Graphic Design Services
54149	7389	Other Specialized Design Services
541611	8742	Administrative Management and General Management Consulting Services
54169	8748, 8999	Other Scientific and Technical Consulting Services
54171	3721, 3724, 3728, 3761, 3764, 3769, 8731, 8733	Research and Development in the Physical, Engineering, and Life Sciences
54172	8732	Research and Development in the Social Sciences and Humanities

See the PROFESSIONAL ENGINEERING SERVICES section for complete descriptions of the services available.

**Contract Period**

**Corporate Contract No. GS-00F-0044L  
1 July 01 to 30 June 06 plus one five year option**

## Ordering Addresses

PDS Technical Services has 19 offices to service the contract. These offices are as follows:

### CORPORATE HEADQUARTERS

1320 Greenway Drive, Suite 550  
Irving, TX 75038-2542  
Phone: (800) 270-4737, Fax: (972) 753-6515

### FEDERAL GOVERNMENT CONTRACTS SERVICE OFFICE

5100 W. Kennedy Blvd, Suite 280  
Tampa, FL 33609  
Kyle Laulo – Government Services  
Phone: (866) 517-9514, Fax: (813) 426-9929  
e-mail: [klaulo@pdstech.com](mailto:klaulo@pdstech.com)

### PDS TECHNICAL SERVICES SERVICE LOCATIONS

#### ANCHORAGE

3330 Arctic Blvd.  
Suite 201  
Anchorage, AK 99503  
907-562-1633 - phone  
907-562-5875 - fax

#### ATLANTA

1925 Vaughn Rd. N.W.  
Suite 130  
Kennesaw, GA 30144  
770-218-8467 - phone  
770-218-8620 – fax

#### AUSTIN

3420 Executive Center Dr.  
Suite 310  
Austin, TX 78731  
512-343-0303 – phone  
512-231-9250 – fax

#### DALLAS - Technical

1320 Greenway Drive  
Suite 825  
Irving, TX 75038  
972-564-8822 – phone  
972-465-8855 – fax

#### DALLAS TECHNOLOGY GRP

12900 Preston Rd. @LBJ  
Suite 422, LB99  
Dallas TX 75230  
972-503-7100 – phone  
972-503-0068 – fax

#### GREEN BAY

110 Packerland Drive  
Suite A  
Green Bay, WI 54303  
920-499-9943 - phone  
920-499-9067 – fax

#### HARTFORD

5 Winthrop Rd.  
Suite 5  
Hebron, CT 06248  
860-432-0216 – phone  
860-371-3962 – fax

#### HOUSTON

12337 Jones Road  
Suite 422  
Houston, TX 77070  
281-469-1941 – phone  
281-469-6221 – fax

#### COSTA MESA

151 Kalmus Dr.  
Suite 825  
Costa Mesa, CA 92626  
714-540-7900 – phone  
714-540-8092 – fax

#### NASHVILLE

104 Cude Lane  
Suite 122  
Madison, TN 37115  
615-865-8004 – phone  
615-865-2792 – fax

#### PHOENIX

1620 W. Fountainhead Pkwy.  
Suite 140  
Tempe, AZ 85282  
480-929-9922 – phone  
480-929-9770 – fax

#### SEATTLE

12101 Tukwilla International Blvd.  
Suite 420  
Seattle, WA 98168  
206-763-2840 – phone  
206-763-3283 – fax

SEATTLE – Offload Engineering  
12101 Tukwilla International Blvd.  
Suite 420  
Seattle, WA 98168  
(206) 767-2773 – phone  
(206) 763-4121 – fax

SPRINGFIELD  
1630 South State Street  
Suite 101  
Springfield, IL 62704  
217-528-7700 – phone  
217-528-7785 – fax

ST. LOUIS  
13729 Riverport Drive  
Maryland Heights, MO 63043  
314-739-5353 – phone  
314-739-5454 – fax

WASHINGTON, D.C.  
12801 World Gate Drive  
Suite 500  
Herndon Drive, VA 20170  
703-506-8399 – phone  
703-506-8388 - fax

WICHITA  
11828 West Central  
Suite 112  
Wichita, KS 67212  
316-729-1800 – phone  
316-729-1857 - fax

TAMPA  
5100 W. Kennedy Blvd  
Suite 280  
Tampa, FL 33609  
813-426-9917 – phone  
813-426-9929 – fax

### **Contract Administrator**

Mr. Kyle Laulo  
PDS Technical Services  
5100 West Kennedy Blvd  
Suite 280  
Tampa, FL 33609  
Tel. 813-426-9917 or 866-517-9514 (toll free)  
Fax: 813-426-9929  
e-mail: [klaulo@pdstech.com](mailto:klaulo@pdstech.com)

### **Ordering Procedures**

Orders and requests for proposals may be submitted through the *GSA Advantage!* website at <http://www.gsadvantage.gov> or *GSA Advantage! E-Buy* website at <https://www.ebuy.gsa.gov>. For more information on Federal Supply Service Schedules visit <http://fss.gsa.gov/schedules>.

Call the contract administrator named above for any questions or referrals, or contact any branch directly.

### **Contract Terms and Conditions**

Maximum/Minimum Order Provision: No limit. To be shown on each order issued under any contract resulting from this award.

Geographic Coverage: United States of America

Foreign Items Offered: N/A, none.

