CIVE 332 Civil Engineering Systems and Project Management
ENVE 335 Decision-Making for Environmental Engineers
Assignment No. 3

(Total marks: 100)

Due Monday March 8th 11:59pm EST on Crowdmark

1) What is resource levelling? What techniques can you use to optimize an objective function for resource demand? (2 marks)

2) What are the three main objectives of project management? What is the function of the control loop in project management? Draw a schematic to visually represent a control loop on typical civil engineering projects. (3 marks)

3) You are managing a landfill project with an initial budget estimate of $2 million. During interim cost and schedule performance analysis, you determined that:

- You should have spent $500,000 till now based on your initial plans and 1,000 person-days of scheduled activities
- You spent $600,000 till now and completed 1,100 person-days of scheduled activities, which should have cost $450,000 based on your initial plans.
- You re-estimated the budget required for the remaining work to be done as $1,500,000.

Draw a chart to represent your plan and your interim findings. What can you say about the cost and schedule performance of this project (show your calculations)? What is the estimated total cost, assuming no further cost overruns? (15 marks)

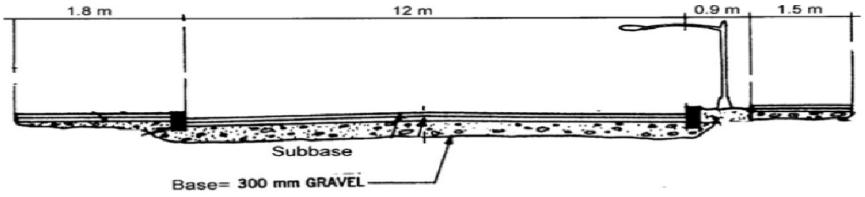
4) The following question is adapted from the Hendrickson (2008) on-line textbook referenced in our syllabus https://www.cmu.edu/cee/projects/PMbook/05_Cost_Estimation.html
The total construction cost of a refinery with a production capacity of 100,000 bbl/day in Caracas, Venezuela, completed in 1977 was $40 million. It was proposed that a similar refinery with a production capacity of $160,000 bbl/day be built in New Orleans, LA for completion in 2021. For the additional information given below, make a screening estimate of the cost of the proposed plant, in the order of the information given. (15 marks)

a. In the total construction cost for the Caracus, Venezuela plant, there was an item of $2 million for site preparation and travel, which is not typical for similar plants.
b. The variation of sizes of the refineries can be approximated by the exponential law with m = 0.6.
c. The inflation rate in U.S. dollars was approximately 9% per year from 1977 to 1995, and 4% from 1995-2021.
d. An adjustment factor of 1.40 was suggested for the project to account for the increase of labor cost from Caracas, Venezuela to New Orleans, LA.
e. New air pollution equipment for the New Orleans, LA plant cost $4 million in 2021 US dollars (it was not required for the Caracas plant).

Note: The site condition at New Orleans required special piling foundation, which cost $2 million in 2021 US dollars.

5) The cross section of a highway under construction is shown below. You are involved with the earth-moving subcontractor engaged in the following activities:

Activity	Description	Quantity per 100m
1	Excavation (Common Earth, using wheel-mounted front end loader)	684 m^3
2	Prepare and Roll Sub-Base	1620 m^2
3	Base for road, 300 mm Gravel, Bank Run	1200 m^2



a) Investigate and list possible methods to do the common-earth excavation activity using the optional wheel-mounted front-end loader capacities in the attached RS Means tables. What choice would you make? (5 marks)

b) Determine the crew type, the duration, and the cost (including overhead and profit) of the activities above (each highway section of 300m). (5 marks)

022 | Earthwork

022 200 | Excav./Backfill/Compact.

			CREW	DAILY OUTPUT	LABOR-HOURS	UNIT	BARE COSTS MAT.	BARE COSTS LABOR	BARE COSTS EQUIP.	BARE COSTS TOTAL	TOTAL INCL O&P
204	0800	Compaction in 300 mm layers, hand tamp, add to above	1 Clab	25.99	.308	m^3		6.35		6.35	10
	0900	Roller compaction operator walking, add (R022-220)	B-10A	115	.104			2.63	.79	3.42	4.92
	1000	Air tamp, add	B-9	218	.183			3.86	.80	4.66	7
	1100	Vibrating plate, add	A-1	68.81	.116			2.40	.97	3.37	4.85
216	0010	**BORROW, LOADING AND/OR SPREADING**									
	4000	Common earth, shovel, 0.76 m^3 bucket	B-12N	642	.025	m^3	6.75	.65	.97	8.37	9.45
	4010	1.15 m^3 bucket	B-12O	868	.018		6.75	.48	1.05	8.28	9.30
	4020	2.29 m^3 bucket	B-12T	1,376	.012		6.75	.30	.91	7.96	8.85
	4030	Front end loader, wheel mounted									
	4050	0.57 m^3 bucket	B-10R	421	.029	m^3	6.75	.72	.56	8.03	9.15
	4060	1.15 m^3 bucket	B-10S	742	.016		6.75	.41	.42	7.58	8.50
	4070	2.29 m^3 bucket	B-10T	1,204	.010		6.75	.25	.36	7.36	8.20
	4080	3.82 m^3 bucket	B-10U	1,988	.006		6.75	.15	.45	7.35	8.15
	5000	Select granular fill, shovel, 0.76 m^3 bucket	B-12N	707	.023		10.15	.59	.88	11.62	13
	5010	1.15 m^3 bucket	B-12O	956	.017		7.60	.44	.96	9	10.05
	5020	2.29 m^3 bucket	B-12T	1,514	.011		7.60	.28	.82	8.70	9.70

022 300 | Pavement Base

304	0010	**BASE** Prepare and roll sub-base, small areas to 2100 m^2	B-32A	1,254	.019	m^2		.48	.77	1.25	1.59
	0100	Large areas over 2100 m^2	B-32	3,094	.010	"		.27	.53	.80	.99
308	0010	**BASE COURSE** For roadways and large paved areas (R025-110)									
	0050	20 mm stone compacted, 75 mm deep	B-36B	3,846	.017	m^2	6.45	.41	.83	7.69	8.65
	0100	150 mm deep		3,763	.017		9.20	.42	.85	10.47	11.70
	0200	225 mm deep		2,759	.023		13.80	.57	1.16	15.53	17.35
	0300	300 mm deep		2,258	.028		18.40	.69	1.41	20.50	23
	0301	Crushed 40 mm stone base, compacted to 100 mm deep		5,017	.013		6.05	.31	.64	7	7.85
	0302	150 mm deep		3,763	.017		9.20	.42	.85	10.47	11.70
	0303	200 mm deep		2,926	.022		12.30	.54	1.09	13.93	15.55
	0304	300 mm deep		1,672	.038		18.35	.94	1.91	21.20	23.50
	0350	Bank run gravel, spread and compacted									
	0370	150 mm deep	B-32	5,017	.006	m^2	2.93	.16	.32	3.41	3.83
	0390	230 mm deep		4,097	.008		4.40	.20	.40	5	5.60
	0400	300 mm deep		3,010	.011		5.85	.27	.54	6.66	7.45
	0500	Bituminous concrete, 100 mm thick	B-25	3,800	.023		6.95	.53	.46	7.94	8.95

