A Minimum Spanning Tree (MST) is a subgraph of a connected, undirected, weighted graph that:

1. Spans all the vertices in the graph (i.e., all nodes are connected)

2. Is a tree (i.e., contains no cycles)

3. Has the minimum possible total edge weight

In simpler terms, an MST connects all nodes together with the least total cost, and without creating loops.

Minimum Spinning Tree

Full Graph