F.O.B Point: Destination

Points of Production: N/A, this award is for services. See ordering addresses above.

Discounts: There are no discounts from list prices and no volume discounts on this contract. Prices shown herein are net (discount deducted), and already include discounts to the government.

Delivery Terms: As soon as possible. There are no expedited delivery terms under this contract. However, we will attempt to fill urgent, overnight, and two-day requests as soon as possible.

Payment Terms: To be shown on each order issued under any contract resulting from this award.

Payment Addresses:

For Electronic Funds Transfer (EFT) Payments:

JP Morgan Chase Bank  
Routing (ABA) Number: 111000614  
Account Number: 645588351

For Other Payments:

PDS Technical Services –  
PO BOX 973503  
Dallas, TX 75397-3503

For Payment Questions:

Accounts Receivable POC: Janine Bledsoe  
Tel. 972-550-1212  
e-mail: jbledsoe@pdstech.com

Warranty Provisions: Standard

For Services Exempt from the Service Contract Act, As Amended: All primary categories offered are exempt from the Service Contract Act of 1965, as amended. Any categories that fall under the Service Contract Act of 1965, as amended, must be incidental to and used solely to support the product and/or professional services, and cannot be purchased separately. Exempt service employees receive the same compensation and fringe benefits plan as equivalent employees servicing commercial customers.

Travel: Any Contractor travel required in the performance of services must comply with the Federal Travel Regulation or Joint Travel Regulations, as applicable, in effect on the date(s) the travel is performed. Established Federal Government per diem rates will apply to all Contractor travel. Contractors cannot use GSA city pair contracts. The Contractor will not add the 0.75% Industrial Funding Fee onto the travel costs.

Notice to Small Businesses: PDS Technical Services encourages the participation of all small businesses that can assist with the types of services included in this contract. If your company is considered a small, small disadvantaged, woman-owned small or HUBZone small business and you would like to be considered as a subcontracting partner, please contact the person named above in the Contract Administrator section.

**INFORMATION TECHNOLOGY SERVICES  
CONTRACT NO. GS-00F-0044L**

**PRICING**

**SAMPLING OF PROJECTS**

**JOB DESCRIPTIONS**

**PRICING - INFORMATION TECHNOLOGY SERVICES - Schedule 70**

Pricing for Information Technology Services SIN Numbers: S C D301, 302, 306, 307, 308, 310, 311, 313, 316, 317, and 399

CONTRACT NO. GS-00F-0044L

<b>INFORMATION TECHNOLOGY SERVICES - Schedule 70</b>		
<b>PRICING EFFECTIVE JANUARY 1, 2004</b>		
<b>(After Reduction of IFF fee to 0.75%)</b>		
<b>PERIOD</b>	<b>LABOR CATEGORY</b>	<b>New Bill Rates to the Government after IFF Reduction</b>
BASE PERIOD	PROJECT MANAGER	\$ 86.79
	CONSULTANT 1	\$ 100.99
	CONSULTANT 2	\$ 80.79
	SYSTEMS ANALYST	\$ 70.74
	PROGRAMMER ANALYST	\$ 67.98
	PROGRAMMER	\$ 56.94
	APPLICATION ARCHITECT	\$ 87.29
	BUSINESS SYSTEM ANALYST	\$ 72.49
	DEVELOPER	\$ 76.26
	SYS. PROG/ ADMINISTRATOR	\$ 67.47
	HELP DESK - TIER 1	\$ 34.86
	HELP DESK - TIER 2	\$ 41.63
	HELP DESK - TIER 3	\$ 50.67
	TECHNICAL WRITER	\$ 57.94
	DATABASE MANAGER	\$ 96.07
	DATABASE ADMINISTRATOR	\$ 94.10
	DATABASE ANALYST	\$ 75.75
	DATA MODELER	\$ 80.77
	DATA WAREHOUSE	\$ 89.29
	TELECOM SPECIALIST	\$ 69.48
	Q/A SPECIALIST	\$ 63.96
	SOFTWARE ENGINEER	\$ 84.53
	SYSTEMS ARCHITECT	\$ 101.09
	NETWORK ARCHITECT	\$ 93.99
	NETWORK ENGINEER	\$ 80.02
	SYSTEM/APP DEVELOPER	\$ 76.50
	NETWORK ADMINISTRATOR	\$ 62.71
	WEB DEVELOPER	\$ 71.48
ELEC. DATA WAREHOUSE	\$ 72.49	

**SAMPLING OF INFORMATION TECHNOLOGY PROJECTS**

- Systems Analysis and Development
- Programming
- Network Development
- Network Administration

- Web Development
- Internet / Intranet Systems
- Applications Development
- Modeling
- Audit / Quality Assurance
- Mainframe Conversion
- Telecommunication
- Data Development
- Data Conversion
- Training
- Help Desk, Server, or Storage Support
- Systems and Procedure Writing
- Information Services Support
- Data Center Management and Support

## **JOB DESCRIPTIONS - INFORMATION TECHNOLOGY**

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### **Project Manager**

Implements and manages a team of software specialists to complete a specific project objective. Projects include software development, data development/conversion, systems applications, web development, documentation, programming, network development, etc. Requires a Bachelor's degree in a related area and a minimum of 10 years of experience. Relies on experience and judgment to plan and accomplish goals.

