

Term project

1

Form your term project group of maximum 3 team members. Choose a *construction project title* by writing it down next to your names on [online spreadsheet](#) **(by Day 20th)(5%)**. You **can** choose one of the *Suggested Titles*. Repeated or similar project titles (e.g., building 10 storey building and 20 storey building project) are not acceptable for different groups. You are going to apply different project planning and control methods on the project, base on 1) *actual project data you can collect (most preferable)*, 2) *information you get from literature* and/or 3) *legitimate assumptions*. You need to address:

Step 1- Problem statement and Integration planning (10%): Prepare a max of 3 pages of problem statement (do your research on appropriate form of problem statement) and a project charter (max pages of 5)

Step 2- Project Planning

2-1- Scope and time planning (25%): Prepare scope statement, work package level WBS, activity level WBS with dependencies, resources and durations involved (not less than 40 activities), and developed your resource leveled schedule for the baseline. Include your supporting materials (from industry or literature) as appendix to the final report. Use MS Project as your scheduling program.

Term project

2

2-2- Cost planning(20%): Develop the cost estimations and budget of your project. At least the cost (or cost rates) of the 50% percent of your activities should be based on documented rates (including suppliers' quotes, price lists or online rates, cost index, news papers, etc.) . Estimate around 20% of the activity costs as stochastic cost estimations and run PERT analysis for them and determine the project cost estimation at the confidence levels of 75% and 90% . Set the project cost budget baseline by preparing monthly project cash flow, set the project control accounts and aggregating the project cost on each control account.

Step 3- Project Control (20%)

Develop project scheduled % progress S-Curve and PVs for the entire project. Set fictitious actual % progress for different tasks to reach a total progress between 40% and 60%. Pick an arbitrary assessment date within project implementation period to calculate SPI, CPI, ES, SV, CV and DV for the entire project and the control accounts levels. Estimate the final project duration and cost.

Term project

3

Step 4- Report submission (Report quality and organization has 20% value!): Submit the report in pdf and MS Word and add your schedule files in MSP. The main body of your report must come in 5 chapters: 1)Problem statement and project charter, 2)Scope planning, 3)Time planning, 4)Cost planning, and 5) Project control. Put all other supporting materials in the form of appendixes at the end of your report. **Add all files into One ZIP file and send it to the TA.**

(Due Bahman 11th, midnight)

Term project

4



PPCM-ProjectTitle

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1	ردیف	موضوع پروژه	دانشجوی 1	دانشجوی 2	دانشجوی 3			Suggested Project Title
2	1							Airport band and control room construction
3	2							Central stadium construction
4	3							Crop silo construction
5	4							Highrise building construction
6	5							Highway construction
7	6							Hospital construction
8	7							Industrial steel structure construction
9	8							Modular construction project
10	9							Offshore structure construction
11	10							Passanger airplane design and production project
12	11							Pipeline construction
13	12							Power plant construction
14								Suspension bridge construction
15								Tunnel construction
16								Regional jet design and manufacturing
17								Commercial- Administrative Complex
18								Construction of high-speed rail road
19								Natural gas mega refinery construction project
20								Construction of center of Iran's astronomy
21								A mega recreation center in Kish island
22								A multi level parking building
23								Construction of a musical Research and dissemination center
24								Dam construction project
25								Artificial lake construction project