6) The following question is from the Hendrickson (2008) online textbook referenced in our syllabus https://www.cmu.edu/cee/projects/PMbook/. For the project described below:

a. Draw a CPM diagram and suggest a project schedule (disregarding resource limitations) (5 marks)

b. Plot the resource diagram for the schedule developed in part (a). (5 marks)

c. Suggest a project schedule that would complete the project and result in relatively constant or level requirements for labor over the course of the project (10 marks)

d. Assuming the highest number of workers available is 14, use the "Earliest Late Start" algorithm to develop a schedule that satisfies that limitation (15 marks)

e. Using the resource information in Table 2 and the schedule created in part (a), determine:

   i. The minimum project duration and its corresponding cost. (5 marks)

   ii. The minimum cost required to reduce the project duration by 9 days. (5 marks)

   iii. If the incentive for early completion is 17$/day, what is the most optimal project schedule. Show the project duration, total cost, and your crashing decisions. (5 marks)

TABLE 1

Activity	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Predecessors	---	A	A	---	B	C,D	C,D	D	H	F	E,J	F	G,I	G,I	L,N
Duration	6	7	1	14	5	8	9	3	5	3	4	12	6	2	7
Workers Per Day	0	3	0	9	5	4	2	14	10	4	1	2	7	3	5

TABLE 2

Activity	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Shortest Possible Completion Time	3	5	1	10	4	6	6	2	4	3	3	3	2	2	5
Normal Completion Time Cost ($)	150	250	80	400	220	300	260	120	200	180	220	500	100	120	500
Change in Cost Per Day Earlier Completion ($)	20	30	Infinity	15	20	25	10	35	20	Infinity	25	15	30	Infinity	10

7) For the exercise presented in the MS project tutorial, use MS Project to submit the report for the General Worker (GW) resource demand for the project in the exercise, before and after levelling.

(5 marks)

Assignment 3

Due: Monday March 8, 2021 11:59 PM (EDT)

Thanks for your submission!

Your assignment has been received and is waiting to be graded.

Review your submission

Q1 (2 points)

1 page submitted

1) What is resource levelling? What techniques can you use to optimize an objective function for resource demand?

Assignment 3

Question 1

Resource levelling refers to the process of stabilizing a work condition without increasing the total project duration. This is typically limited by the activity's float time. However, expediting certain activities is a good idea to see if the cost changes much by it. This may change the critical path, so analysis of the various possible critical paths will be required to optimize the schedule. Another possibilitity is to take the moment of the resources across the horizontal axis (check for fluctuations) or about the y-axis (optimize duration).

2 pages submitted

Q2 (3 points)

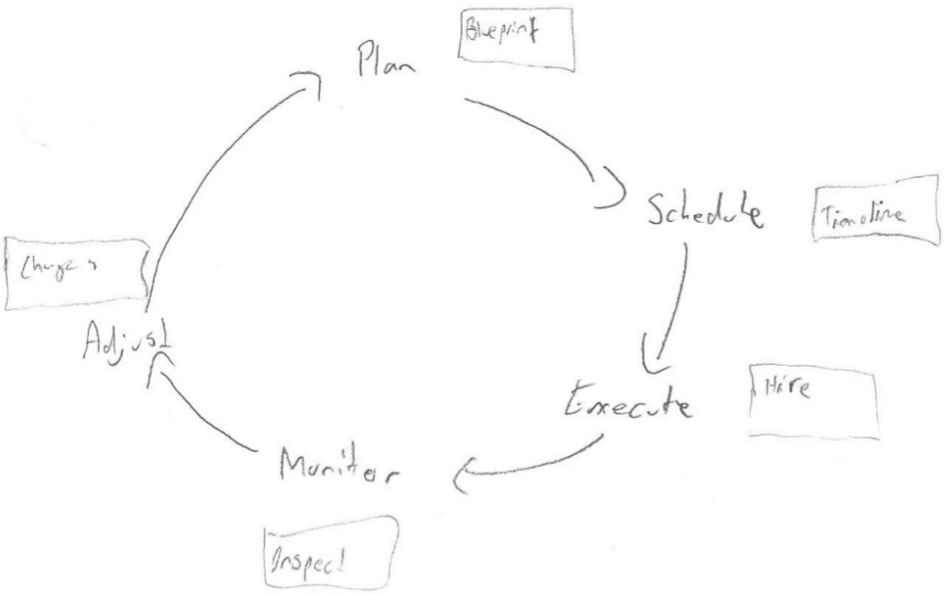
2) What are the three main objectives of project management? What is the function of the control loop in project management? Draw a schematic to visually represent a control loop on typical civil engineering projects.

Question 2

The three main objectives are to optimize:

1. Time
2. Quality
3. Cost

A *control loop* is purposed to monitor, assess, and adjust the performance of the project. For most civil engineering applications, the control loop is seen as below



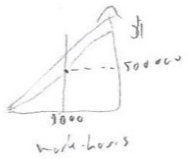
1 page submitted

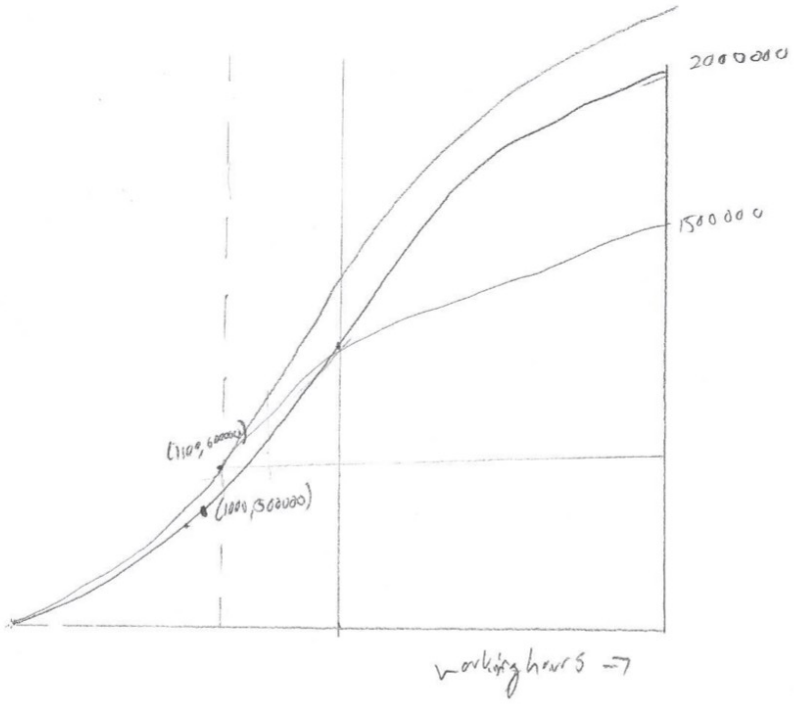
Q3 (15 points)

3) You are managing a landfill project with an initial budget estimate of $2 million. During interim cost and schedule performance analysis, you determined that : • You should have spent 500,000 till now based on your initial plans and 1,000 person-days of scheduled activities • You spent $600,000$ till now and completed $1,100$ person − days of scheduled activities, which should have cost 450,000 based on your initial plans. • You re-estimated the budget required for the remaining work to be done as $1,500,000. Draw a chart to represent your plan and your interim findings. What can you say about the cost and schedule performance of this project (show your calculations)? What is the estimated total cost, assuming no further cost overruns?