### **Consultant 1**

Provides a high level of Information Technology skills to complex and/or specialized computer systems. IT areas can include software development, data conversion, programming, systems applications, network development, etc. Requires a bachelor's degree or higher in related fields, 15+ years of experience, and several years in an IT specialty.

### **Consultant 2**

Has similar background and education as Consultant 1, with 10+ years of experience and several years in an IT specialty.

### **Systems Analyst**

Reviews, analyzes, and evaluates systems and user needs. Formulates systems to parallel overall strategies. Writes detailed description of user needs, program functions, and steps required to develop or modify computer programs. Normally requires a Bachelor's degree in a related area with at least 5 years of experience in the field or in a related area. Familiar with relational database concepts, and client-server concepts. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. May report directly to a project lead or manager. A wide degree of creativity and latitude is expected.

### **Programmer Analyst**

Reviews, analyzes, and modifies programming systems including encoding, testing, debugging and installing for a large-scale mainframe computer system. Maintains and develops on-line and batch application programs. Develops and implements a disaster recovery plan. Normally requires a Bachelor's degree in a related area and at least 5 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. May report directly to a project lead or manager. A wide degree of creativity and latitude is expected.

### **Programmer**

Reviews, analyzes, and modifies programming systems including encoding, testing, debugging and documenting programs. May require a Bachelor's degree. Requires at least 5 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. May report directly to a project lead or manager. A wide degree of creativity and latitude is expected.

### **Application Architect**

Reviews, analyzes, and modifies programming systems including encoding, testing, debugging and installing to support an organization's application systems. Consults with users to identify current operating procedures and to clarify program objectives. May be expected to write documentation to describe program development, logic, coding, and corrections. Writes manuals for users to describe installation and operating procedures. Requires a Bachelor's degree in a related area and 5-8 years of experience in the field or in a related area. Must have a working knowledge of relational databases and client-server concepts. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. Typically reports to a project leader or manager. A wide degree of creativity and latitude is expected.

### **Business System Analyst**

Reviews, analyzes, and evaluates business systems and user needs. Formulates systems to parallel overall business strategies. Writes detailed description of user needs, program functions, and steps required to develop or modify computer programs. May require a Bachelor's degree in a related area with at least 5 years of experience in the field or in a related area. Familiar with relational database concepts, and client-server concepts. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. May report directly to a project lead or manager. A wide degree of creativity and latitude is expected.

### **Developer**

Identifies, negotiates and manages strategic relationships with content and technological partners. Manages the marketing, sales and product development teams to implement business development initiatives. Require a Bachelor's degree in business, finance or marketing with a minimum of 5 years of experience in the field or a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. Normally reports to a manager. A wide degree of creativity and latitude is expected.

### **Systems Programmer/Administrator**

Installs new software releases, system upgrades, evaluates and installs patches and resolves software related problems. Performs system backups and recovery. Performs system programming. Maintains data files and monitors system configuration to ensure data integrity. May require a Bachelor's degree in a related area and 5-8 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision; typically reports to a project leader or manager. A certain degree of creativity and latitude is required.

### **Help Desk - Tier 1**

Provides support to end users on a variety of issues. Identifies, researches, and resolves technical problems. Responds to telephone calls, email and personnel requests for technical support. Tracks and monitors the problem to insure a timely resolution. May require an Associate's degree in a related area and 0-2 years of experience in the field or in a related area. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Little creativity is required. Typically reports to a supervisor or manager.

### **Help Desk - Tier 2**

Provides support to end users on a variety of issues. Identifies, researches, and resolves technical problems. Responds to telephone calls, email and personnel requests for technical support. Tracks and monitors the problem to insure a timely resolution. May require an Associate's degree in a related area and 3-5 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. A wide degree of creativity and latitude is expected. Relies on established guidelines to perform the functions of the job. Works under immediate supervision. Moderate creativity is required. Typically reports to a manager.

### **Help Desk - Tier 3**

Provides support to end users on a variety of issues. Identifies, researches, and resolves technical problems. Responds to telephone calls, email and personnel requests for technical support. Tracks and monitors the problem to insure a timely resolution. May require an Associate's degree in a related area and 5-10 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. Typically reports to a supervisor or manager. A wide degree of creativity and latitude is expected.

### **Technical Writer**

Prepares and/or maintains documentation pertaining to programming, systems operation and user documentation. Translates business specifications into user documentation. Plans, writes, and maintains systems and user support documentation efforts, including online help screen. May require an Associate's degree in a related area and 3-5 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. Typically reports to a manager. A wide degree of creativity and latitude is expected.

### **Database Manager**

Provides management and leadership in a database systems and services environment. Responsibilities include a broad base of network systems including operating systems, software installation, hardware installation, and user support. Usually supervises a group of software specialists and has a minimum of 10 years of experience, 3 of which was a manager/ supervisor capacity.

### **Database Administrator**

Provides technical administration in various database systems. Responsibilities include system administration of database tasks encompassing operating systems, software installation, performance monitoring, hardware and software maintenance, and problem diagnosis and user support. Normally, the database administrator has a degree in computer science, mathematics, or engineering, with a minimum of 8 years of experience

### **Database Analyst**

Reviews, evaluates, designs, implements and maintains company database[s]. Identifies data sources, constructs data decomposition diagrams, provides data flow diagrams and documents the process. Writes codes for database access, modifications, and constructions including stored procedures. May require a Bachelor's degree in a related area and 5-7 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision; typically reports to a project leader or manager. A certain degree of creativity and latitude is required.

