MINIMUM QUALIFICATIONS FOR LABOR CATEGORIES

12 May 2026

1. Project Manager
    a. Minimum of a Bachelor's degree in a Project Management, Engineering or Business discipline. No less than ten years of experience as a project manager managing contracts involving technical efforts such as engineering design and development, software development etc. Minimum of 10 years of project management experience must demonstrate comprehensive knowledge in interpreting requirements and management of varied complex federal government projects from inception through completion. Minimum of 10 years of project management experience must include hands-on experience in field management of federal government requirements as well as in-house work, to include coordination of subcontractors, vendors, and in-house work to meet the requirements of the Government on a timely basis. Minimum of 10 years of project management experience shall include the management of funds, time, and other resources. The Project Manager may also serve as the Project Engineer provided the candidate meets the qualifications for Project Engineer.
2. Administrator
    a. Minimum of a Bachelor's Degree in Business Management and three (3) years of experience in providing program management financial support. Two (2) years of directly related experience may be substituted for each year of education beyond high school (diploma/GED). Demonstrated experience in financial administration and reporting requirements of Government contracts. Must have comprehensive knowledge of man loading requirements and of both direct and indirect cost components and functions. Must demonstrate a thorough knowledge of automated databases and financial spreadsheets.
3. Senior Project Engineer
    a. Requires a minimum of a Bachelor's degree in Operations Research, plus 5 years of experience analyzing problems for the US military services. Perform scientific work that involves designing, developing, and adapting mathematical, statistical, econometric, and other scientific methods and techniques. The work also involves analyzing management problems and providing advice and insight about the probable effects of alternative

solutions to these problems. The primary requirement of this work is competence in the rigorous methods of scientific inquiry and analysis.

4. Project Engineer
    a. Minimum of a Bachelor's degree in a Science or Engineering discipline and no less than ten years of experience in project engineering. Minimum of 10 years of project engineering experience must demonstrate extensive knowledge of instrumentation/test system, production planning and material control to oversee integration of systems and enhance manufacturing activities. Responsibilities of this position include requirements planning; materials planning and control, production scheduling and control, and may require direction of other employees. The Project Engineer may also serve as the Project Manager provided the candidate meets the qualifications for Project Manager.
5. Senior Electrical Engineer
    a. Minimum of a graduate degree in an Electrical or Computer Engineering discipline from an ABET accredited institution plus ten (10) years of engineering experience, or a Bachelor's degree in an Electrical or Computer Engineering discipline from an ABET accredited institution, plus twelve (12) years of engineering experience. Must have experience (totaling at least 10 years) directly related to at least three of the following disciplines with no less than three years of direct experience in each.. Software Development Electronic Packaging Logic Design Microprocessor Software and Hardware Industrial Controls Design Instrumentation Circuit design
6. Electronic/Electrical Engineer
    a. Minimum of a graduate degree in an Electrical or Computer Engineering discipline from an ABET accredited institution plus one (1) year of electrical engineering experience, or a Bachelor's degree in an Electrical or Computer Engineering discipline from an ABET accredited institution, plus three (3) years of electrical engineering experience. Must have at least one year of experience directly related to at least three of the following areas: Software Development Electronic Packaging Logic Design Microprocessor Software and Hardware Industrial Controls Design Instrumentation Circuit design
7. Senior Mechanical Engineer
    a. Minimum of a graduate degree in a Mechanical Engineering discipline from an ABET accredited institution plus ten (10) years of engineering experience, or a Bachelor's degreein a Mechanical Engineering discipline from an ABET accredited institution plus twelve (12) years of engineering experience. Must have experience (at least 10 years) directly related to at least three of the

following disciplines with no less than three years of direct experience in each. Stress Analysis (including Finite Element Analysis) Electromechanical Systems (and Controls) Hydraulics Instrumentation Development Packaging CAD Design Materials Failure Analysis Reliability Analysis

