

Coursework example : Assignment of CSE 30303

Tutorial #4 The Use of Computer Programs for Scheduling

Activities for completing a small building foundation are given below. All the relationships between the activities are Finish-to-Start.

Activities	Designation	Predecessor	Duration (days)
Layout building	A	--	2
Excavator and form isolated footings	B	A	3
Excavator and form elevator pit slab	C	B	1
Install isolated footing rebar	D	B	2
Dig and form strip footings	E	B C	3
Inspect isolated footings	F	D	1
Tie strip footing rebar	G	E	3
Pour isolated footings	H	F	1
Inspect strip footing rebar	I	G	1
Pour strip footings	J	I	1
Install HVAC/Electrical underslab rough-ins	K	A J	3
Pour slab on grade	L	K	1

1. Use MS Project to develop a Bar Chart schedule for this project. Print out the Bar Chart schedule.
2. Print out the Precedence Network using MS Project (reconfigure the activity box).
3. Show ES, EF, LS, LF, Total Float for each activity.

Assignment of CSE 30359

Watch the videos that are uploaded to the blackboard site (under the folder “Video Collection”) and answer the following questions.

1. Watch the jobsite layout shown in “Video 02.” In the video, what cost item(s) do you think can be placed under “indirect costs” and what cost item(s) can be placed under “direct costs?”
2. What is the name of the pile in “video 03?” Describe the purpose of the pile and how it is driven into the ground.
3. A typical concrete slab construction process is shown in “Video 05.” Watch the construction process and develop a short project schedule for this process (about 7-15 activities).
4. In “Video 04”, what are the names of the two cranes? It appears that a dewatering device is placed inside the excavated pit. What kind of dewatering device may be used in the video?
5. In the video “Big Blue Accident,” it was later concluded that the combination of dead load of the truss and wind load exceeds the capacity limit of the crane. Based on the safety theories that are introduced in the class, explain the root causes of the accidents and approaches that may be taken to avoid such accidents.