### **Data Modeler**

Designs and builds relational databases. Develops strategies for data acquisitions, archive recovery, and implementation of a database. Cleans and maintains the database by removing and deleting old data. May require an Associate's degree in a related area and at least 5 years of experience in the field or in a related area. Must be able to design, develop and manipulate Oracle databases, data warehouses and multidimensional databases. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. Typically reports to a project leader or manager. A wide degree of creativity and latitude is expected.

### **Data Warehouse Analyst**

Designs, implements and supports data warehousing. Implements business rules via stored procedures, middleware, or other technologies. Defines user interfaces and functional specifications. Requires a Bachelor's degree with at least 3 years of experience in data warehousing design. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Typically reports to a manager. A certain degree of creativity and latitude is required.

### **Telecom Specialist**

Reviews, analyzes, evaluates and maintains an organization's telecommunications system. Designs, develops, and tests of telecommunications software solutions. Provides customer training of the telecommunications features and functionality. May require an Associate's degree or its equivalent and 7-10 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. Typically reports to a manager. A wide degree of creativity and latitude is expected.

### **Q/A Specialist**

Develops, publishes, and implements test plans. Writes and maintains test automation. Develops quality assurance standards. Defines and tracks quality assurance metrics such as defect densities and open defect counts. Requires a Bachelor's degree and at least 5 years of experience coding in C, C++, Java. Must have a working knowledge of quality assurance methodologies. Familiar with NT, UNIX and/or Solaris environments. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. May lead and direct the work of others. Works under general supervision; typically reports to a manager. A certain degree of creativity and latitude is required.

### **Software Engineer**

Designs, modifies, develops, writes and implements software programming applications. Supports and/or installs software applications. Participates in the testing process through test review and analysis, test witnessing and certification of software. Requires a Bachelor's degree in a related area and at least 5 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. May report directly to a project lead or manager. A wide degree of creativity and latitude is expected.

### **Systems Architect**

Reviews, analyzes, and evaluates business systems and user needs. Formulates systems to meet these specific needs, applications, etc. Writes detailed description of user needs, program functions, and steps required to develop or modify computer programs. May require a Bachelor's degree in a related area with at least 5-8 years of experience in the field or in a related area. Familiar with relational database concepts, and client-server concepts. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. May report directly to a project lead or manager. A wide degree of creativity and latitude is expected.

### **Network Architect**

Develops, tests, and implements networks to meet specific end user needs. Design and develops server system and supporting software to meet network requirements. May require a Bachelor's degree in a related field and 5-8 years of experience in a related field. Relies on medium experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision and typically reports to a project leader or manager. A certain degree of creativity and latitude is required.

### **Network Engineer**

Develops, tests, and implements networks to meet specific end user needs. Design and develops server system and supporting software to meet network requirements. Requires a Bachelor's degree in a related field and a minimum of 5 years of experience in a related field. Relies on medium experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision and typically reports to a project leader or manager. A high degree of creativity and latitude is required.

### **System/Application Developer**

Reviews, analyzes, and develops systems and applications to meet end users needs and requirements. Writes detailed descriptions, program functions to facilitate computer program, etc. to fulfill these requirements. Must be familiar with computer systems and their applications. May require a Bachelor's degree in a related field and a minimum of 5 years of experience in the field or related field. Normally reports to a project lead or manager. A wide degree of creativity and latitude is expected.

### **Network Administrator**

Installs, configures and maintains organization's network. Builds networks and maintains external and internal web presence, administers the networks. Performs system backups on its internal and external web network servers. Designs and supports server system(s) and supporting software. May require a Bachelor's degree in a related area and 5-8 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision; typically reports to a project leader or manager. A certain degree of creativity and latitude is required.

### **Web Developer**

Consults with clients to design, build and manage web sites. Develops installation programs for websites. May require a Bachelor's degree in a related area and 3-5 years of experience in the field or in a related area. Has knowledge of a variety of concepts, practices, and procedures within a particular field (i.e., SQL, C++, HTML, CGI and JavaScript). Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. Typically reports to a project leader or manager. A wide degree of creativity and latitude is expected.

### **Electronic Data Warehouse Specialist**

Designs, enters, audits and maintains data warehouse. May require an Associate's degree in a related area and 3-5 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May lead and direct the work of others. Typically reports to a manager. A wide degree of creativity and latitude is expected.