8. Mechanical Engineer
    a. Minimum of a graduate degree in a Mechanical Engineering discipline from an ABET accredited institution plus one (1) year of engineering experience, or a Bachelor's degree in a Mechanical Engineering discipline from an ABET accredited institution plus three (3) years of engineering experience. Must have at least one year of experience directly related to at least three of the following disciplines: Stress Analysis (including Finite Element Analysis) Electromechanical Systems (and Controls) Hydraulics Instrumentation Development Packaging CAD Design Materials Failure Analysis Reliability Analysis
9. Senior Computer Engineer
    a. Minimum of a graduate degree in a Computer or Electrical Engineering discipline from an ABET accredited institution plus ten (10) years of engineering experience, or Bachelor's degree in a Computer or Electrical Engineering discipline from an ABET accredited institution, plus twelve (12) years of engineering experience. Must have experience (at least 10 years) directly related to at least three of the following disciplines with no less than three years of direct experience in each.
    b. Software Design
    c. Hardware-Software Integration
    d. Embedded Microcontrollers
    e. VLSI Design
    f. Designing Analog Sensors
    g. Designing Mixed Signal Circuit Boards
10. Senior Software Engineer/Computer Scientist
    a. Minimum of a graduate degree in a Software Engineering or Computer Science or Computer Engineering discipline from an accredited institution plus ten (10) years of software development experience, or a Bachelor's degree in a Software Engineering or Computer Science or Computer Engineering discipline from an ABET accredited institution, plus twelve (12) years of software development experience. Must have experience (at least 10 years) directly related to at least three of the following disciplines with no less than three years of direct experience in each. Software Design UML Design Patterns C/C++/Java Linux/Embedded Linux XML

11. Computer Programmer II
    a. At this level, initial assignments are designed to develop competence in applying established programming procedures to routine problems. This Computer Programmer performs routine programming assignments that do not require skilled background experience but do require knowledge of established programming procedures and data processing requirements, and works according to clear-cut and complete specifications. The data are refined, and the format of the final product is very similar to that of the input, or is well defined when significantly different, i.e., there are few, if any, problems with interrelating varied records and outputs. The Computer Programmer II maintains and modifies routine programs, makes approved changes by amending program flow charts, developing detailed processing logic, and coding changes, tests and documents modifications and writes operator instructions, may write routine new programs using prescribed specifications, and may confer with EDP personnel to clarify procedures, processing logic, etc. In addition, the Computer Programmer II may evaluate simple interrelationships in the immediate programming area confers with user representatives to gain an understanding of the situation sufficient to formulate the needed change, and implements the change upon approval of the supervisor or higher level staff. The incumbent is provided with charts, narrative descriptions of the functions performed, an approved statement of the product desired (e.g., a change in a local establishment report), and the inputs, outputs, and record formats. This Worker reviews objectives and assignment details with higher level staff to insure thorough understanding; uses judgment in selecting among authorized procedures and seeks assistance when guidelines are inadequate, significant deviations are proposed, or when unanticipated problems arise. Work is usually monitored in progress, and all work is reviewed upon completion for accuracy and compliance with standards.
12. Computer Programmer III
    a. As a fully qualified Computer Programmer, this Worker applies standard programming procedures and detailed knowledge of pertinent subject matter in a programming area such as a record keeping operation (supply, personnel and payroll, inventory, purchasing, insurance payments, depositor accounts, etc.); a well-defined statistical or scientific problem; or other standardized operation or problem. The incumbent works according to approved statements of requirements and detailed specifications. While the data are clear cut, related, and equally available, there may be substantial

interrelationships of a variety of records and several varied sequences of formats are usually produced. The programs developed or modified typically are linked to several other programs in that the output of one becomes the input for another. This Computer Programmer recognizes probable interactions of other related programs with the assigned program(s) and is familiar with related system software and computer equipment, and solves conventional programming problems, (In small organizations, may maintain programs that concern or combine several operations, i.e. users, or develop programs where there is one primary user and the others give input.)

