# Embedded Engineer: Principal Embedded Engineer

Designs, develops, operates and maintains software and firmware components and computing systems software; ensures components and software meet with engineering, scientific and manufacturing requirements. Applies the appropriate standards, processes, procedures and tools throughout the system development life cycle to support the generation of engineering applications and products, such as: laboratory simulation systems, aircraft flight control and display systems, mechanical and electrical systems. Interfaces with customers, suppliers, application users and other technical and support personnel.

**Discretion/Latitude**
Works under consultative direction toward predetermined long-range goals and objectives. Determines and pursues courses of action necessary to obtain desired results. Completed work is reviewed for desired results from a relatively long-term perspective.

**Knowledge, Skills, &amp; Abilities**
Applies advanced technical principles, theories and concepts. Contributes to the development of new principles and concepts. Identifies, analyzes and develops new business opportunities. Answers unusually complex technical questions regarding products and services and takes part in putting together proposals, configurations and product offerings.

**Problem Solving**
Works on unusually complex technical problems and provides solutions that are highly innovative and ingenious.

**Impact**
Develops technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical project objectives. Leads the planning and implementation of large projects/programs. Contributes to department goals and planning efforts.

**Liason**
Serves as organization spokesperson on projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications.

**Minimum Education and Experience**
12+ years with a BS in designated Engineering or a related field. Employees usually have an advanced degree in their field of specialization.