**PROFESSIONAL ENGINEERING SERVICES  
CONTRACT NO. GS-00F-0044L**

**PRICING**

**SCOPE OF WORK**

**JOB DESCRIPTIONS**

## PRICING - PROFESSIONAL ENGINEERING SERVICES - Schedule 871

Pricing for Professional Engineering Services, SIN Number CR425

CONTRACT NO. GS-00F-0044L

<b>PROFESSIONAL ENGINEERING SERVICES - Schedule 871</b>		
<b>PRICING EFFECTIVE JANUARY 1, 2004</b>		
<b>(After IFF Reduction to 0.75%)</b>		
<b>PERIOD</b>	<b>LABOR CATEGORY</b>	<b>New Bill Rates to the Government after IFF Reduction</b>
<b>BASE PERIOD</b>	Project Manager 1	\$ 67.32
	Project Manager 2	\$ 47.13
	Consultant 1	\$ 100.99
	Consultant 2	\$ 80.79
	Technical Specialist 1	\$ 64.63
	Technical Specialist 2	\$ 56.55
	Civil Engineer 1	\$ 53.86
	Civil Engineer 2	\$ 47.13
	Civil Engineer 3	\$ 40.39
	Chemical Engineer 1	\$ 53.86
	Chemical Engineer 2	\$ 47.13
	Chemical Engineer 3	\$ 40.39
	Mechanical Engineer 1	\$ 53.86
	Mechanical Engineer 2	\$ 47.13
	Mechanical Engineer 3	\$ 40.39
	Electrical Engineer 1	\$ 53.86
	Electrical Engineer 2	\$ 47.13
	Electrical Engineer 3	\$ 40.39
	Designers 1	\$ 51.17
	Designers 2	\$ 45.78
	Designers 3	\$ 40.39
	Documentation Specialists 1	\$ 49.82
	Documentation Specialists 2	\$ 41.74
	Engineering Software Specialists 1	\$ 64.63
	Engineering Software Specialists 2	\$ 56.55
	Logistics Engineer 1	\$ 53.86
	Logistics Engineer 2	\$ 44.43
	Trainers 1	\$ 40.39
	Trainers 2	\$ 33.66
	Technicians 1	\$ 33.66
	Technicians 2	\$ 30.97
	Technicians 3	\$ 24.24

## **IN-HOUSE ENGINEERING AND DESIGN SERVICES CAPABILITIES**

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PDS Engineering, the outsourcing division of PDS Technical Services, provides engineering and design services.

**Services include, but are not limited to:**

- Aircraft structures and mechanical systems engineering
- Aerospace tooling and handling equipment design
- Facilities modifications and improvements
- Electrical, mechanical, structural, and piping design and drafting
- Professional Engineer and FAA DER services

**Computer capabilities include:**

- Operating Systems: IBM AIX RS-6000; MS Windows 95, 98, & XP
- CAD/CAM: CATIA V4, Version 5, UG V14, UG NX and AutoCad
- NC Programming: CATIA, Unigraphics, NCL, VERICUT and Intercim G-Post
- FEM and structural analysis: NASTRAN, COSMOS, STAAD, and Version 5 ELFINI
- Internet: T-1 Frame Relay and FTP site

**Company strengths:**

A full outsourcing-service provider with a highly experienced core group of engineers and the support of one of the largest suppliers of temporary engineering personnel in the country. PDS utilizes its own proprietary project-tracking computer application (PTS) to identify and minimize design completion hurdles and manage them through to successful on-time delivery. The "PTS" provides real-time updates of all projects for completion status and identifies specific constraints requiring attention to both PDS project leads and its customer for immediate recognition and remedial action. PDS can provide services for programs of any magnitude, in support of in-plant architectural, mechanical, electrical, and civil modifications.

**Customers:**

Boeing, Lockheed Martin, Northrop Grumman, GKN Aerospace Services, Pratt & Whitney, Janicki Industries, Machinist Inc., Composite Structures, Composites Atlantic, Aviation Partners/Boeing, API and Boeing Defense and Space.

**Contact Information:**

PDS Engineering  
12101 Pacific Hwy. South  
Suite 420  
Seattle, WA 98168  
Phone: (206) 767-2773  
Fax: (206) 763-4121  
Attn: Jim Turcott, Director Business Development

## SCOPE OF WORK

PDS Technical Services will provide all resources that are required to fulfill the requirements of each specific work order. This will include personnel, management, supplies, services, materials, facilities, equipment, transportation, etc. to provide a wide range of professional engineering services. Services can be performed at either the ordering agencies facilities or facilities provided by Aviant depending on the work order requirements.

There are four primary disciplines in the engineering field and hundreds of sub-disciplines or specialties associated with engineering disciplines. Below is a list of primary engineering disciplines with a partial list of sub-disciplines or specialties contemplated under Professional Engineering Services.

- **Chemical Engineering**

Planning, development, evaluation, and operation of chemical, biochemical or physical plants and processes. Changes in composition, energy, content, state of aggregation of materials, forces that act on matter, and relationships are examined and new and conventional chemical materials, products and processes are produced and/or manufactured. Within the chemical engineering discipline, there are several specialties within the scope of this work, a partial listing follows:

- Refining
- Pharmaceuticals
- Ceramics
- Petrochemicals
- Textiles
- Electronic Components & Chemicals
- Other Chemical Engineering Specialties
- Food
- Pulp and Paper
- Biotechnology
- Environmental Control & Cleanup
- Safety Engineering

- **Civil Engineering**

Planning, evaluation and constructed infrastructure of facilities and buildings, transportation systems, water, earthworks, and other structures. Within the civil engineering discipline, there are several specialties within the scope of this work, a partial listing follows:

- Structural
- Water Resources
- Other Chemical Engineering Specialties
- Transportation
- Geotechnical
- Environmental
- Surveying

- **Electrical Engineering**

Planning, design, development, evaluation and operation of electrical principles, models, processes, etc. It includes, but is not limited to the design, fabrication, measurement and operation of electrical devices, equipment and systems (e.g. signal processing, telecommunication, sensors, microwave, and image processing, micro-fabrication, energy systems and control, micro - and - nano-electronics, plasma processing, laser and photonics, satellites, missiles and guidance systems, radar, sonar, space vehicles, aircraft, fiber optics, robotics, etc.).

