

Table 1

Best Practice Recommendations Based on the Literature

Priority Rule	Definition	Conditions
First Come First Served (FCFS)	Assign the first eligible activity the highest priority, regardless of other factors.	With simple tasks and when new projects arrive randomly (dynamic) ^{43, 44}
Shortest Activity for Shortest Project (SASP)	Assign activities that are feasible in a short period of time with preference for short projects.	Many simple tasks with few constraints, or when there are many short projects ^{45, 46}
		Multiple dynamic projects, low resource demand ⁴⁷
Maximum Total Work Content (MAXTWK)	Assign activities that require the most resources, regardless of deadlines.	Under conditions of high resource demand ⁴⁸
		Multiple dynamic projects, high resource demand ⁴⁹
Resource Scheduling Method (RSM)	Assign priority to activities that are time sensitive subject to resources.	Static projects with low or high resource demand ^{50, 51}
Most Total Successors (MTS)	For two similar projects, assign priority to the project with the most number of activities remaining.	Static projects that have started simultaneously ^{52, 53}
Minimum Late Finish Time (LFT)	Assign activities by due dates, with priority given to activities that if there was a delay in starting, the project duration would be extended.	Increased complexity of problems ⁵⁴
		Increased network complexity ⁵⁵
Minimum Late Start Time (LST)	Assign activities by earliest available starting time, so that if there was a delay in starting, the project duration would be extended.	Single project, no constraints ⁵⁶
		Many simple tasks when resources are constrained ⁵⁷
		There are different skill levels, and possibilities of errors in estimating work, and with activity misspecification (reworks) ⁵⁸
		Multiple projects, low resource constraints ⁵⁹
		Under conditions of learning ⁶⁰

Priority rules are in order of increasing complexity.