World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

General Network with Four Nodes and Four Activities with Triangular Fuzzy Number as Activity Times

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Abstract : In many projects, we have to use human judgment for determining the duration of the activities which may vary from person to person. Hence, there is vagueness about the time duration for activities in network planning. Fuzzy sets can handle such vague or imprecise concepts and has an application to such network. The vague activity times can be represented by triangular fuzzy numbers. In this paper, a general network with fuzzy activity times is considered and conditions for the critical path are obtained also we compute total float time of each activity. Several numerical examples are discussed.

Keywords: PERT, CPM, triangular fuzzy numbers, fuzzy activity times

Conference Title: ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020