Within the electrical engineering discipline, there are several specialties within the scope of this work, a partial listing follows:

- Aerospace and Electronic Systems
- Circuits and Sytems
- Computer
- Dielectrics and Electrical Insulation
- Geoscience & Remote Sensing
- Information Theory
- Lasers & Electro-Optics
- Nuclear and Plasma Sciences
- Power Electronics
- Reliability
- Solid-State Circuits
- Vehicular Technology
- Signal Processing on Social Implications of Technology
- Antennas and Propagation
- Communications
- Consumer Electronics
- Education
- Engineering
- Management
- Industrial Electronics
- Intelligent Transportation Systems
- Magnetics
- Neural Networks Council
- Power Engineering
- Robotics & Automation
- Systems Man. and Cybernetics
- Ultrasonics, Ferroelectrics and Frequency Control
- Broadcast Technology
- Components Packaging and Manufacturing
- Technology Control Systems
- Electromagnetic Compatibility
- Engineering in Medicine and Biology
- Industry Applications
- Instrumentation and Measurement
- Microwave Theory and Techniques
- Oceanic Engineering
- Professional Communication
- Engineering Specialties

- **Mechanical Engineering**

Planning, development, evaluation and control of systems and components involving the development and production of equipment, systems, products, etc. It includes, but is not limited to planning, engineering, design, and evaluation of power plants, Aerospace systems, and other systems development, analysis of the economical combustion of fuels, conversion of heat energy into mechanical energy, use of mechanical energy to perform useful work, analysis of structures and motion in mechanical systems and conversion of raw materials into a final product, etc. (e.g. thermodynamics, mechanics, fluid mechanics, jets, rocket engines, internal combustion engines, steam and gas turbines, continuum mechanics, dynamic systems, dynamics fluid mechanics, heat transfer, manufacturing materials, solid mechanics, reactors, missile systems, aircraft systems, etc.).

- ASME Heat Transfer
- Applied Mechanics
- Dynamic Systems & Control
- Fluids Engineering
- Heat Transfer
- Stress Analysis
- International Gas Turbine
- Noise Control & Acoustics
- Ocean Engineering
- Plant Engineering & Maintenance
- Process Industries
- Solar Energy
- Textile Engineering
- Tribology
- Advanced Energy Systems
- Bioengineering
- Electrical & Electronic Packaging
- Fluids Power Systems & Technology Systems
- Information Storage & Processing Systems
- Manufacturing Engineering
- Management
- Materials Handling Engineering
- Non-Destructive Evaluation Engineering
- Offshore Mechanics & Artic Engineering
- Rail Transportation
- Power
- Other Chemical Eng
- Aerospace Engineering
- Design Engineering
- Environmental Engineering
- Fuels & Combustion Technologies
- Internal Combustion Engine
- Microchannel Flow and Heat Transfer
- Nuclear Engineering
- Petroleum
- Pressure Vessels & Piping
- Safety Engineering & Risk Analysis
- Technology & Society
- Solid Waste Processing

The following non-inclusive list represents a sampling of the types of engineering tasks that can be provided and/or supplied:

- Acquisition and life cycle management
- Analysis of program goals, mission, objectives, etc.
- Assessment Support
- Computer Aided Design CAD
- Computer Aided Engineering CAE
- Computer Aided Management CAM
- Concept development
- Demonstration and Validation
- Design/Specifications and Development
- Documentation and Information Dissemination
- Education/training
- GOCO Managed Services
- Independent Verification and Validation (IV&V)
- Information services (studies, impact statements, program development, project documentation, data collection, data analysis/evaluation, etc.)
- Instrumentation
- Integration
- Investigative Engineering Service
- Life Cycle Costing
- Logistics and Documentation
- Long-term Reliability and Maintainability
- National Academy of Sciences
- O&M (operation and maintenance)
- Operations Research (Non R&D)
- Plan, organize, establish, implement, manage, upgrade and control of technical systems
- Privatization
- Program and Project management
- Prototype development and first article(s) production
- Radar/Sonar
- Regulatory compliance support
- Reliability and Maintainability Analysis
- Signal Processing
- Simulation and modeling
- Source data development
- Source data validation (existing hardware and software systems)
- Stress Analysis
- Support services
- Systems engineering data base development, maintenance, and analysis
- Technical analysis
- Technical and management support
- Technical writing/editorial support
- T&E (test and evaluation) of products and systems
- Training

Personnel categories for professional engineering services anticipated include, but are not limited to:

- Administrative
- Biologists
- Chemist
- Consultants
- Designers
- Documentation specialists
- Economists
- Engineering and technical analysts
- Engineers
- Information specialists
- Logistics engineers and technical specialists
- Naval architects
- Operations research specialists
- Physicists
- Project/program analysts/leaders/managers
- Scientists
- Statisticians/Mathematicians
- Support
- Technical Specialists
- Technicians
- Trainers
- Writers

## **JOB DESCRIPTIONS - PROFESSIONAL ENGINEERING SERVICES**

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### **Project Manager 1**

Plans and designs engineering programs and assembles project staffs. Responsible for organizing highly complex activities for the development, implementation, and maintenance of engineering projects. Typically requires an advanced technical degree and at least 15 years of related experience. Reports to top management.

