Remodeling Chemical Lab: AON CPM Example using dynamic array formulas in EXCEL

Photios G. Ioannou **Sep 17, 2022**

(See below and to the right of this table for explanatory notes about the formulas used)

Implicit intersection operator: @ (microsoft.com)

CPM Table for Activity-on-Node Network

No.	Activity Description	Pred	T	ESD	EFD	LSD	LFD	TF	FF	INTF	INDF	Crit
005	Contract award		0	0	0	0	0	0	0	0	0	C
010	Obtain vinyl floor covering	005	5	0	5	21	26	21	21	0	21	
015	Obtain cabinets	005	10	0	10	3	13	3	2	1	2	
020	Strip room	005	3	0	3	1	4	1	0	1	0	
025	Obtain fume hood	005	10	0	10	4	14	4	2	2	2	
030	Obtain chemical sink	005	10	0	10	7	17	7	4	3	4	
035	Painter availability	005	20	0	20	0	20	0	0	0	0	C
040	Replace existing fume duct	020	3	3	6	6	9	3	2	1	1	
045	Rough-in plumbing and electrical	020	5	3	8	4	9	1	0	1	0	
050	Repair walls and ceiling	040, 045	4	8	12	9	13	1	0	1	0	
055	Repair floor	045	1	8	9	12	13	4	3	1	2	
060	Install wall cabinets	015, 050, 055	5	12	17	13	18	1	0	1	0	
065	Install new fume hood	025, 050, 055	1	12	13	14	15	2	0	2	0	
070	Install 1/3 base cabinets	015, 065	1	13	14	15	16	2	0	2	0	
075	Install 2/3 base cabinets	070	2	14	16	16	18	2	1	1	0	
080	Install chemical sink	030, 070	1	14	15	17	18	3	2	1	0	
085	Finish plumbing and electrical	060, 075, 080	2	17	19	18	20	1	1	0	0	
090	Paint cabinets	035, 085	6	20	26	20	26	0	0	0	0	C
095	Paint walls and ceiling	035, 085	3	20	23	23	26	3	3	0	3	
100	Lay vinyl floor	010, 090, 095	1	26	27	26	27	0	0	0	0	C

Project Duration = 27