3. Budget(initial) = 2000000

Budget now = 1500000





SV = 1100 − 1000

= 100

∴ 100 > 0, ahead of schedule

CV = 450000 − 600000

= −150000

∴ −50000 < 0, over budget

work/cost ↓ (remaining estimated cost) ↓ cost/work ↓

Cost to complete = 600000 + $\left(\frac{1000}{500000} \times (2000000 - 450000) \times \frac{500000}{1000}\right)$

= 2150000

1 page submitted

Q4 (15 points)

4) The following question is adapted from the Hendrickson (2008) on-line textbook referenced in our syllabus https://www.cmu.edu/cee/projects/PMbook/05_Cost_Estimation.html The total construction cost of a refinery with a production capacity of 100,000 bbl/day in Caracas, Venezuela, completed in 1977 was $40 million. It was proposed that a similar refinery with a production capacity of 60,000 bbl/day be built in New Orleans, LA for completion in 2021. For the additional information given below, make a screening estimate of the cost of the proposed plant, in the order of the information given. (15 marks) a. In the total construction cost for the Caracus, Venezuela plant, there was an item of $2 million for site preparation and travel, which is not typical for similar plants. b. The variation of sizes of there fineries can be approximated by the exponential law with $m = 0.6$, c million in 2021 US dollars (it was not required for the Caracas plant). Note: The site condition at New Orleans required special piling foundation, which cost $2 million in 2021 US dollars.

4. 100 000 bbl/day

40 000 000

160 000 bbl/day

a) 40 000 000 - 2 000 000

= 38 000 000

b) $38\,000\,000 \times \left(\frac{1.6}{1}\right)^{0.6} = 50\,379\,701.06$

c) $50379701.06\,(1.09)^{18}(1.04)^{26} = 658\,864\,449.90$

d) $658\,864\,449.90 \times 1.4 = 922\,417\,229.90$

e) $922\,417\,229.9 + 4\,000\,000$ (pollution) $+ 2\,000\,000$ (piping) $= 928\,417\,229.90$

1 page submitted

Q5 (10 points)

Please Refer to Q5 in "W21-CIVE332-ENVE335-Assignment 3" onLEARN for more details on the problem statement.

a) Investigate and list possible methods to do the common-earth excavation activity using the optional wheel-mounted front-end loader capacities in the attached RS Means tables. What choice would you make?

b) Determine the crew type, the duration, and the cost (including overhead and profit) of the activities above (each highway section of 300m).

5.

a)

OPTION	Material	Labour	Equip	Total
0.57 m^3 bucket	6.75	0.72	0.56	8.03
1.15 m^3	6.75	0.41	0.42	7.58
2.29 m^3	6.75	0.25	0.36	7.36
3.82 m^3	6.75	0.15	0.45	7.35

Since the 3.82 m^3 bucket has lowest cost, that is the choice

b)

Excavation

3.82m^3 bucket

$684 \times 3 = 2052\ m^3$

Cost = 2052×8.15

$= 16723.80$

Duration = $\frac{2052}{1988} = 1.03219$ days

Crew Type = B-10U

Prepare and Roll

$1620 \times 3 = 4860\ m^2$, ∴ Large area

Cost = $4860 \cdot 0.99$

$= 4811.40$

Duration = $\frac{4860}{3094} = 1.5708$ days

Crew = B-32

Base Course

$1200 \times 3 = 3600 m^2$

Cost = $3600\ (7.45)$

$= 26820$

Duration = $\frac{3600}{3010} = 1.1961$ days

9 pages submitted

Q6 (50 points)

6) Please Refer to Q6 in "W21-CIVE332-ENVE335-Assignment 3" for more details about the problem statement

For the project described in Table 1: a. Draw a CPM diagram and suggest a project schedule (disregarding resource limitations) b. Plot the resource diagram for the schedule developed in part (a).

c. Suggest a project schedule that would complete the project and result in relatively constant or level requirements for labor over the course of the project

d. Assuming the highest number of workers available is 14, use the “Earliest Late Start” algorithm to develop a schedule that satisfies that limitation
e. Using the resource information in Table 2 and the schedule created in part (a), determine: i. The minimum project duration and its corresponding cost.

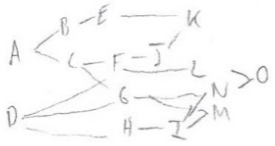
ii. The minimum cost required to reduce the project duration by 9 days.

iii. If the incentive for early completion is 17$/day, what is the most optimal project schedule. Show the project duration, total cost, and your crashing decisions.

