

GEORGETOWN UNIVERSITY		PIN:
INFORMATION TECHNOLOGY POSITION DESCRIPTION		Date:
JOB CLASS TITLE: ANALYST/ PROGRAMMER		
Possible Functional Titles: Programmer Analyst; Systems Programmer; Applications Analyst; Telecom Systems Programmer; Web Specialist		
Please check one: <input type="checkbox"/> New <input type="checkbox"/> Revised <input type="checkbox"/> Updated for files only		

A. General Information:

Name of Incumbent:		
Class Code: 2239	Departmental Position Title:	
Supervisor (Name, Title and Phone):		
Home Dept.#:	Dept. Name:	
Cost Center(s):		
Is this a Term position?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, Exp. Date:

B. Position Summary: *This should explain why the position exists. Choose one level only which describes how the position functions 80% of the time..*

<input type="checkbox"/> Entry level: responsibilities could include: assisting with or performing the analyzing, designing, coding, testing, and maintaining core business application &/or information access applications, including Web Sites. Work assignments would mainly be of minimal complexity , and position would work under immediate supervision.
<input type="checkbox"/> Intermediate level: responsibilities would include those outlined above of semi-complexity , with relatively varied tasks. Position would also tailor systems software to the special needs of the organization and to optimize performance of mission critical computer systems including CPU, peripherals, main memory, and secondary storage. Position is able to solve a range of problems. Position works under moderate supervision .
<input type="checkbox"/> Advanced level: responsibilities would include all those listed in the above at a complex level with intricate, varied tasks and processes. Systems software could include: communications software, supervisory programs, job management programs, input/output (I/O) management programs, database management software, systems utility software and language translation software (compilers). Works with periodic direction and little guidance .
“Systems” referred to could mean: mini-computers; mid-frames; or mainframe computer systems.

C. Organizational Characteristics: *Please attach organizational chart.*

Organizational Unit:
Reporting Responsibilities:
Supervisory Responsibilities:

D. Principal Accountabilities: **Duties listed are progressive. Select only those duties which directly apply to the position you are describing.** You may expand on the wording of a function to meet the needs of your position. *Indicate percentage of effort (time) required. Percentages must equal 100%. You must check whether an accountability is Essential (E) or Non-Essential (NE) for Americans with Disabilities Act purposes. Please check whether task is performed (D)aily, (W)eekly, (M)onthly or on a (P)eriodic basis.*

<input type="checkbox"/> 1. (%)	Programming Systems Software - May include the following duties:	
<input type="checkbox"/> E <input type="checkbox"/> NE	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Analyze user requests, University requirements and existing applications.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Plans, designs and creates web pages/documents. Prepares, edits and converts documents into web pages.

	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Design, code, and test applications to meet the needs of the user &/or University requirements.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Install and configure systems software, such as Unix MVS, VMS, CICS, etc.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Install and configure systems software, such as unix, MVS, VMS, CICS, etc.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Maintain, administer and support systems software. Includes items such as creating and monitoring print queues, and scheduling jobs.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Maintain, administer and support systems software. Includes items such as creating and monitoring print queues, and scheduling jobs.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Coordinate with other UIS professionals as appropriate, to plan for and provide a computer environment (appropriate hardware/software systems resources) that meets their requirements.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Track performance and capacity of hardware and software. Provide reports and analysis of systems performance to upper management for evaluating and planning systems growth needs.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Tune systems using a wide variety of specialized systems utility software to provide optimum systems throughput and resource availability.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Plan, evaluate, develop and test: new systems software, updates to existing systems and new hardware.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Interpret, integrate and implement systems and subsystems from specifications prepared by other programmers.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Integrate hardware and software from multiple vendors into overall organizational configuration, maintaining and improving data communication and resource sharing.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Create, run and modify programs using the appropriate programming language in support of all tasks noted in this job description.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	
<input type="checkbox"/> 2. (%)	Troubleshooting - May include the following duties:	
<input type="checkbox"/> E <input type="checkbox"/> NE	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Coordinate with network, desktop support and help desk managers to resolve systems problems.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Resolve system problems either personally or by coordinating with vendors.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Coordinate with hardware and software vendors to obtain and apply solutions or workarounds to pervasive system problems.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Develop procedures that will minimize the impact of a problem where appropriate, effective solutions are not yet available.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	
<input type="checkbox"/> 3. (%)	Technical Support and Training - May include the following duties:	
<input type="checkbox"/> E <input type="checkbox"/> NE	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Provide high-level technical support; training, advice, guidance to UIS staff and clients.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Ensure that appropriate written documentation is created and maintained to allow other systems programmers to keep systems operational in the absence of systems programmer.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Cross train to be able to function effectively as a backup for other programmers.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Develop and enforce policies, procedures and standards for system use.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Keep abreast of new software releases, investigate emerging technologies, advise management for strategic and tactical planning.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Coordinate, plan and schedule operations staff to ensure that systems are available 24 hrs/day.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	

