**Discrete Mathematics**
Graph Theory - 2

Non-example of Eulerian graph

By
Prof. S.R.S Iyengar
**Department of Computer Science**
IT Ropar

There are graphs where this is not possible, look at a star graph, star graph is a graph with a node in the middle, and other n-1 nodes connected to them by a single edge,
(Refer Slide Time: 00:16)
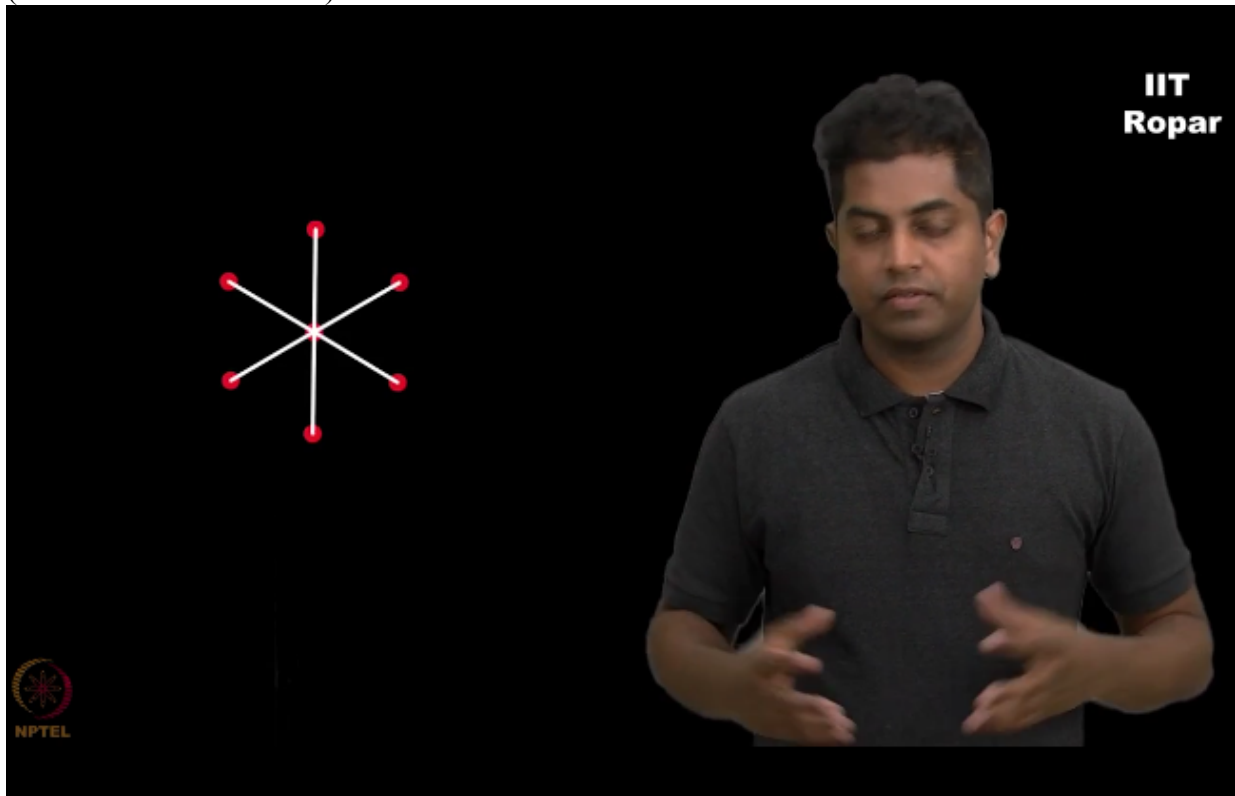
no more edges like this, here you obviously cannot observe, you cannot start from a node, you go to the center, this is