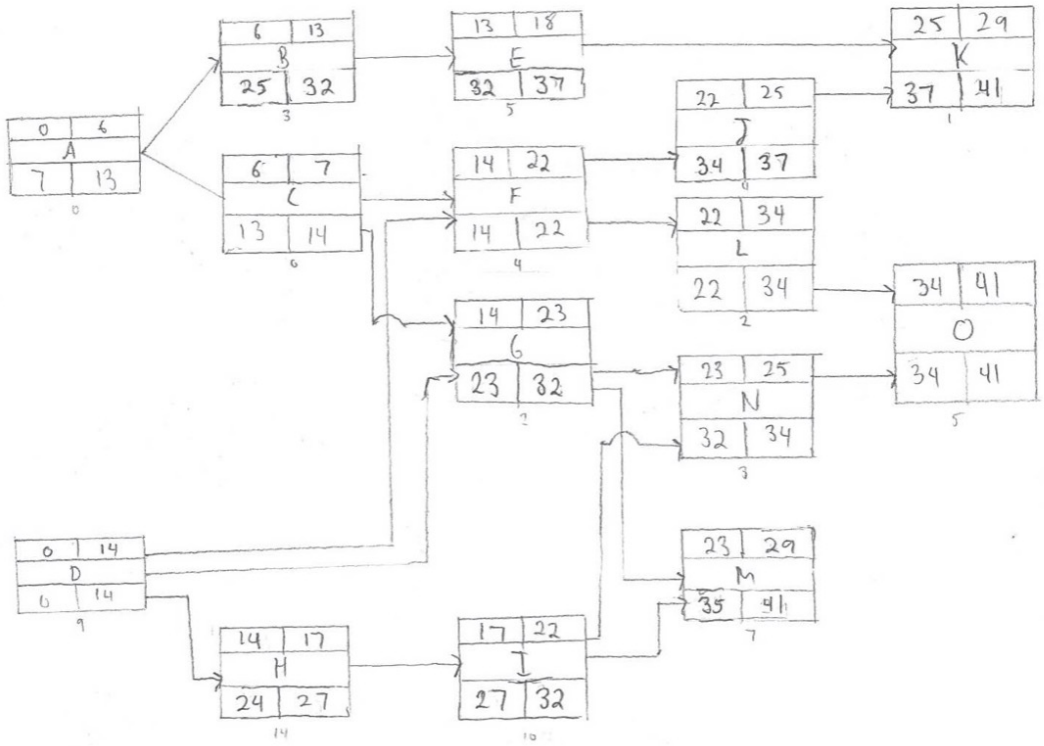
6a

	A	B	C	D
1	**Proposed Schedule = A and D start from t=0**			
2	*Day*	*Work*		
3	1	A,D		
4	2	A,D		
5	3	A,D		
6	4	A,D		
7	5	A,D		
8	6	A,D		
9	7	D,C,B		
10	8	D,B		
11	9	D,B		
12	10	D,B		
13	11	D,B		
14	12	D,B		
15	13	D,B		
16	14	D,E		
17	15	E,F,G,H		
18	16	E,F,G,H		
19	17	E,F,G,H		
20	18	E,F,G,I		
21	19	F,G,I		
22	20	F,G,I		
23	21	F,G,I		
24	22	F,G,I		
25	23	G,J,L		
26	24	J,L,M,N		
27	25	J,L,M,N		
28	26	L,M,K		
29	27	L,M,K		
30	28	L,M,K		
31	29	L,M,K		
32	30	L		
33	31	L		
34	32	L		
35	33	L		
36	34	L		
37	35	O		
38	36	O		
39	37	O		
40	38	O		
41	39	O		
42	40	O		
43	41	O		

6.


A
B
E
K
C
F
J
L
D
G
N
O
M
H
I

6a

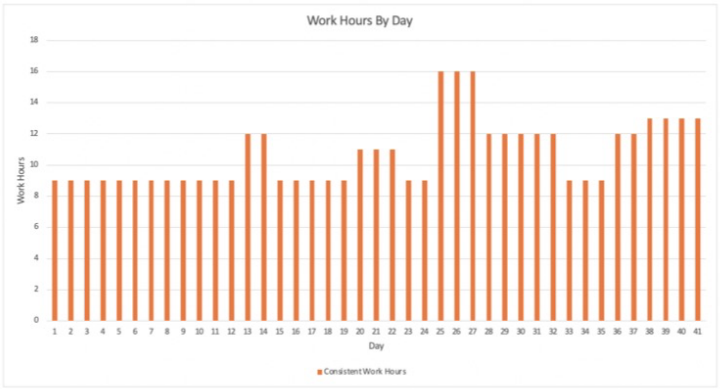

0 6
A
7 13
0
6 13
B
25 32
3
13 18
E
32 37
5
25 29
K
37 41
1
22 25
J
34 37
0
6 7
C
13 14
6
14 22
F
14 22
4
22 34
L
22 34
2
34 41
O
34 41
5
14 23
G
23 32
2
23 25
N
32 34
3
0 14
D
6 14
9
23 29
M
35 41
7
14 17
H
24 27
14
17 22
I
27 32
10

6b

Day	Work	Hours
1	A,D	9
2	A,D	9
3	A,D	9
4	A,D	9
5	A,D	9
6	A,D	9
7	D,C,B	12
8	D,B	12
9	D,B	12
10	D,B	12
11	D,B	12
12	D,B	12
13	D,B	12
14	D,E	14
15	E,F,G,H	25
16	E,F,G,H	25
17	E,F,G,H	25
18	E,F,G,I	21
19	F,G,I	16
20	F,G,I	16
21	F,G,I	16
22	F,G,I	16
23	G,J,L	4
24	J,L,M,N	12
25	J,L,M,N	12
26	L,M,K	10
27	L,M,K	10
28	L,M,K	10
29	L,M,K	10
30	L	2
31	L	2
32	L	2
33	L	2
34	L	2
35	O	5
36	O	5
37	O	5
38	O	5
39	O	5
40	O	5
41	O	5

6c

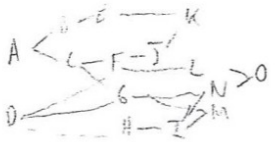
Day	Critical	Hours	Activities	Hours
1	D	9	D,A	9
2	D	9	D,A	9
3	D	9	D,A	9
4	D	9	D,A	9
5	D	9	D,A	9
6	D	9	D,A	9
7	D	9	D,C	9
8	D	9	D	9
9	D	9	D	9
10	D	9	D	9
11	D	9	D	9
12	D	9	D	9
13	D	9	D,B	12
14	D	9	D,B	12
15	F	4	B,F,G	9
16	F	4	B,F,G	9
17	F	4	B,F,G	9
18	F	4	B,F,G	9
19	F	4	B,F,G	9
20	F	4	F,G,E	11
21	F	4	F,G,E	11
22	F	4	F,G,E	11
23	L	2	L,G,E	9
24	L	2	L,G,E	9
25	L	2	L,H	16
26	L	2	L,H	16
27	L	2	L,H	16
28	L	2	L,I	12
29	L	2	L,I	12
30	L	2	L,I	12
31	L	2	L,I	12
32	L	2	L,I	12
33	L	2	L,J,N	9
34	L	2	L,J,N	9
35	O	5	O,J	9
36	O	5	O,M	12
37	O	5	O,M	12
38	O	5	O,K,M	13
39	O	5	O,K,M	13
40	O	5	O,K,M	13
41	O	5	O,K,M	13



