Downloaded from <https://www.velvetjobs.com/job-descriptions/principal-systems-engineer>

# Example of Principal Systems Engineer Job Description

Our company is growing rapidly and is looking for a principal systems engineer. We appreciate you taking the time to review the list of qualifications and to apply for the position. If you don’t fill all of the qualifications, you may still be considered depending on your level of experience.

## Responsibilities for principal systems engineer

* Contribute to system development tasks that include defining needs, requirements, and use-cases, and defining and tracing system and subsystem architecture, requirements, and testing
* Requirements flow down, tracking, verification, and the writing complex specifications, interface control documents, and engineering reports from advanced studies, special engineering investigations, and similar activities
* Tasks may also include harness interface design, writing electrical interface design requirements, electrical interface requirement validation, and Command and Telemetry database development
* Interface with algorithm developers, software developers, and hardware developers, working as a team, in supporting both engineering development and production development of radar sensors
* Develop solutions to engineering problems through the application of professionally accepted engineering techniques, practices and procedures
* Develop system goals and requirements for complex systems
* Knowledge of networks, virtual machine backups, system patch management, and McAfee HBSS
* Lead a cross-functional project team consisting of electrical, software, mechanical, manufacturing, and quality engineers to achieve project deliverables
* Create and maintain programmatic and technical requirements, specifications, and related technical documentation
* Defines non-functional requirements based on business vision, best practices, and enterprise architecture direction

## Qualifications for principal systems engineer

* CCNP certification or equivalent experience
* A BS in Electrical, Mechanical, or Biomedical engineering, with an advanced technical degree desired
* A demonstrated track record in electromechanical system development, preferably medical devices or other highly regulated products such as military hardware
* Assist scoping and costing speciality efforts
* Requires Bachelor's degree and seven to nine years of related experience
* MCSE - Microsoft Certified Solutions Expert - Server Infrastructure certification