Global Position Profile

Global Position Profiles	Function:	Comp Class:
Engineer	Engineering	CC01

Job Summary:

This entry level engineering position applies basic knowledge of engineering principles and practices to one or more of the following assigned tasks: specification, design, development, analysis, release, validation and maintenance of new and current products/subsystems through the product life cycle. Works effectively with other engineering disciplines and cross-functional teams.

Key Responsibilities:

Investigates product, system, and/or technology problems, understands causal mechanisms, recommends appropriate action, owns problem resolution and documents results with guidance from more experienced team members.
Main focus will include working in business processes of Product Preceding Technology (PPT), Value Package Introduction (VPI) or Current Product Support (CPS) and executing technical processes such as Engineering Standard Work (ESW), iDFMEA, Failure Incident Review Group (FIRG) while using tools such as 7-step problem solving, design review checklist and other discipline specific specialized tools required to support the processes and enable high quality decision making.
Obtains input from stakeholders such as technical managers, project leaders, product and manufacturing engineers and supplier partners to deliver information and recommendations that lead to successful project decisions.
Applies academic knowledge and existing experience to take action and make decisions that progress projects forward without sacrificing project quality expectations. Examples of these decisions include day to day project details, analysis or test work instruction details, coordination across discipline areas that are necessary to make quality progress.
Owns problem resolution for moderately complex components, products, systems, subsystems or services with a relatively low degree of technical complexity and ambiguity.
Provides independent execution of established work processes and systems, while still developing technology or product knowledge; engages with the improvement of systems and processes
Involves minimal direct management of people, but could involve the coordination and direction of work amongst technicians and/or temporary student employees.
Contributes effectively toward team goals, exhibits influence within a work group and continues to develop proficiency in the competency areas critical to success in the role (see "competencies" below)

Qualifications and Competencies

Competencies:

Applies Principles of Statistical Methods - Analyzes technical data using descriptive statistics, probability distributions, graphical analysis, and statistical inference (population and sample, confidence intervals, and hypothesis testing); models relationships between response and independent variables using analysis of variance, regression, and design of experiments to make rigorous, data-based decisions.

Cross-Functional Design Integration - Translates the value package requirements that include the voices of many stakeholders into virtual designs, and communicates the capability of the design through an approved cross-functional design review.

Product Development Execution, Monitoring and Control - Plans, schedules, coordinates and executes the activities involved in developing a product to a respectively aligned hierarchy of requirements and technical profiles; monitors and communicates across functional boundaries to meet project resource and quality expectations; ensures product capability meets or exceeds expectations and takes mitigating actions when project risks are higher than expected; understands the full product life cycle process and stakeholders.

Product Failure Mode Avoidance - Mitigates potential product failure modes, by identifying interfaces, functions, functional requirements, interactions, control factors, noise factors, and prioritized potential failure modes and potential failure causes for the system of interest to effectively and efficiently improve the reliability of Cummins' products.

Product Function Modeling, Simulation and Analysis - Impacts product design decisions through the utilization and/or interpretation of computational tools and methods that predict the capability of a product's function relative to its system, sub-system and/or component level requirements.

Product Problem Solving - Solves product problems using a process that protects the customer; determines the assignable cause; implements robust, data-based solutions; and identifies the systemic root causes and recommended actions to prevent problem reoccurrence.

Product Verification and Validation Management - Develops product systems validation plans from a variety of inputs to identify failure modes, while managing product risk and relative priority; negotiates product requirements against capability to guide project scope; evaluates analytical, simulation and physical test results to verify product capability and validate requirements; assesses legacy versus proposed system solution capabilities and produces recommendations with technical documentation to support product decisions.

System Requirements Engineering - Uses appropriate methods and tools to translate stakeholder needs into verifiable requirements to which designs are developed; establishes acceptance criteria for the system of interest through analysis, allocation and negotiation; tracks the status of requirements throughout the system lifecycle; assesses the impact of changes to system requirements on project scope, schedule, and resources; creates and maintains information linkages to related artifacts.

Systems Thinking - Defines the system of interest by drawing the boundaries, identifying its context within its environment, its interfaces, and that it has a lifecycle to aid in planning the problem statement, scope and deliverables ; analyzes linkages and interactions between elements that comprise the system of interest by using appropriate methods, models and integration of outcomes to understand the system, predict its behavior and devise modifications to it in order to produce the desired effects.

Technical Documentation - Documents information based on knowledge gained as part of technical function activities; communicates to stakeholders with the goal of enabling improved technical productivity and effective knowledge transfer to others who were not originally part of the initial learning.

Collaborates - Building partnerships and working collaboratively with others to meet shared objectives.

Communicates effectively - Developing and delivering multi-mode communications that convey a clear understanding of the unique needs of different audiences.

Decision quality - Making good and timely decisions that keep the organization moving forward.

Drives results - Consistently achieving results, even under tough circumstances.

Self-development - Actively seeking new ways to grow and be challenged using both formal and informal development channels.

Education, Licenses, Certifications:

College, university, or equivalent Bachelor's degree in Engineering or appropriate STEM field is required.

Post-graduate (Master's) degree relevant to this discipline area may be required for select roles.

This position may require licensing for compliance with export controls or sanctions regulations.

Experience:

Minimal work experience required. Preferred candidates would have relevant experience working in an temporary student employment, intern, co-op, or other extracurricular team activities.