b. The Computer Programmer III performs such duties as developing, modifying, and maintaining assigned programs, designing and implementing modifications to the interrelation of files and records within programs in consultations with higher level staff. This Worker monitors the operation of assigned programs and responds to problems by diagnosing and correcting errors in logic and coding; implements and/or maintains assigned portions of a scientific programming project, applying established scientific programming techniques to well-defined mathematical, statistical, engineering, or other scientific problems usually requiring the translation of mathematical notation into processing logic and code. (Scientific programming includes assignments such as: using predetermined physical laws expressed in mathematical terms to relate one set of data to another; the routine storage and retrieval of field test data, and using procedures for real-time command and control, scientific data reduction, signal processing, or similar areas.) This Programmer tests, documents work, writes and maintains operator instructions for assigned programs, and confers with other EDP personnel to obtain or provide factual data.
c. In addition, this Programmer may carry out fact-finding and programming analysis of a single activity or routine problem, applying established procedures where the nature of the program, feasibility, computer equipment, and programming language have already been decided. Job tasks may require the incumbent to analyze present performance of the program and take action to correct deficiencies based on discussion with the user and consultation with and approval of the supervisor or higher-level staff. This Programmer may assist in the review and analysis of detailed program specifications, and in program design to meet changes in work processes.
d. The Computer Programmer III works independently under specified objectives; applies judgment in devising program logic and in selecting and adapting standard programming procedures, resolves problems and

deviations according to established practices, and obtains advice where precedents are unclear or not available. This Worker, may guide or instruct lower level programmers; supervise technicians and others who assist in specific assignments, works on complex programs under close direction of higher level staff or supervisor, and may assist higher level staff by independently performing moderately complex tasks assigned, and performing complex tasks under close supervision. Work at a level above this is deemed Supervisory or Individual Contributor. Completed work is reviewed for conformance to standards, timeliness, and efficiency.

13. Computer Programmer IV
    a. Computer Programmer IV applies expertise in programming procedures to complex programs; recommends the redesign of programs, investigates and analyzes feasibility and program requirements, and develops programming specifications. Assigned programs typically affect a broad multi-user computer system which meets the data processing needs of a broad area (e.g., manufacturing, logistics planning, finance management, human resources, or material management) or a computer system for a project in engineering, research, accounting, statistics, etc. This Programmer plans the full range of programming actions to produce several interrelated but different products from numerous and diverse data elements, which are usually from different sources; solves difficult programming problems, and uses knowledge of pertinent system software, computer equipment, work processes, regulations, and management practices. This Programmer performs such duties as: developing, modifying, and maintains complex programs; designs and implements the interrelations of files and records within programs which will effectively fit into the overall design of the project; works with problems or concepts and develops programs for the solution to major scientific computational problems requiring the analysis and development of logical or mathematical descriptions of functions to be programmed; and develops occasional special programs, e.g. a critical path analysis program to assist in managing a special project. This Worker tests, documents, and writes operating instructions for 54 all work, confers with other EDP personnel to secure information, investigate and resolve problems, and coordinates work efforts. In addition, this incumbent performs such programming analyses as: investigating the feasibility of alternate program design approaches to determine the best balanced solution, e.g., one that will best satisfy immediate user needs, facilitate subsequent modification, and conserve resources. Duties include the following: assisting user personnel in

defining problems or needs, determining work organization on typical maintenance projects and smaller scale, working on limited new projects, the necessary files and records, and their interrelation with the program or working on large or more complicated projects, and participating as a team member along with other EDP personnel and users, holding responsibility for a portion of the project.

b. The Computer Programmer IV works independently under overall objectives and direction, apprising the supervisor about progress and unusual complications and modifying and adapting precedent solutions and proven approaches. Guidelines include constraints imposed by the related programs with which the incumbent's programs must be meshed. Completed work is reviewed for timeliness, compatibility with other work, and effectiveness in meeting requirements. This Worker may function as team leader or supervise a few lower level programmers or technicians on assigned work.

