

ENGINEERING/ SCIENTIFIC JOB LEVEL SUMMARY

This chart is not a substitute for the relevant job description. The chart is primarily intended to be used by engineering/scientific managers as an aid in making classification decisions. It may also be used by engineers and scientists as a convenient comparison of the requirements for all job levels and thus help them in planning their careers.

The chart should always be used in combination with the relevant job descriptions.

The chart is divided into two broad categories - "duties and responsibilities" and "indicators." Responsibilities are those items normally associated with describing the job done at each level. Indicators are, in general, secondary outcomes which result from doing the primary job and are mainly intended to be used in guiding the generation of the additional information required when making promotion decisions to Levels IV (Senior Engineer/Scientist) and above.

The responsibilities shown in the chart describe the expectations of a fully qualified individual at each level.

| LEVEL | TITLE | ENGINEER/SCIENTIST I | ENGINEER/SCIENTIST II | ENGINEER/SCIENTIST III | SENIOR ENGINEER/SCIENTIST | PRINCIPAL ENGINEER/SCIENTIST | CHIEF ENGINEER/SCIENTIST |
|---|---|--|---|---|--|---|---|
| | DESCRIPTION | IMPLEMENTATION | | IMPLEMENTATION/INNOVATION | | INNOVATION | |
| | | ENTRY LEVEL | MATURING PROFESSIONAL | MATURE PROFESSIONAL | TECHNICAL EXPERT | WELL KNOWN AUTHORITY AMONG PEERS | WIDELY RECOGNIZED AUTHORITY |
| DUTIES AND RESPONSIBILITIES | KNOWLEDGE | Limited use and/or application of basic principles, theories and concepts Little practical experience | Full use and application of standard principles, theories, concepts and techniques once selected | Capable of selection and wide application of principles, theories and concepts in major field of specialization Working knowledge of other related disciplines and the ability to develop nonstandard approaches to work | Applies extensive technical expertise/analysis as a generalist or specialist Defines general approaches as well as specific solutions to technical problems considered state of the art | Applies advanced principles, theories and concepts Contributes to the development of new principles and concepts Utilizing knowledge of principles, forecasts new technology and provides business directions based on them | Exhibits an exceptional degree of ingenuity, creativity and resourcefulness Applies and/or develops highly advanced technologies, products, scientific principles, theories and concepts |
| | PROBLEM COMPLEXITY | Develops solutions to problems of limited scope Expected to require some technical guidance & planning assistance | Provides solutions to a variety of problems using standard techniques Some technical guidance expected to supplement areas of lesser experience | Provides solutions to a wide range of difficult problems Solutions are imaginative, thorough and practicable | Develops solutions to complex problems which require the regular use of ingenuity and creativity Problems typically require considerable technical insight as opposed to the complex but more routine problems encountered by Level III's | Works on unusually complex problems and provides solutions which are highly innovative and ingenious Work at this level will typically require the understanding of several technology areas | Develops information which extends the existing boundaries of knowledge in a given field or several fields Works on major projects that advance the state of the art Works on research or engineering projects in areas of great complexity and breadth where precedents are lacking |
| | DEGREE OF WORK DIRECTION | Work is closely supervised Follows specific, sometimes detailed instructions | Works under general supervision Follows established procedures Work is reviewed for soundness of technical judgment and overall adequacy and accuracy | Works only under very general direction Independently determines general approach and specific solutions to technical problems Demonstrates good judgment in setting schedules/risk taking Work is reviewed upon completion for adequacy in meeting objectives | Work is performed without appreciable direction Exercises considerable latitude in determining technical objectives of assignments Completed work is reviewed from a relatively long term perspective for desired results Assignments may be self-initiated | Works under consultive direction toward predetermined long range goals Expected to develop long range positions on programs or technologies for management consideration Assignments are often self-initiated Determines and pursues courses of action necessary to obtain desired results Work checked through consultation and agreement with others more than by formal review by superior | Directs or influences key technical resources at critical points in corporate level decision making process on long range technological objectives May be used to uncover and resolve problems associated with the development and implementation of operational programs Work is checked only to the effectiveness of results obtained typically requiring a long term perspective Virtually self-supervisory |
| | IMPACT | Failure to achieve results is normally capable of being overcome without serious effect on schedules and programs | Erroneous decisions, recommendations or failure to get results may cause delays in program schedules and result in the allocation of more resources | Erroneous decisions, recommendations, or failure to get results would typically result in serious program delays and considerable expenditure of resources Shares responsibility for the effect of technical decisions/judgments on program schedules or goals critical to the organization with other high level engineer/scientists and managers | Erroneous decisions, recommendations, or failure to get results would typically result in failure to achieve goals critical to the major objectives of the organization Regularly contributes to key technical decisions and technology/product planning | Erroneous decisions or judgments would have a major impact on critical corporate programs Acts as technological/project leader and sponsor with consistent and meaningful influence | Erroneous decisions or judgments would have a prolonged effect on the corporation's technical reputation and business posture Technological/product conscience of corporation; widely viewed as an authority in a broad area of expertise Serves as a consultant to top management in long range corporate planning concerning new or projected areas of technical research and/or product development |