### **Project Manager 2**

Plans and designs engineering programs and assembles project staffs. Responsible for organizing highly complex activities for the development, implementation, and maintenance of engineering projects. Typically requires an advanced technical degree and at least 8 years of related experience. Reports to top management.

### **Consultant 1**

Provides services in a specialized technical field. Typical fields include: environmental, nuclear, restoration, pollution, software, computer applications, structure analysis, etc. A minimum Bachelors degree is required with a high probability of a Master's degree in a specialized field. Experience would normally include 10 - 15 years experience as a consultant and is normally considered an expert in his/her field.

### **Consultant 2**

Provides services in a specialized technical field. Typical fields include: environmental, nuclear, restoration, pollution, software, computer applications, structure analysis, etc. A minimum bachelor's degree is required with a high probability of a Master's degree in a specialized field. Experience would normally include 5 - 10 years experience as a consultant and is normally considered an expert in his/her field.

### **Technical Specialist 1**

Will have a minimum of 20 years of progressive experience in one or more disciplines such as civil, chemical structural mechanical, electrical, etc. engineering. Is normally responsible for the technical compliance on major projects, systems integration, equipment, etc. Normally reports to a Project or Division Manager.

### **Technical Specialist 2**

Will have a minimum of 15 years of progressive experience in one or more disciplines such as civil, chemical structural mechanical, electrical, etc. engineering. Is normally responsible for the technical compliance on major projects, systems integration, equipment, etc. Normally reports to a Project or Division Manager.

### **Civil Engineer 1**

Designs and supervises construction projects such airports, bridges, channels, dams, railroads, and roads. Prepares proposals and cost estimates. Estimates work load to establish completion dates. Requires a Bachelor's degree in engineering and at least 12 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May report to an executive or a manager. A wide degree of creativity and latitude is expected.

### **Civil Engineer 2**

Designs and supervises construction projects such airports, bridges, channels, dams, railroads, and roads. Prepares proposals and cost estimates. Estimates work load to establish completion dates. Requires a Bachelor's degree in engineering and a minimum of 8 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. Typically reports to a supervisor or manager. A certain degree of creativity and latitude required.

### **Civil Engineer 3**

Designs and supervises construction projects such airports, bridges, channels, dams, railroads, and roads. Prepares proposals and cost estimates. Estimates work load to establish completion dates. Requires a Bachelor's degree in engineering and a minimum of 4 years of experience in the field or in a related area. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Typically reports to a supervisor or manager.

### **Chemical Engineer 1**

Designs and initiates processes for the manufacturing of chemicals and related products such as cement, detergents, gasoline, plastics, and synthetics. Requires a Bachelor's degree in engineering and a minimum of 10 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May report to an executive or a manager. A wide degree of creativity and latitude is expected.

### **Chemical Engineer 2**

Designs and initiates processes for the manufacturing of chemicals and related products such as cement, detergents, gasoline, plastics, and synthetics. Requires a Bachelor's degree in engineering and a minimum of 6 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals to perform a variety of tasks. Works under general supervision; typically reports to a supervisor or manager. A certain degree of creativity and latitude is required.

### **Chemical Engineer 3**

Designs and initiates processes for the manufacturing of chemicals and related products such as cement, detergents, gasoline, plastics, and synthetics. May require a Bachelor's degree in engineering and a minimum of 2 years of experience in the field or in a related area. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Little creativity is required. Typically reports to a supervisor or manager.

### **Mechanical Engineer 1**

Designs, develops, and tests all aspects of mechanical components, equipment, and machinery. Requires a Bachelor's degree in engineering and a minimum of 10 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May report to an executive or a manager. A wide degree of creativity and latitude is expected.

## **Mechanical Engineer 2**

Designs, develops, and tests all aspects of mechanical components, equipment, and machinery. Requires a Bachelor's degree in engineering and a minimum of 6 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision; typically reports to a supervisor or manager. A certain degree of creativity and latitude is required.

## **Mechanical Engineer 3**

Designs, develops, and tests all aspects of mechanical components, equipment, and machinery. May require a Bachelor's degree in engineering and a minimum of 2 years of experience in the field or in a related area. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Little creativity is required. Typically reports to a supervisor or manager.

## **Electrical Engineer 1**

Designs, develops, and tests all aspects of electrical components, equipment, and machinery. Requires a Bachelor's degree in engineering and a minimum of 10 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May report to an executive or a manager. A wide degree of creativity and latitude is expected.

## **Electrical Engineer 2**

Designs, develops, and tests all aspects of electrical components, equipment, and machinery. Requires a Bachelor's degree in engineering and a minimum of 6 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision; typically reports to a supervisor or manager. A certain degree of creativity and latitude is required.

## **Electrical Engineer 3**

Designs, develops, and tests all aspects of electrical components, equipment, and machinery. Requires a Bachelor's degree in engineering and a minimum of 2 years of experience in the field or in a related area. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Little creativity is required. Typically reports to a supervisor or manager.

## **Designer 1**

Prepares drawings and may resolve associated mechanical and fabrication problems. May also participate in designing special modifications to existing machinery or parts. May require an Associate's degree in a related area and a minimum of 12 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. May direct and lead the work of others. Typically reports to a manager or head of a unit/department. A wide degree of creativity and latitude is expected.