the only possible way and then you should go to another node, you go to some node and then you're locked,
(Refer Slide Time: 00:33)
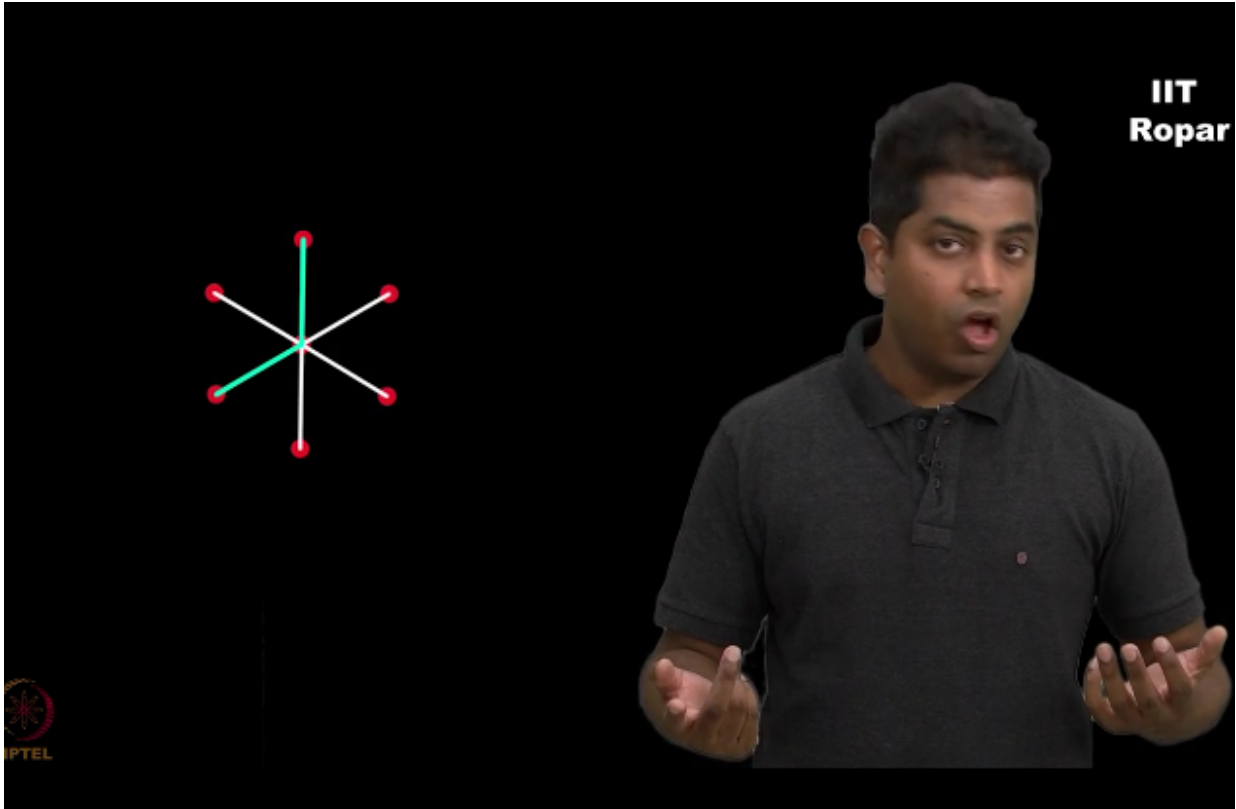
locked because you cannot use the same edge twice, so this graph is obviously not Eulerian.
(Refer Slide Time: 00:40)
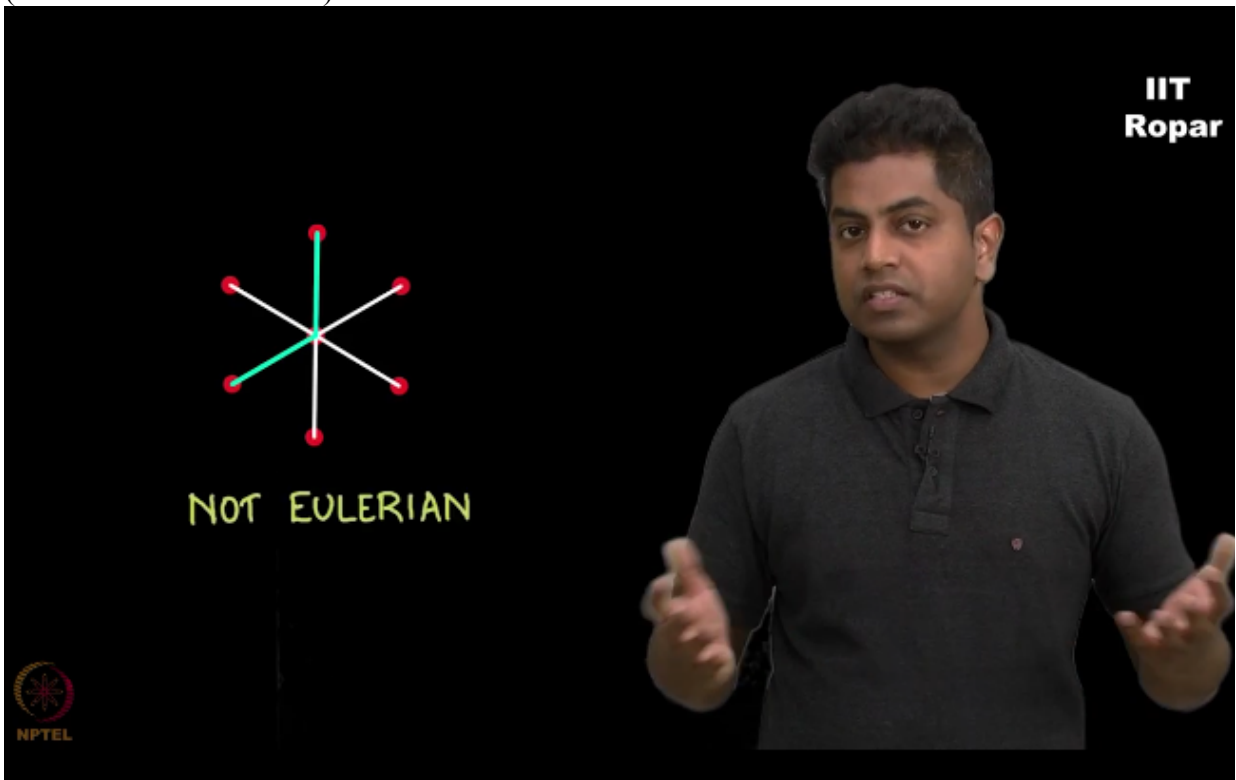
IIT MADRAS PRODUCTION

Founded by
Department of Higher Education
Ministry of Human Resources Development
Government of India

www.nptel.iitm.ac.in

Copyrights Reserved