14. Manufacturing Engineer
    a. Minimum of a Bachelor's degree in Engineering with a Manufacturing Engineering focus from an ABET accredited institution plus at least four (4) years of engineering experience. Experience must include 6 months effort devoted to selection of the right process and procedures to produce the desired product quality in a cost- effective manner and have a demonstrated ability to prepare reliable cost estimates. Experience must include 3 months each in fabrication, assembly, test, quality control, and installation technology for various types of mechanical and electronic hardware in a specialty-manufacturing environment.
15. Senior Systems Engineer
    a. Requires a Bachelor's degree in Systems Engineering with a minimum of fifteen (15) years of experience developing concepts for large, complex electronic and/or mechanical systems. Must show demonstrated 10 years of experience in applying engineering disciplines to complex programs as required on Government contracts. Must have comprehensive knowledge of interpretation and application of Government engineering requirements and specifications including environmental testing that validates system requirements.
16. Mathematician
    a. Requires a minimum of a Bachelor's degree in Mathematics, plus 4 years of experience applying mathematical methods to solve scientific, engineering, and military problems. Perform scientific work that involves developing mathematical methods to solve a variety of scientific, engineering, and

military problems where precise specification of the relationships, rigor and economy of mathematical operations, and logical deduction are the controlling considerations.

17. Operations Research Analyst
    a. Requires a minimum of a Bachelor's degree in Operations Research, plus 5 years of experience analyzing problems for the US military services. Perform scientific work that involves designing, developing, and adapting mathematical, statistical, econometric, and other scientific methods and techniques. The work also involves analyzing management problems and providing advice and insight about the probable effects of alternative solutions to these problems. The primary requirement of this work is competence in the rigorous methods of scientific inquiry and analysis.
18. Material Handling Laborer
    a. Requires a high school diploma, GED or equivalent experience. Also requires six (6) months experience in general material handling techniques/disciplines. Performs material handling and general storeroom tasks. Works in accordance with detailed directions. Uses basic hand tools and non-motorized material handling equipment to unload, unpack, move and pack material.
19. Engineering Technician II
    a. Engineering Technician II performs standardized or prescribed assignments involving a sequence of related operations, follows standard work methods on recurring assignments but receives explicit instructions on unfamiliar assignments. Technical adequacy of routine work is reviewed on completion; non-routine work may be reviewed in progress. This technician performs at this level, one or a combination of such typical duties as:
        i. a. Following specific instructions, assembles or constructs simple or standard equipment or parts, servicing or repairing simple instruments or equipment;
        ii. b. Conducting a variety of tests using established methods, preparing test specimens, adjusting and operating equipment, recording test data, and pointing out deviations resulting from equipment malfunction or observational errors;
        iii. c. Extracting engineering data from various prescribed but non-standardized sources, processing the data following well-defined methods including elementary algebra and geometry, and presenting the data in prescribed form.
20. Engineering Technician III

a. The Engineering Technician III performs assignments that are not completely standardized or prescribed, selects or adapts standard procedures or equipment, using fully applicable precedents, receives initial instructions, equipment requirements, and advice from supervisor or engineer as needed, performs recurring work independently. Work is reviewed for technical adequacy or conformity with instructions. This technician performs at this level one or a combination of such typical duties as:
    i. a. Constructing components, subunits, or simple models or adapts standard equipment; may troubleshoot and correct malfunctions; 107
    ii. b. Following specific layout and scientific diagrams to construct and package simple devices and subunits of equipment.
    iii. c. Conducting various tests or experiments which may require minor modifications in test setups or procedures as well as subjective judgments in measurement, selecting, preparing, and operating standard test equipment and records test data;
    iv. d. Extracting and compiling a variety of engineering data from field notes, manuals, lab reports, etc., processing data, identifying errors or inconsistencies, selecting methods of data presentation.
    v. e. Assisting in design modification by compiling data related to design, specifications, and materials that are pertinent to specific items of equipment or component parts; developing information concerning previous operational failures and modifications, and using judgment and initiative to recognize inconsistencies or gaps in data and seek sources to clarify information.

