Engineering Project Management (0405-464)

Project Scheduling Software Assignment

The following tables provide information on the activities to be performed for a project. Learn how to use the Microsoft Project software package and then use it to:

a.   Construct the Gantt chart
b.   Construct the network diagram
c.   Identify the critical path
d.   Determine the total slack and free slack for each activity
e.   Determine the project duration (in weeks)
f.   Determine the project completion date

Notes:
* This is an individual assignment. Students must complete and submit their own work independently.
* Assume that the project will start on the first Monday following your upcoming birthday (i.e., the first working day after your birthday)
* There is one 8-hour shift per day, 8:00-16:00, Monday to Saturday
* Submit a report (hardcopy and softcopy), detailing each step with accompanying screenshots
* Submit a softcopy of your Microsoft Project file(s)

Submission due date: April 15th, 2026 @ 18:00. There will be a **penalty** of 10% per **day** late.

Activity	Activity Description	Duration (Weeks)	Predecessors
A	Detail site investigation and survey	2	—
B	Detail planning	6	A
C	Detail design	6	B
D	Preparation of site	4	C
E	Relocate services	3	C
F	Re-align overhead track electrification	4	C, E
G	Access road and ramp construction	1	D
H	Piling	2	G
J	Construct foundations and abutments	3	H
K	Construct temporary supports to support bridge deck during construction	2	F, G
L	Fabrication planning of structural steel components	2	C
M	Manufacture structural steel components (off-site)	2	L
N	Transport structural steel components and erect on-site	1	M
P	Erect pylons and fill with concrete	2	J
Q	Construct main span deck on pre-cast concrete beams	3	H, K, N, P
R	Cable-stay installation and lift the bridge deck off temporary supports	3	Q
S	Removal of temporary supports	1	R
T	Electrical system installation	1	S
U	Roadway surfacing (paving)	2	S
V	Finishing and ancillaries	2	T, U
W	Commissioning—cut-over	1	V
X	Formal hand-over and ceremony	1	W
Y	Project sign-off	1	X
Z	Administrative closure	1	W