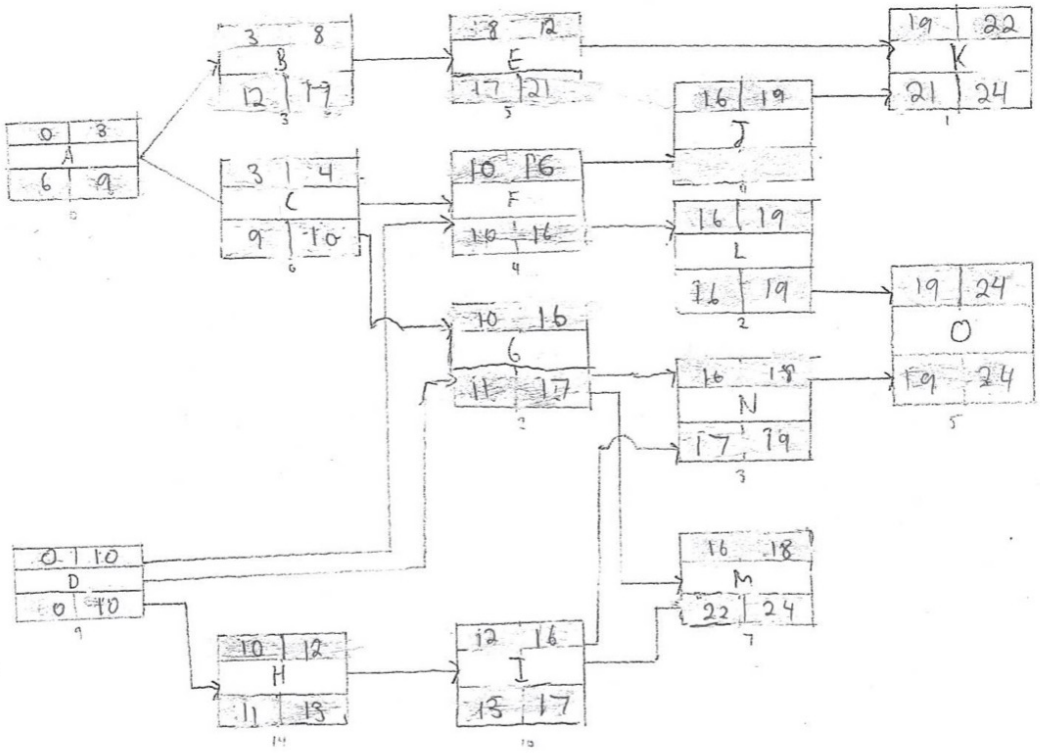
6d

	A	B	C	D	E	F	G
1	Day	Activity	Duration	Resource	Late Start	Decision	Finish
2	1	A	6	0	7	START	6
3		D	14	9	0	START	14
4	7	D	14	9	0	CONTINUE	14
5		C	1	0	13	START	7
6		B	7	3	25	START	13
7	14	D	14	9	0	CONTINUE	14
8		E	5	5	32	START	18
9	15	E	5	5	32	CONTINUE	18
10		F	8	4	14	START	22
11		G	9	2	23	START	23
12		H	3	14	24	DELAY	17
13	18	E	5	5	32	CONTINUE	18
14		F	8	4	14	START	22
15		G	9	2	23	START	23
16		I	5	10	27	DELAY	22
17	23	G	9	2	23	START	23
18		J	3	3	34	START	25
19		L	12	2	22	START	34
20		H	3	14	24	DELAY	25
21	26	L	12	2	22	CONTINUE	34
22		K	4	1	37	START	29
23		H	3	14	24	DELAY	28
24	30	L	12	2	22	CONTINUE	34
25		H	3	14	24	DELAY	32
26	35	H	3	14	24	START	37
27	38	I	5	10	27	START	42
28	43	N	2	3	32	START	44
29		M	6	7	35	START	48
30	45	M	6	7	35	CONTINUE	48
31		O	6	5	34	START	51

6.



6ei


A
0 3
6 9
B
3 8
12 14
C
3 4
9 10
D
0 10
0 10
E
8 12
17 21
F
10 16
10 16
G
10 16
11 17
H
10 12
11 13
I
12 16
15 17
J
16 19
L
16 19
16 19
K
19 22
21 24
M
16 18
22 24
N
16 18
17 19
O
19 24
19 24

a)

6ei

	A	B	C	D	E	F	G	H
1	*Activity*	*Original Days Req'd*	*New Days Req'd*	*Days Reduced*	*Normal Daily Cost*	*Increase in Cost per Day*	*Actual Daily Cost*	*Actual Cost*
2	A	6	3	3	150	20	210	630
3	B	7	5	2	250	30	310	1550
4	C	1	1	0	80	1000	80	80
5	D	14	10	4	400	15	460	4600
6	E	5	4	1	220	20	240	960
7	F	8	6	2	300	25	350	2100
8	G	9	6	3	260	10	290	1740
9	H	3	2	1	120	35	155	310
10	I	5	4	1	200	20	220	880
11	J	3	3	0	180	1000	180	540
12	K	4	3	1	220	25	245	735
13	L	12	3	9	500	15	635	1905
14	M	6	2	4	100	30	220	440
15	N	2	2	0	120	1000	120	240
16	O	7	5	2	500	10	520	2600
17								
18								
19		Duration:	24					
20		Cost:	19310					

6eii

	A	B	C	D	E	F	G	H
1	*Activity*	*Original Days Req'd*	*New Days Req'd*	*Days Reduced*	*Normal Daily Cost*	*Increase in Cost per Day*	*Actual Daily Cost*	*Actual Cost*
2	A	6	3	3	150	20	210	630
3	B	7	5	2	250	30	310	1550
4	C	1	1	0	80	1000	80	80
5	D	14	14	0	400	15	400	5600
6	E	5	4	1	220	20	240	960
7	F	8	8	0	300	25	300	2400
8	G	9	6	3	260	10	290	1740
9	H	3	2	1	120	35	155	310
10	I	5	4	1	200	20	220	880
11	J	3	3	0	180	1000	180	540
12	K	4	3	1	220	25	245	735
13	L	12	5	7	500	15	605	3025
14	M	6	2	4	100	30	220	440
15	N	2	2	0	120	1000	120	240
16	O	7	5	2	500	10	520	2600
17								
18								
19		*Path*	*Length*					
20		DFLO	32	32				
21		ACFLO	22					
22		DGNO	27					
23		ABFJK	22					
24								
25		Cost:	21730					

