

<b>GEORGETOWN UNIVERSITY</b>  <b>INFORMATION TECHNOLOGY POSITION DESCRIPTION</b>  <b>CLASS TITLE: SENIOR TECHNOLOGY ENGINEER</b>	PIN:
	Date:
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: <b>2289</b>	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:
Number of months per year:	Number of hours per week:

**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"/> <b>Senior level</b> designs and directs comprehensive, integrated GU network architectures, creates policies and procedures in conjunction with UIS groups, vendors, and user committees. Assignments are <b>complex</b> , with varied tasks. Position understands problems from a broad perspective. Requires a proficiency of <b>advanced skills and technical knowledge</b> with some ability to forecast potential events. Performs tasks with <b>periodic direction and little guidance</b> .
<input type="checkbox"/> <b>Expert level</b> provides technical expertise for all GU network engineering with a special knowledge of how GU's network resources are applied to its mission and goals. Work assignments are <b>very complex</b> and intricate, and require advanced skills and knowledge in more than one area. Position must function pro-actively and <b>independently</b> to develop solutions that combine information and ideas in unprecedented, <b>abstract</b> ways. <b>Functions with general direction from supervisor</b> .

**C. Organizational Characteristics:** *Reporting relationships affecting the position. Please attach organizational chart.*

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**D. Principal Accountabilities:** **You may expand on the wording of a function to meet the needs of your position.** *List each responsibility and indicate percentage of effort (time) required. Percentages must equal 100%. You must indicate whether an accountability is Essential (E) or Non-Essential (NE) for Americans with Disabilities Act purposes.*

<b>1. ( % )</b> <input type="checkbox"/> E <input type="checkbox"/> NE	<b>Computing</b>  Maintains high-level qualifications in specialized platforms such as Unix, NT or Novell in support of network services such as OpenView, DHCP and DNS. He/she is expert in more than one discipline, mastering both the network <u>and</u> the client-server area, understanding the total information delivery environment; can change source code to enhance network services.
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<p><b>2. (%)</b>  <input type="checkbox"/>E <input type="checkbox"/>NE</p>	<p><b>Network Architecture</b></p> <p>Explores emergent technologies and predicts when and where they can be used at GU; carries out complete cost/benefits analysis of new products; plans for the migration from current to future technologies; exchanges research data and procedures with other colleagues nationally to improve GU procedures and practices.</p>
<p><b>3. (%)</b>  <input type="checkbox"/>E <input type="checkbox"/>NE</p>	<p><b>Infrastructure</b></p> <p>Expert level understanding of bandwidth capabilities of many different media; selection of appropriate network technology to inter-operate with future media as well as current physical plant.</p>
<p><b>4. (%)</b>  <input type="checkbox"/>E <input type="checkbox"/>NE</p>	<p><b>Network Maintenance</b></p> <p>Understands the complex details of vendor-specific tools (Optivity, CWSI, etc.); recommends how to extract the greatest benefit from technology investments; designs high-level service level standards for the statistical analysis of network performance; designs procedures that maximize the network quality of service; uses knowledge of pre-standard vendor-specific systems to recommend when to replace or upgrade technology.</p>
<p><b>5. (%)</b>  <input type="checkbox"/>E <input type="checkbox"/>NE</p>	<p><b>Protocols</b></p> <p>Can analyze and summarize how various protocols will affect network reliability, performance and cost; can write standards and procedures that assure GU uses the correct protocols; understands how given protocols are implemented on many different vendor hardware platforms.</p>
<p><b>6. (%)</b>  <input type="checkbox"/>E <input type="checkbox"/>NE</p>	<p><b>WAN Support</b></p> <p>Researches and tests new offerings, such as xDSL and ATM, prior to their deployment at GU, recommending the most economical way to achieve the highest user service levels for the lowest cost; identifies how network events, managed or unmanaged, will affect the wide area network as opposed to the campus LAN (convergence, broadcast filters, etc.); supports the campus Internet and Internet2 initiatives with high-level planning.</p>
<p><b>7. (%)</b>  <input type="checkbox"/>E <input type="checkbox"/>NE</p>	<p><b>Administrative</b></p> <p>Represents GU at vendor and industry forums; produces high-quality professional presentations; creates and maintains the highest levels of quality assurance in his/her work procedures; recommends or negotiates the <b>technical</b> aspects of contracts or third-party agreements.</p>
<p><b>8. (%)</b>  <input type="checkbox"/>E <input type="checkbox"/>NE</p>	<p><b>Project Work</b></p> <p>Professional project management; complete responsibility for all campus-wide network design and planning, including integrated systems such as wireless, modem pools, etc. Technical expert for comprehensive network planning.</p>
<p><b>9. (%)</b>  <input type="checkbox"/>E <input type="checkbox"/>NE</p>	<p><b>Security</b></p> <p>Develops security practices and procedures that complement the Security Officers plans and policies; recommends security enforcement procedures that strike an appropriate balance between security needs and service goals; understands the details and complexities of the specific security products and platforms chosen by GU; can predict the impact of proposed security practices on the current network environment.</p>
<p><b>10. (%)</b>  <input type="checkbox"/>E <input type="checkbox"/>NE</p>	