## **Designer 2**

Prepares drawings and is responsible for resolving associated mechanical and fabrication problems. May also participate in designing special modifications to existing machinery or parts. May require an Associate's degree in a related area and a minimum of 8 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision; typically reports to a supervisor or manager. A certain degree of creativity and latitude is required.

## **Designer 3**

Prepares drawings and is responsible for resolving associated mechanical and fabrication problems. May also participate in designing special modifications to existing machinery or parts. May require an Associate's degree in a related area and a minimum of 5 years of experience in the field or in a related area. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Little creativity is required. Typically reports to a supervisor or manager.

## **Documentation Specialist 1**

Develops, writes, and edits various documents, and media for management, customers, etc. Media includes proposals, brochures, presentation material manuals, specifications, etc. Requires a Bachelor's degree in a related field and a minimum of 7 years of experience. Utilizes commonly-used concepts, practices and procedures in the graphic arts, visual arts, and documentation fields. A degree of creativity and latitude is required. Typically reports to a supervisor or manager and services technical and management personnel to support their documentation needs.

## **Documentation Specialist 2**

Develops, writes, and edits various documents, and media for management, customers, etc. Media includes proposals, brochures, presentation material manuals, specifications, etc. Requires an Associates degree (2 years) in a related field and a minimum of 3 years of experience. Utilizes commonly-used concepts, practices and procedures in the graphic arts, visual arts, and documentation fields. A degree of creativity and latitude is required. Typically reports to a supervisor or manager and services technical and management personnel to support their documentation needs.

## **Engineering Software Specialist 1**

Manages a team of software engineers to architect, design enterprise software products. Writes product requirement documents, implements and tracks development timelines, negotiates feature sets with the development leads and product. Requires a Bachelor's degree in a related area and at least 10 years of experience with software development in specific software and strong relational database knowledge. Knowledge of e-commerce infrastructure, customer relationship management, data warehousing, and business intelligence. Relies on experience and judgment to plan and accomplish goals. Typically reports to a senior or project manager.

## **Engineering Software Specialist 2**

Manages a team of software engineers to architect, design enterprise software products. Writes product requirement documents, implements and tracks development timelines, negotiates feature sets with the development leads and product. Requires a Bachelor's degree in a related area and at least 5 years of experience with software development in specific software and strong relational database knowledge. Knowledge of e-commerce infrastructure, customer relationship management, data warehousing, and business intelligence. Relies on experience and judgment to plan and accomplish goals. Typically reports to a senior manager.

### **Logistics Engineer 1**

Develops, writes, and produces technical documentation in support of management customers, and contract requirements. Requires a Bachelor's degree and will have a minimum of 10 years of experience in documentation preparation. Documentation will include proposals, specifications, manuals, and procedures. Primary required to meet customers' needs, systems, equipment, and projects. Documentation normally must be developed in accordance with specification and/or particular guidelines. A certain degree of creativity and latitude is required. Typically he/she reports to a department manager.

### **Logistics Engineer2**

Develops, writes, and produces technical documentation in support of management customers, and contract requirements. Requires a Bachelor's degree and will have a minimum of 5 years of experience in documentation preparation. Documentation will include proposals, specifications, manuals, and procedures. Primary required to meet customers' needs, systems, equipment, and projects. Documentation normally must be developed in accordance with specification and/or particular guidelines. A certain degree of creativity and latitude is required. Typically he/she reports to a department manager.

### **Trainers 1**

Participates in, and conducts technical training programs. Determines training objectives. Writes training programs, including outlines, text, handouts, tests, and designs laboratory exercises. Lectures class on safety, installation, programming, maintenance, and repair of machinery and equipment, following outline, handouts and texts. Administers written and practical exams and writes performance reports to evaluate trainees' performance. Requires a Bachelor's degree and a minimum of 6 years of technical experience. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks.

### **Trainers 2**

Participates in, and conducts technical training programs. Determines training objectives. Writes training programs, including outline, text, handouts, and tests, and designs laboratory exercises. Lectures class on safety, installation, programming, maintenance, and repair of machinery and equipment, following outline, handouts and texts. Administers written and practical exams and writes performance reports to evaluate trainees' performance. Requires a Bachelor's degree in a related area and a minimum of 3 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Typically reports to a manager.

### **Technicians 1**

Studies and records time, motion, methods, and speed involved in performance of maintenance, production, clerical, and other worker operations to establish standard production rate and to improve efficiency. May require an Associate's degree with a minimum of 8 years of experience in the field. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May direct and lead the work of others. Typically reports to a manager or head of a unit/department. A wide degree of creativity and latitude is expected.

### **Technicians 2**

Studies and records time, motion, methods, and speed involved in performance of maintenance, production, clerical, and other worker operations to establish standard production rate and to improve efficiency. May require an Associate's degree with a minimum of 5 years of experience in the field. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision; typically reports to a supervisor or manager. A certain degree of creativity and latitude is required.

### **Technicians 3**

Studies and records time, motion, methods, and speed involved in performance of maintenance, production, clerical, and other worker operations to establish standard production rate and to improve efficiency. May require an Associate's degree with a minimum of 2 years of experience in the field. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Little creativity is required. Typically reports to a supervisor or manager.