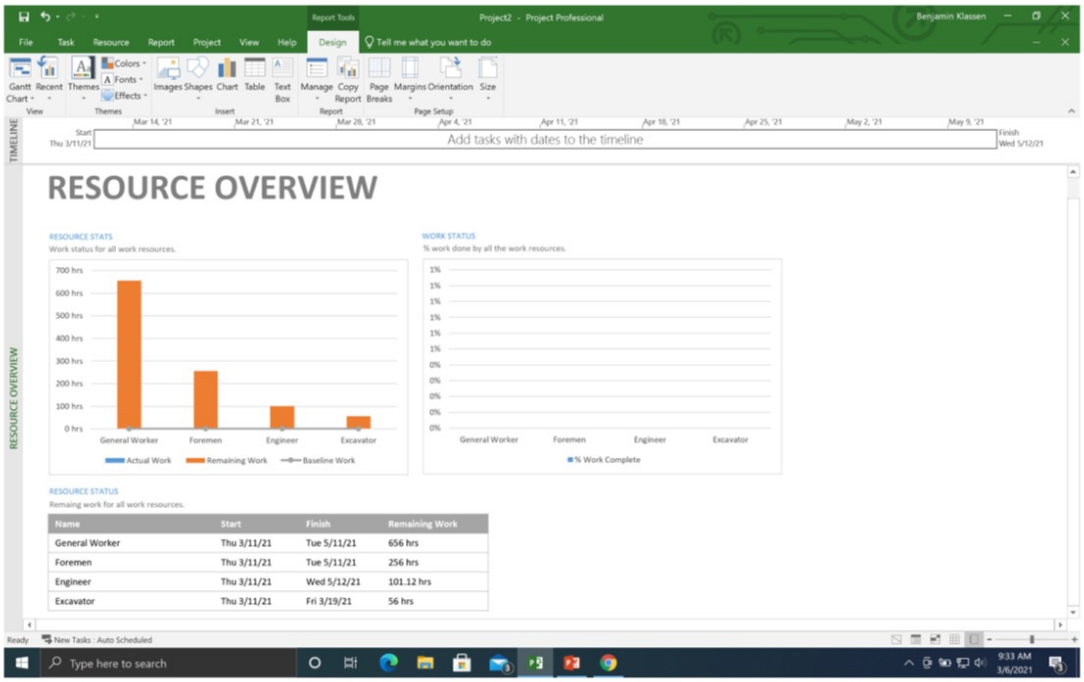
6eiii

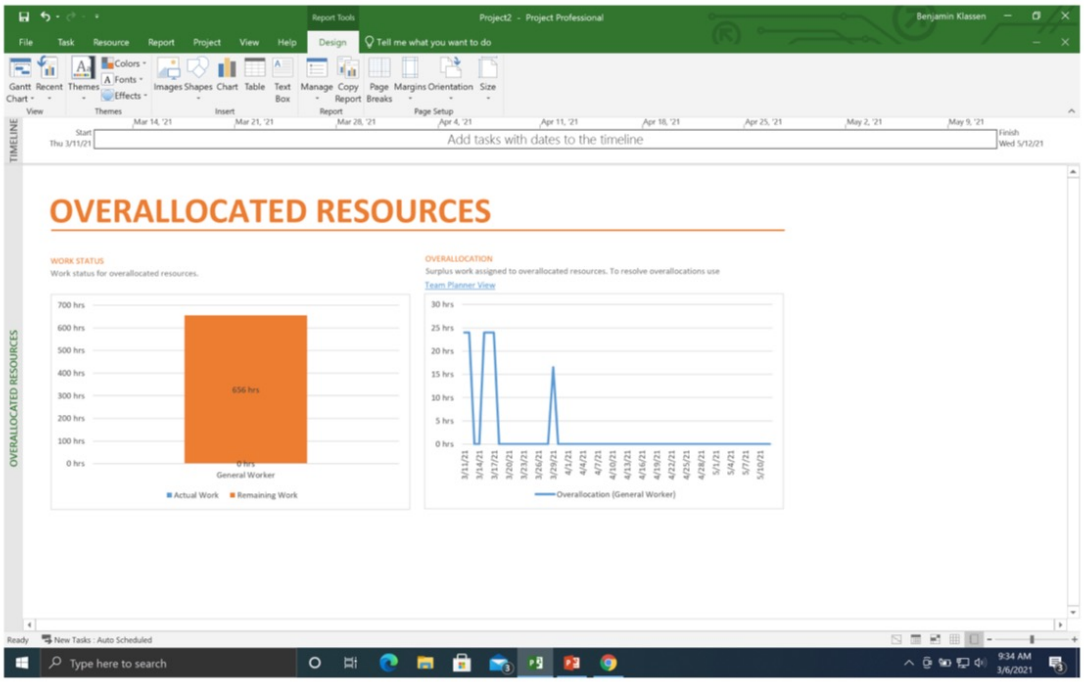
	A	B	C	D	E	F	H	I
1	*Activity*	*Original Days Req'd*	*New Days Req'd*	*Days Reduced*	*Normal Daily Cost*	*Increase in Cost per Day*	*Actual Daily Cost*	*Actual Cost*
2	A	6	3	3	150	20	210	630
3	B	7	5	2	250	30	310	1550
4	C	1	1	0	80	1000	80	80
5	D	14	10	4	400	15	460	4600
6	E	5	4	1	220	20	240	960
7	F	8	6	2	300	25	350	2100
8	G	9	6	3	260	10	290	1740
9	H	3	2	1	120	35	155	310
10	I	5	4	1	200	20	220	880
11	J	3	3	0	180	1000	180	540
12	K	4	3	1	220	25	245	735
13	L	12	3	9	500	15	635	1905
14	M	6	2	4	100	30	220	440
15	N	2	2	0	120	1000	120	240
16	O	7	5	2	500	10	520	2600
17								
18								
24								
25		Cost:	19021					

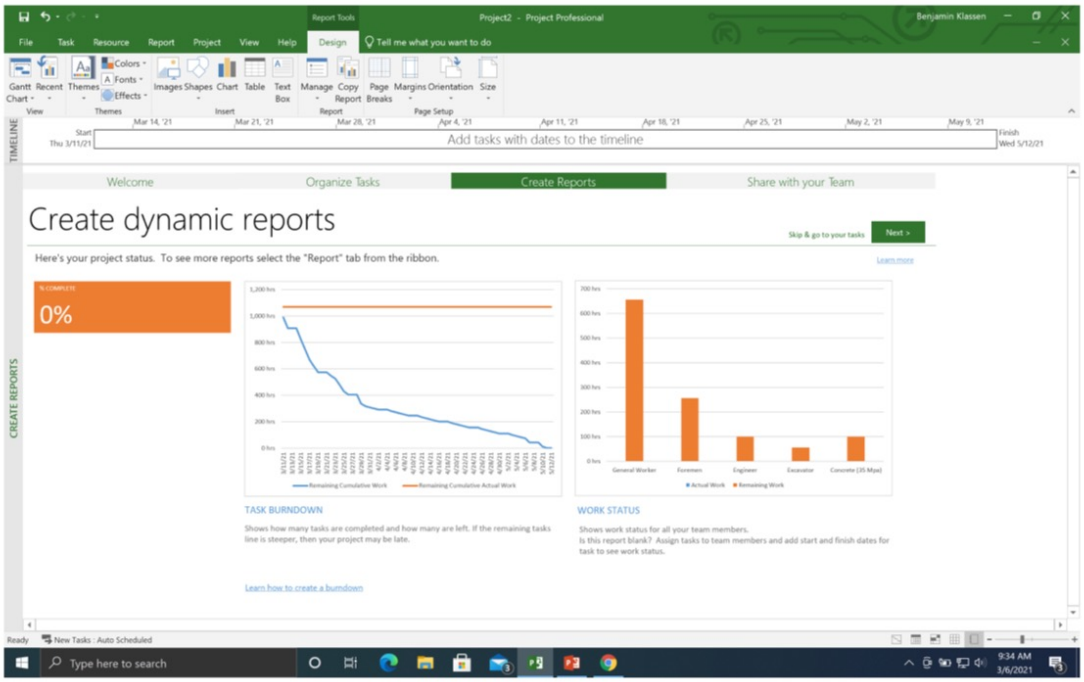
Q7 (5 points)