**E. Dimensions:**

Number of Persons Supervised:    Direct:	Indirect:
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Number of Students Supervised:    Direct:	Indirect:
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**Leadership:** *Check the most descriptive statement for the job as a whole.*

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|-----------------------------|---|
| <input type="checkbox"/> 1) | “Work/Project Leader”: answers general questions and provides assistance; maintains assignment completion schedules; performs the same tasks as others.   |
| <input type="checkbox"/> 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.                   |
| <input type="checkbox"/> 3) | Supervisor: <u>participates</u> 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.    |
| <input type="checkbox"/> 4) | Supervisor: <u>solely responsible</u> for hire/fire decisions; performance appraisals; employee training and development; handles disciplinary problems. <b>This person will be evaluated on these decisions.</b> |
| <input type="checkbox"/> 5) | Supervisor: responsible for multiple units or areas, each with supervisors who have hire/fire authority.  |
| <input type="checkbox"/> 6) | Not applicable to this position.  |

**Complexity of Work:** *Check the most descriptive statement*

- |                             |   |
|-----------------------------|---|
| <input type="checkbox"/> 1) | Routine: Primarily deals in one singularly directed functional area. Awareness of related areas is not significant.   |
| <input type="checkbox"/> 2) | Semi-complex: Requires some integration of different but relatively similar bodies of knowledge and/or functions. Some analytical ability becomes prevalent.  |
| <input type="checkbox"/> 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. |
| <input type="checkbox"/> 4) | Very Complex: Involves complicated bodies of knowledge/functions that differ substantially from each other.   |

**Freedom of Action:** *Check the most descriptive statement*

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

**Impact:** *Check the most descriptive statement*

- |                             |  |
|-----------------------------|--|
| <input type="checkbox"/> 1) | Decisions could positively or negatively affect the immediate work, individual user or group of users.           |
| <input type="checkbox"/> 2) | Decisions could positively or negatively affect a large group of users, entire department, or networked systems. |
| <input type="checkbox"/> 3) | Decisions could positively or negatively affect multiple departments.  |
| <input type="checkbox"/> 4) | Other (explain):   |

**Interactions:** *Check the most descriptive statement and describe contacts*

- |   |   |
|---|---|
| <input type="checkbox"/> 1)   | Exchange basic information and normally requires ordinary courtesy and effectiveness in informing others. |
| <input type="checkbox"/> 2)   | Exchange and interpret information requiring understanding to influence others.                           |
| <input type="checkbox"/> 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:
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Capital inventory affected:
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**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: <i>Check appropriate box and fill in type of experience required.</i> <input type="checkbox"/> 1) Senior level: 5 - 7 years work experience in... <input type="checkbox"/> 2) Expert level: 7+ 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**