

CE716 – Project Management and Controls

Quiz 05

Purpose: To update construction schedule (without using Primavera/Microsoft Project or other commercial packages). MS Office suite can be utilized.

Weightage: The Quiz have 25% weightage in your final grades.

Maximum Marks for this Quiz: 15 Marks

You can work on this assignment in Pairs

Due Date: In 30 minutes

Deliverables:

Legible and easy to read Excel file containing the revised schedule along with summary of what all revisions were made to the schedule. **The revised schedule should include the originally planned dates for reference.**

The Baseline schedule submitted by the contractor and accepted by FRIENDS Family/PMC is provided to you. The summary of the schedule prepared is as follows:

- Expected Start Date: 1st Oct 2024
 - Expected End Date: 28th June 2025
1. The construction of a G+2 residential building is planned in phases. Activities have been devised, starting with site preparation and foundation work.
 2. Relationships between the activities have been established as SS, FF and FS.
 3. After the foundation is complete, the structural framework, including columns, beams, and slabs, is constructed for the ground, first, and second floors.
 4. Following the structure, brickwork, plastering, and installation of mechanical, electrical, and plumbing systems are carried out. Finishing work, such as flooring, painting, and final fittings, comes next.
 5. The project concludes with final inspections, approvals, and handover to the client.
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Having understood the importance of updating project schedules regularly, you decided to track project progress. You went to the project site today and got the following information:

1. ✓ The site was available for construction from 8th October 2024.
2. The mobilization at site (A1) got completed in 3 days.
3. The excavation for Plinth beams (A3) started on 14th October 2024 and got completed in 2 days.
4. Activity A4 to A9 – These activities had planned for Formwork, PCC, etc. for Plinth Beams. This was incorrect as Plinth beams can only be casted unless backfilling is complete. According, these activities only took half the duration to complete than what was originally estimated (Rounded up to highest integer).
5. There was no lag between start of activity A5 and completion of activity A4.

6. On October 17th, the contractor felt that there are some ambiguities in the reinforcement detailing. They had highlighted this issue through email to the PMC (to you). However, due to Antaragni fest going on from 17-20th October you could not respond to the email. Eventually, you (the PMC) replied on 21st October and reinforcement work started on 24th October 2024. As part of your job, you informed the client that contractor got confused but there was no ambiguity in the reinforcement drawing.
7. Reinforcement, Shuttering, and RCC for Columns (Activity A10, A11, A12) coincided with Diwali break. Rachel and Monica (from FRIENDS family) didn't want any disturbance in their backyard during Diwali as there was too much construction noise. They stopped all the work (Chandler wasn't happy about it). No work could be done on the Construction site from 30th October to 4th November 2024. The work was planned to resume on 5th November 2024.
8. The skilled foreman for reinforcement works also went home for Diwali. However, during the return he didn't get a Tatkal ticket and could only join the site on 8th November 2024. Activity A10 started after his return. Other works which were not dependent on the skilled foreman started on 5th November.
9. The productivity assumed for Plastering work was incorrect. It was assumed that a mason could do 20 sqm per day. However, the contractor informed that actual productivity of a mason will be around 10 sqm per day.
10. When you were about to leave the site, the Contractor ran towards you and informed that he is confident that Phase 2 of the project will finish by 15th December and they will start Phase 3 on the next day.

Use this information to update the project schedule. What is the revised completion date for this project? Is the project on time? List any observations that you might have when updating the project schedule.

Why is the project running late? Who is responsible? Approximately how much are they responsible for this delay (Make a educated guess)?