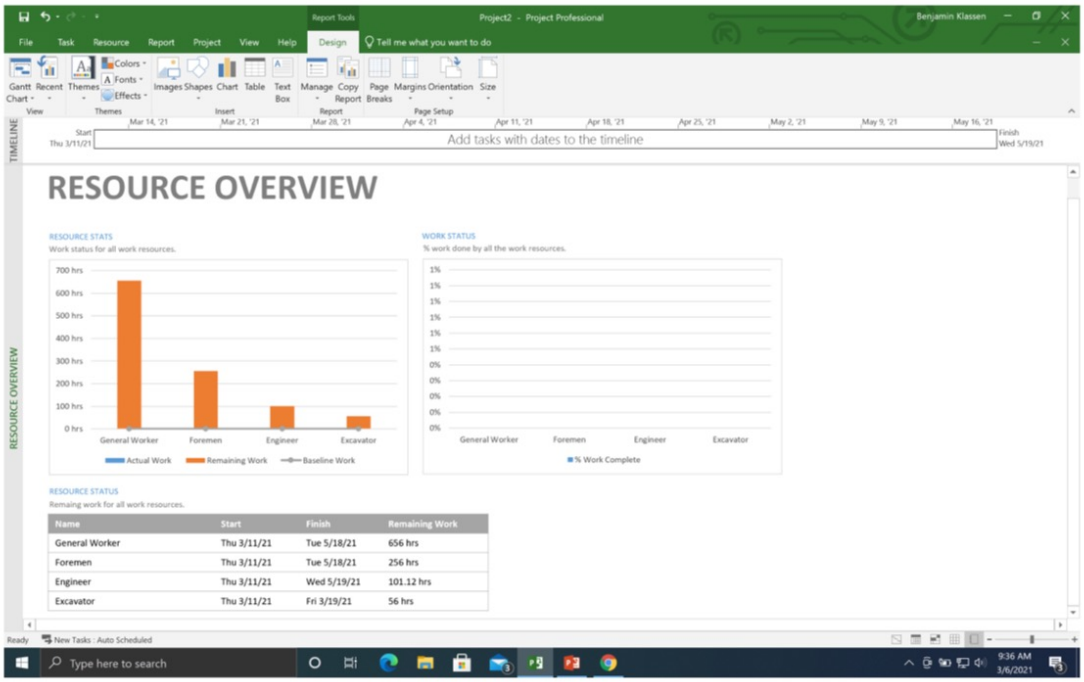
6 pages submitted

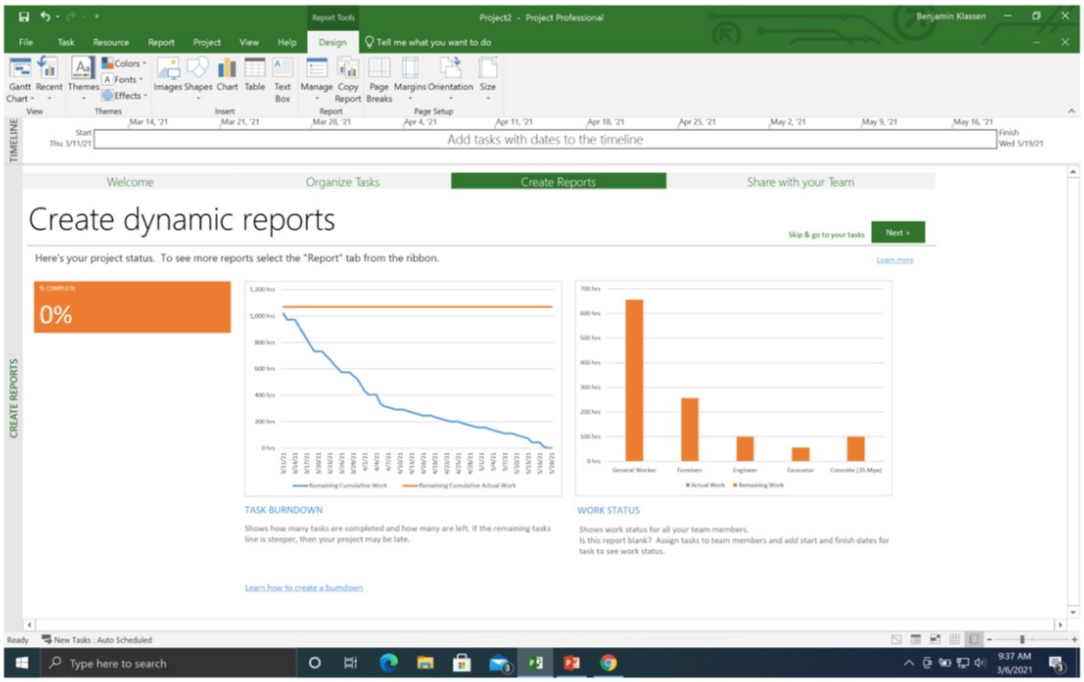
7) For the exercise presented in the MS project tutorial, use MS Project to submit the report for the General Worker (GW) resource demand for the project in the exercise, before and after levelling.

