

PROJECT SCHEDULING

THE PURPOSE OF PROJECT SCHEDULING IS TO DETERMINE WHEN DIFFERENT COMPONENT ACTIVITIES SHOULD BE UNDERTAKEN AND WHEN THEY NEED TO BE COMPLETED. SUCH INFORMATION HELPS TO COMPLETE A PROJECT ON SCHEDULE; HELPS TO IDENTIFY ACTIVITIES WHICH ^{ARE} CRITICAL TO THE ON-TIME COMPLETION OF THE PROJECT (these are activities which lie on the critical path); HELPS TO IDENTIFY ACTIVITIES WHICH CAN BE MOVED AROUND (i.e. have floats); AND HELPS TO ACHIEVE A SCHEDULE OF ACTIVITIES WHICH LEVEL RESOURCE REQUIREMENTS.

THE TECHNIQUE STUDIED HERE IS CALLED PERT. IN THIS METHOD:

- ~ NODES ARE USED TO INDICATE POINTS IN TIME WHEN ACTIVITIES BEGIN AND/OR END. (EVENTS)
- ~ ACTIVITIES ARE REPRESENTED AS ARROWS EMANATING FROM ONE NODE AND ENDING AT ANOTHER. (ONE ARROW FOR ONE ACTIVITY)
- ~ NO TWO ACTIVITIES CAN BE REPRESENTED BY THE SAME PAIR OF STARTING AND ENDING NODES (EVENTS).
- ~ USING THESE RULES (WHICH IMPLY INTRODUCING DUMMY ACTIVITIES WHICH CONSUME ZERO RESOURCES AND ZERO TIME) A NETWORK REPRESENTING ALL THE ACTIVITIES AND THEIR INTER-RELATIONSHIPS (PRECEDENCE RELATIONS) IS CONSTRUCTED.
- ~ THIS NETWORK IS USED TO CALCULATE ALL NEC. INFO.