# Field Network & Systems Engineer: Sr. Principal Field Network & Systems Engineer

Designs and plans network communications systems. Provides specifications and detailed schematics for network architecture. Provides specific detailed information for hardware and software selection, implementation techniques and tools for the most efficient solution to meet business needs, including present and future capacity requirements. Conducts testing of network design. Maintains technical expertise in all areas of network and computer hardware and software interconnection and interfacing, such as routers, multiplexers, firewalls, hubs, bridges, gateways, etc. Evaluates and reports on new communications technologies to enhance capabilities of the network.

Performs system and subsystem integration, technical risk assessments, technical planning, verification and validation, and supportability and effectiveness analyses of total systems throughout the system lifecycle. Analyses are performed at all levels of total system product to include: concept, design, fabrication, test, installation, operation, maintenance and disposal. Performs functional analysis, timeline analysis, detail trade studies, requirements allocation and interface definition studies to translate customer requirements into hardware and software specifications.

**Discretion/Latitude**
Works under consultative direction toward predetermined long-range goals and objectives. Assignments are often self-initiated. Determine and pursue courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior.

**Knowledge, Skills and Abilities**
Applies advanced technical principles, theories, and concepts. Contributes to the development of new principles and concepts. Widely recognized for achievements, technical expertise and meritorious standing within professional field. Identify, analyze and develop new business opportunities. Establish customer contacts, conduct research and analysis into their future plans and needs, assist with the development of their specifications, develop proposals, and deliver marketing presentations.

**Problem Solving**
Work on unusually complex technical problems and provide solutions which are highly innovative and ingenious.

**Impact**
Develops advanced technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical organizational objectives and effect the image of the organization's technological capability. Functions in a program leadership role. Plays a key role in implementing programs/projects and makes significant contributions to department goals and overall functional strategic planning efforts.

**Liaison**
Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications. Often instrumental in attracting and obtaining major new company business.

**Minimum Education and Experience**
15+ years with BS in designated Engineering, Information Technology or related field or equivalent experience and/or applicable industry certifications. Employees usually have advanced degree in field of specialization.