
Gaant Chart – Project Schedule Levels

Project schedule levels are used to establish a hierarchical structure for planning and controlling project activities. Each level represents a different level of detail and accuracy in the project schedule.

The four commonly used schedule levels are Schedule **Level 0**, **Schedule Level 1**, **Schedule Level 2**, and Schedule **Level 3**.

These levels help provide a comprehensive understanding of the project timeline, resource allocation, and dependencies. This description describes each level, their requirements, and how they can be linked with the **Front-End Loading (FEL)** methodology.

Schedule Levels:

Schedule Level 0 (Master Schedule):

Schedule Level 0, also known as the Master Schedule, represents the highest level of schedule planning. It provides an overview of the entire project and typically covers the entire project duration. Level 0 schedules are primarily used for high-level strategic planning, stakeholder communication, and decision-making. They include major project milestones, key deliverables, and major phases or stages of the project. Important requirements for Schedule Level 0:

- Clearly defined project objectives and scope
- High-level work breakdown structure (WBS) or project hierarchy
- Identification of major project milestones and deliverables
- Consideration of external dependencies and constraints
- Alignment with the project's strategic objectives and organizational goals

Schedule Level 1 (Summary Schedule):

Schedule Level 1, also known as the Summary Schedule, provides a more detailed breakdown of the project compared to Level 0. It further decomposes the project into manageable components and key activities. Level 1 schedules are typically developed for each major phase or stage of the project and cover a shorter timeframe than Level 0 schedules. Important requirements for Schedule Level 1:

- Detailed project scope and objectives
- Comprehensive WBS or project hierarchy, breaking down major phases into sub-phases or major activities
- Identification of key milestones and deliverables for each phase



- Preliminary resource allocation and high-level cost estimation
- Consideration of internal dependencies and constraints within each phase

Schedule Level 2 (Control Schedule):

Schedule Level 2, also known as the Control Schedule, provides a more granular breakdown of the project compared to Level 1. It focuses on specific activities, tasks, and dependencies required to complete each phase or major activity identified in Level 1. Level 2 schedules cover a shorter duration than Level 1 schedules and are used for day-to-day project management and control.

Important requirements for Schedule Level 2:

- Detailed activity list derived from Level 1 schedule
- Sequence of activities and their dependencies
- Duration estimation for each activity
- Resource allocation and leveling for each activity
- Identification of critical path(s) and potential schedule risks
- Development of project baselines for performance measurement and control

Schedule Level 3 (Detailed Schedule):

Schedule Level 3, also known as the Detailed Schedule, provides the highest level of detail and specificity among the schedule levels. It breaks down Level 2 activities into individual tasks, typically with short durations and clear dependencies. Level 3 schedules are used by project teams for day-to-day execution, coordination, and tracking of project activities.

Important requirements for Schedule Level 3:

- Comprehensive breakdown of Level 2 activities into individual tasks
- Accurate estimation of task duration and resource requirements
- Assignment of responsible individuals or teams for each task
- Clear identification of task dependencies and relationships
- Realistic scheduling of milestones and deliverables
- Integration with project management tools and software for efficient tracking and progress reporting

Linking Schedule Levels with FEL Methodology:

The Front-End Loading (FEL) methodology, also known as front-end engineering design (FEED), is a systematic approach used in project management to enhance project planning and decision-making. It aligns well with the schedule levels as follows:

- 1. FEL Phase 1:** During this conceptual phase, the FEL methodology helps develop the Schedule Level 0 by defining the project objectives, major milestones, and high-level project



timeline. The Schedule Level 0 provides a basis for estimating project costs and benefits, as well as establishing initial project viability.

- 2. FEL Phase 2:** In this phase, the FEL methodology supports the development of Schedule Levels 1 and 2. The methodology aids in defining the project scope, breaking down the work packages, identifying dependencies, and estimating resource requirements. It facilitates stakeholder engagement and alignment, ensuring that the schedule levels are robust and realistic.
- 3. FEL Phase 3:** During the execution phase, the FEL methodology complements the Schedule Level 3. It helps project teams manage and track individual tasks, monitor progress, and address any deviations from the planned schedule. The methodology supports effective resource allocation, risk management, and issue resolution to keep the project on track.

Conclusion:

Schedule levels provide a hierarchical structure for planning and controlling project activities. Each level represents a different level of detail, from high-level milestones to detailed tasks. By preparing schedule levels accurately and aligning them with the Front-End Loading methodology, project managers can enhance project planning, resource allocation, and decision-making. This leads to improved project execution, increased stakeholder satisfaction, and better overall project outcomes.