<input type="checkbox"/> 4. (%) <input type="checkbox"/> E <input type="checkbox"/> NE	System Security - May include the following duties:	
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Administer or provide for administration of access permissions for data and systems.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Provide for an effective strategy for systems/data backup and recovery. Ensure that strategy is adhered to including: full and incremental backups are performed regularly without negatively impacting systems performance; recovery of files, data and systems are possible; ensure that backup media is tested for integrity, rotated and retired on schedule, copies maintained off-site.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Provide for, and adhere to an effective strategy and policy for systems and data security.
<input type="checkbox"/> 5. (%) <input type="checkbox"/> E <input type="checkbox"/> NE	Database and Application Development - May include the following duties:	
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Creates web forms and uses CGI scripts such as Perl scripts to interpret and process forms data. Please provide specific examples:
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Provides web interfaces to application programs such as legacy databases. Please provide specific examples:
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Uses database query languages such as SQL or other development tools to interface with application programs such as databases. Please provide specific examples:
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Uses Java, JavaScript, ActiveX or other development tools to support web applications. Please provide specific examples:
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	
<input type="checkbox"/> 6. (%) <input type="checkbox"/> E <input type="checkbox"/> NE	Web Server Administration - May include the following duties:	
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Posts web pages/documents/images to web server by FTP or NFS.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Plans, designs and executes the structure/organization for a website, including creating directory structure, homepages and links.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Administers a web server. Installs web server software/hardware. Configures server operating system. Monitors and analyzes usage. Manages server processes.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Responsible for web server security including access control, firewalls, authentication, verification and encryption services.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Installs hardware/software and configures web server for streaming video or audio applications.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Implements e-mail on web server using protocols such as SMTP, POP, IMAP and MIME.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Implements newsgroups on web servers using NNTP.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Implements listservs on web servers
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Implements multimedia conferencing such as chat, whiteboard, audio conferencing and video conferencing.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Implements web push technology.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Implements dial-up web access using CSLIP, PPP and ADSL.
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Implements e-commerce on web server.
<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Installs and maintains web server search engine.	
<input type="checkbox"/> 7. (%) <input type="checkbox"/> E <input type="checkbox"/> NE	Image Editing - May include the following duties:	
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Scans photos, slides and other images to create digital images for web use
	<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Creates, modifies and reformats digital images into web formats such as “gif” or “jpg.” Inserts images into web documents.

<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	Advanced editing of digital images using image editing software. Creates image maps, web animations.
<input type="checkbox"/> D <input type="checkbox"/> W <input type="checkbox"/> M <input type="checkbox"/> P	

E. Dimensions:

Number of Persons Supervised: Direct:	Indirect:
Number of Students Supervised: Direct:	Indirect:

Leadership: Check the most descriptive statement for the job as a whole.

- 1) “Work/Project Leader”: answers general questions and provides assistance; maintains assignment completion schedules; performs the same tasks as others.
- 2) “Team Leader”: advises and directs the teams; answers complex questions functioning as an expert resource; maintains assignment completion schedules. Performs the same and higher level tasks.
- 3) Supervisor: participates in the selection process of new employees; assists with performance appraisals; disciplinary problems are referred to a higher level. Performs similar and higher level tasks.
- 4) Supervisor: solely responsible for hire/fire decisions; performance appraisals; employee training and development; handles disciplinary problems. **This person will be evaluated on these decisions.**
- 5) Supervisor: responsible for multiple units or areas, each with supervisors who have hire/fire authority.
- 6) Not applicable to this position.

Complexity of Work: Check the most descriptive statement

- 1) Routine: Primarily deals in one singularly directed functional area. Awareness of related areas is not significant.
- 2) Semi-complex: Requires some integration of different but relatively similar bodies of knowledge and/or functions. Some analytical ability becomes prevalent.
- 3) Complex: Functions differ significantly from each other or a major function is broad and requires integration of differing complicated bodies of knowledge. Analytical ability is clearly required.
- 4) Very Complex: Involves complicated bodies of knowledge/functions that differ substantially from each other.

Freedom of Action: Check the most descriptive statement

- 1) General Supervision: Proceeds on regular tasks, referring questionable situations to supervisor.
- 2) Very General Supervision: Resolves most questions, accomplishes most tasks without guidance.
- 3) Little Guidance: Performs complex functions, establishes priorities, resolves issues, rarely refers to supervisor.
- 4) Plans, develops, and implements functions/projects for functional unit(s) or team(s).
- 5) Other (explain):

Impact: Check the most descriptive statement

- 1) Decisions could positively or negatively affect the immediate work, individual user or group of users.
- 2) Decisions could positively or negatively affect a large group of users, entire department, or networked systems.
- 3) Decisions could positively or negatively affect multiple departments.
- 4) Other (explain):

Interactions: Check the most descriptive statement and describe contacts

- 1) Exchange basic information and normally requires ordinary courtesy and effectiveness in informing others.
 - 2) Exchange and interpret information requiring understanding to influence others.
 - 3) Exchange, analyze, and interpret information requiring various approaches to influence others.
- Describe the people with whom this position has regular contact. Identify level and title of GU positions or describe persons outside GU:

Fiscal Responsibility:

Budget responsibilities (creation or disposition) or salary dollars:
Capital inventory affected:

Physical Working Conditions: *Describe physical environment, lifting, walking, fumes, odors, etc.*

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F. Minimum Qualifications:

Academic Level: <input type="checkbox"/> High School <input type="checkbox"/> College <input type="checkbox"/> Bachelor's <input type="checkbox"/> Master's <input type="checkbox"/> Doctorate
Degree Program (list):
Practical Experience in Years: <input type="checkbox"/> 1) Entry level: 1-3 years work experience in
<input type="checkbox"/> 2) Intermediate level: 3-5 years work experience in
<input type="checkbox"/> 3) Advanced level: 5+ years work experience in
Technical Qualifications or Specialized Certification:
Other Skills:

G. Additional Information About this Position:

Supplementary information as applicable. List responsibilities that have changed since the last position description was done, or reasoning behind creating a new position. List all special skills required, characterized as mandatory or desired.

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H. Signatures:

Incumbent:
Supervisor:
Dept. Head or Authorizing:

Attach Organizational Chart