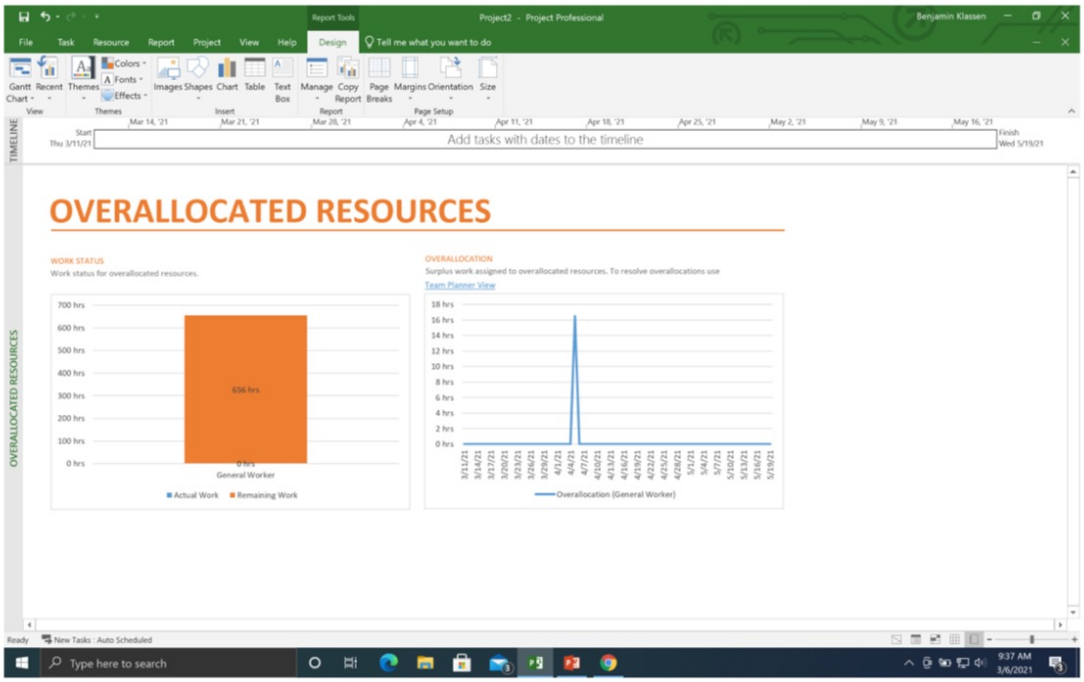

Project2 - Project Professional
Benjamin Klassen
Report Tools
File
Task
Resource
Report
Project
View
Help
Design
Tell me what you want to do
Gantt Chart
Recent
Themes
Colors
Fonts
Effects
Images
Shapes
Chart
Table
Text Box
Manage
Copy Report
Page Breaks
Margins
Orientation
Size
View
Themes
Insert
Report
Page Setup
TIMELINE
Start
Thu 3/11/21
Add tasks with dates to the timeline
Finish
Wed 5/12/21
RESOURCE OVERVIEW
RESOURCE OVERVIEW
RESOURCE STATS
Work status for all work resources.
700 hrs
600 hrs
500 hrs
400 hrs
300 hrs
200 hrs
100 hrs
0 hrs
General Worker
Foremen
Engineer
Excavator
Actual Work
Remaining Work
Baseline Work
WORK STATUS
% work done by all the work resources.
1%
0%
% Work Complete
RESOURCE STATUS
Remaing work for all work resources.
Name
Start
Finish
Remaining Work
General Worker
Thu 3/11/21
Tue 5/11/21
656 hrs
Foremen
Thu 3/11/21
Tue 5/11/21
256 hrs
Engineer
Thu 3/11/21
Wed 5/12/21
101.12 hrs
Excavator
Thu 3/11/21
Fri 3/19/21
56 hrs
Ready
New Tasks : Auto Scheduled
Type here to search
9:33 AM
3/6/2021


Project2 - Project Professional
Benjamin Klassen
Add tasks with dates to the timeline
OVERALLOCATED RESOURCES
WORK STATUS
Work status for overallocated resources.
OVERALLOCATION
Surplus work assigned to overallocated resources. To resolve overallocations use
Team Planner View
656 hrs
General Worker
Actual Work
Remaining Work
Overallocation (General Worker)
Type here to search


Project2 - Project Professional
Report Tools
Benjamin Klassen
File
Task
Resource
Report
Project
View
Help
Design
Tell me what you want to do
Gantt Chart
Recent
Themes
Colors
Fonts
Effects
Images
Shapes
Chart
Table
Text Box
Manage
Copy Report
Page Breaks
Margins
Orientation
Size
View
Themes
Insert
Report
Page Setup
TIMELINE
Start
Thu 3/11/21
Add tasks with dates to the timeline
Finish
Wed 5/12/21
Welcome
Organize Tasks
Create Reports
Share with your Team
CREATE REPORTS
Create dynamic reports
Skip & go to your tasks
Next >
Here's your project status. To see more reports select the "Report" tab from the ribbon.
Learn more
% COMPLETE
0%
TASK BURNDOWN
Shows how many tasks are completed and how many are left. If the remaining tasks line is steeper, then your project may be late.
Learn how to create a burndown
WORK STATUS
Shows work status for all your team members.
Is this report blank? Assign tasks to team members and add start and finish dates for task to see work status.
Ready
New Tasks : Auto Scheduled
Type here to search
9:34 AM
3/6/2021


Project2 - Project Professional
Benjamin Klassen
Report Tools
File Task Resource Report Project View Help Design
Tell me what you want to do
Gantt Chart Recent Themes Colors Fonts Effects Images Shapes Chart Table Text Box Manage Copy Report Page Breaks Margins Orientation Size
View Themes Insert Report Page Setup
TIMELINE
Start Thu 3/11/21
Add tasks with dates to the timeline
Finish Wed 5/19/21
RESOURCE OVERVIEW
RESOURCE OVERVIEW
RESOURCE STATS
Work status for all work resources.
700 hrs
600 hrs
500 hrs
400 hrs
300 hrs
200 hrs
100 hrs
0 hrs
General Worker
Foremen
Engineer
Excavator
Actual Work
Remaining Work
Baseline Work
WORK STATUS
% work done by all the work resources.
1%
0%
% Work Complete
RESOURCE STATUS
Remaing work for all work resources.
Name Start Finish Remaining Work
General Worker Thu 3/11/21 Tue 5/18/21 656 hrs
Foremen Thu 3/11/21 Tue 5/18/21 256 hrs
Engineer Thu 3/11/21 Wed 5/19/21 101.12 hrs
Excavator Thu 3/11/21 Fri 3/19/21 56 hrs
Ready
New Tasks : Auto Scheduled
Type here to search
9:36 AM
3/6/2021


Project2 - Project Professional
Benjamin Klassen
Report Tools
File
Task
Resource
Report
Project
View
Help
Design
Tell me what you want to do
Gantt Chart
Recent
Themes
Colors
Fonts
Effects
Images
Shapes
Chart
Table
Text Box
Manage
Copy Report
Page Breaks
Margins
Orientation
Size
View
Themes
Insert
Report
Page Setup
TIMELINE
Start
Thu 3/11/21
Mar 14, '21
Mar 21, '21
Mar 28, '21
Apr 4, '21
Apr 11, '21
Apr 18, '21
Apr 25, '21
May 2, '21
May 9, '21
May 16, '21
Add tasks with dates to the timeline
Finish
Wed 5/19/21
CREATE REPORTS
Welcome
Organize Tasks
Create Reports
Share with your Team
Create dynamic reports
Skip & go to your tasks
Next >
Here's your project status. To see more reports select the "Report" tab from the ribbon.
Learn more
% COMPLETE
0%
TASK BURNDOWN
Shows how many tasks are completed and how many are left. If the remaining tasks line is steeper, then your project may be late.
Learn how to create a burndown
WORK STATUS
Shows work status for all your team members.
Is this report blank? Assign tasks to team members and add start and finish dates for task to see work status.
General Worker
Foremen
Engineer
Excavator
Concrete (35 Mpa)
Actual Work
Remaining Work
Ready
New Tasks : Auto Scheduled
Type here to search
9:37 AM
3/6/2021


Project2 - Project Professional
Benjamin Klassen
Report Tools
File
Task
Resource
Report
Project
View
Help
Design
Tell me what you want to do
Gantt Chart
Recent
Themes
Colors
Fonts
Effects
Images
Shapes
Chart
Table
Text Box
Manage
Copy Report
Page Breaks
Margins
Orientation
Size
View
Themes
Insert
Report
Page Setup
TIMELINE
Start
Thu 3/11/21
Add tasks with dates to the timeline
Finish
Wed 5/19/21
OVERALLOCATED RESOURCES
OVERALLOCATED RESOURCES
WORK STATUS
Work status for overallocated resources.
700 hrs
600 hrs
500 hrs
400 hrs
300 hrs
200 hrs
100 hrs
0 hrs
656 hrs
0 hrs
General Worker
Actual Work
Remaining Work
OVERALLOCATION
Surplus work assigned to overallocated resources. To resolve overallocations use
Team Planner View
18 hrs
16 hrs
14 hrs
12 hrs
10 hrs
8 hrs
6 hrs
4 hrs
2 hrs
0 hrs
Overallocation (General Worker)
Ready
New Tasks : Auto Scheduled
Type here to search
9:37 AM
3/6/2021

Back to top