| | PROJECT RESPONSIBILITY (For product development, technology, tools, new procedures, etc.) | Executes plan made by supervisor May plan own technical work | Leads small project(s) or sub-project(s) as part of a greater project(s) May be technical leader who guides technical direction of project(s) | Makes plans as a subset of larger plan which may last years and include several other work groups or organizations May be technical leader and/or responsible for project planning; makes substantial contributions to determining feasibility of goals/objectives | Exercises a significant degree of leadership to projects and programs bearing directly on organization objectives Makes plans which coordinate plans of others May lead major research or product development project consisting of multiple modules or sub-projects which may require the use of sophisticated project planning techniques May be used to apply knowledge in evaluating proposed or ongoing projects | Demonstrated ability to determine program objectives/requirements, organizing programs and projects, and developing standards and guides for diverse engineering/scientific activities May be used to apply knowledge in evaluating proposed or ongoing projects | Same as principal engineer/scientist |
| | LIAISON | Contacts are primarily with immediate supervisor & other professionals in their immediate group | Primarily intraorganizational with less frequent interorganizational and outside customer contacts on routine matters | Frequent interorganizational and/or outside customer contacts Represents the organization in providing solutions to difficult technical problems associated with specific projects | Represents the organization as the prime technical contact on projects Interacts with senior technical management and/or customers on significant technical matters often requiring coordination across organizational lines | Serves as a consultant and spokesperson at organization level on major projects/programs Acts as an advisor to top management and/or customers on advanced technical or research studies/product development | Serves as consultant to top management in long term corporate planning concerning new/ projected areas of technological research/ advancements Prime spokesperson to customers and/or technical community on corporate technological capabilities/future efforts |
| INDICATORS | INTERNAL RECOGNITION | | Peer recognition within work group | Viewed as a mature professional able to successfully carry out complex projects and/or participate in project leadership or program planning | Recognized as an expert and internal consultant within an organization in a field of specialization Consistently utilized and/or capable of aiding in the solution of problems for Level I-III engineers/scientists | Viewed as one of the authorities in the corporation in an area(s) of expertise | Technological leader and sponsor whose opinion is viewed as authoritative |
| | EXTERNAL RECOGNITION | | | Typically has contacts with other professionals through technical society activities, conferences and visits to companies and universities | Visible representative of Tektronix at conferences and technical society activities | Known as a contributor to field of specialization through publications, conference presentations and/or extensive contacts with other professionals | Externally recognized as an expert in field(s) Asked to sit on conference committees, chair sessions and contribute to the formulation of industry standards |
| | PATENTS, PRODUCT DEVELOPMENT, ETC | | | Responsible as a team member for a project or program of major contribution to the corporation May have credit for patents, trade secrets, and/or disclosures | Key technical contributor in major product development project or responsible for significant new applications of known technology recognized as either patentable or as trade secrets/disclosures | Typically will have contributed inventions, new designs or techniques regarded as significant advances in the internal technical community | Typically will have contributed inventions, new designs or techniques regarded as significant advances in both the internal and external technical community |
| | PUBLICATIONS | | Familiar with value/content of major publications in area of expertise Technical reports/articles published for Tek internal use | Current on publications in field of expertise and familiar with technology directions May have published a few articles/papers in trade or technical journals | Typically will have articles/papers published in trade/technical journals | Typically will have published a number of times in technical journals and will have made conference presentations | Publications in major journals and/or portions of books Presentations at major conferences, active participation in conference committees |
| | PROFESSIONAL CONTACTS | | | Through professional and academic activities is able to assist in identifying and attracting new professionals to Tektronix | Knows centers of excellence in field of expertise Able to identify contacts and to attract talented professionals to Tektronix | As a recognized authority, has personal contacts with top talent Knows their status and is utilized in matching their interests to opportunities at Tektronix | With increased understanding of corporate technical developments, able to attract key professionals as employees or as major academic contacts for technical or recruiting contributions |
| Typical minimum qualification or ☆ (any equivalent combination of experience and training) | | Bachelors degree, ☆ | Bachelors with 1-2 years relevant experience, or Bachelors plus Masters degree, or ☆ | BS with 4-6 years relevant experience, or MS with 2-3 years relevant experience, or PhD in appropriate academic discipline, or ☆ | BS with 7-10 years relevant experience, or MS with 5-7 years relevant experience, or PhD with 2-4 years relevant experience, or ☆ | BS with 12-16 years relevant experience, or MS with 8-12 years relevant experience, or PhD with 6-9 years relevant experience, or ☆ | |