21. Engineering Technician VI
    a. This technician independently plans and accomplishes complete projects or studies of broad scope and complexity, or serves as an expert in a narrow aspect of a particular field of engineering, e.g., environmental factors affecting electronic engineering. Complexity of assignments typically requires considerable creativity and judgment to devise approaches to accomplish work, resolve design and operational problems, and make decisions in situations where standard engineering methods, procedures, and techniques may not be applicable. Supervisor or professional engineer provides advice on unusual or controversial problems or policy matters. Completed work is reviewed for compliance with overall project objectives. This worker may supervise or train and be assisted by lower level technicians, and performs, one or a combination of the following:

i. a. Prepares designs and specifications for various complex equipment or systems (e.g., a heating system in an office building, or new electronic components such as solid state devices for instrumentation equipment).
ii. b. Plans approach to solve design problems; conceives and recommends new design techniques; resolves design problems with contract personnel, and assures compatibility of design with other parts of the system.
iii. c. Designs and coordinates test set-ups and experiments to prove or disprove the feasibility of preliminary design; uses untried and untested measurement techniques; and improves the performance of the equipment. May advise equipment users on redesign to solve unique operational deficiencies.
iv. d. Plans approach and conducts various experiments to develop equipment or systems characterized by (a) difficult performance requirements because of conflicting attributes such as versatility, size, and ease of operation; or (b) unusual combination of techniques or components. Arranges for fabrication of pilot models and determines test procedures and design of special test equipment.

22. Electronics Technician Maintenance III
    a. The Electronics Technician Maintenance III applies advanced technical knowledge to solve complex problems that typically cannot be solved solely by referencing manufacturers' manuals or similar documents. Examples of such problems include determining the location and density of circuitry, evaluating electromagnetic radiation, isolating malfunctions, and incorporating engineering; changes. Work typically requires an understanding of the interrelationships of circuits, exercising independent judgment in performing such tasks as making circuit analyses, calculating wave forms, and tracing relationships in signal flow, using complex test instruments such as high frequency pulse generators, frequency synthesizers, distortion analyzers, and complex computer control equipment. Work may be reviewed by supervisor for general compliance with accepted practices. This position may provide technical guidance to lower level technicians.
23. Machine-Tool Operator
    a. Someone in this position specializes in operating one or more than one type of machine tool (e.g., jig borer, grinding machine, engine lathe, milling machine) to machine metal for use in making or maintaining jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal

or nonmetallic material (e.g., plastic, plaster, rubber, glass). Work typically involves: planning and performing difficult machining operations which require complicated setups or a high degree of accuracy, setting up machine tool or tools (e.g., installing cutting tools and adjusting guides, stops, working tables, and other controls to handle the size of stock to be machined. The Machine Tool Operator determines proper feeds, speeds, tooling, and operation sequence or selects those prescribed in drawings, blueprints, or layouts). Work also involves using a variety of precision measuring instruments, making necessary adjustments during machining operation to achieve requisite dimensions to very close tolerances. This worker may be required to select proper coolants and cutting and lubricating oils to recognize when tools need dressing, and to dress tools. In general, the work of a Machine-Tool Operator (Tool room) at the skill level called for in this classification, requires extensive knowledge of machine shop and tool room practice usually acquired though considerable on-the-job training and experience.

24. Tool And Die Maker
    a. The Tool and Die Maker constructs and repairs jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). Work typically involves: planning and laying out work according to models, blueprints, drawings, or other written or oral specifications, understanding the working properties of common metals and alloys, selecting appropriate materials, tools, and processes required to complete task, making necessary shop computations, and setting up and operating various machine tools and related equipment. Work for someone in this position also involves using various Tool and Die Maker's hand tools and precision measuring instrument, working to very close tolerances, heat-treating metal parts and finished tools and dies to achieve required qualities, and fitting and assembling parts to prescribed tolerances and allowances. In general, the Tool and Die Maker's work requires rounded training in machine shop and tool room practice usually acquired through formal apprenticeship or equivalent training and experience.
25. Technical Writer III
    a. Minimum of a Bachelor’s degree from an accredited college and three years of technical report writing experience. The individual should be capable of organizing technical data into comprehensive outlines and illustration lists and writing general and functional descriptions, detailed operating and

servicing instructions as well as procedures at all levels of maintenance, test, and checkout. Should be able to evaluate work for technical, grammatical, and specification accuracy.