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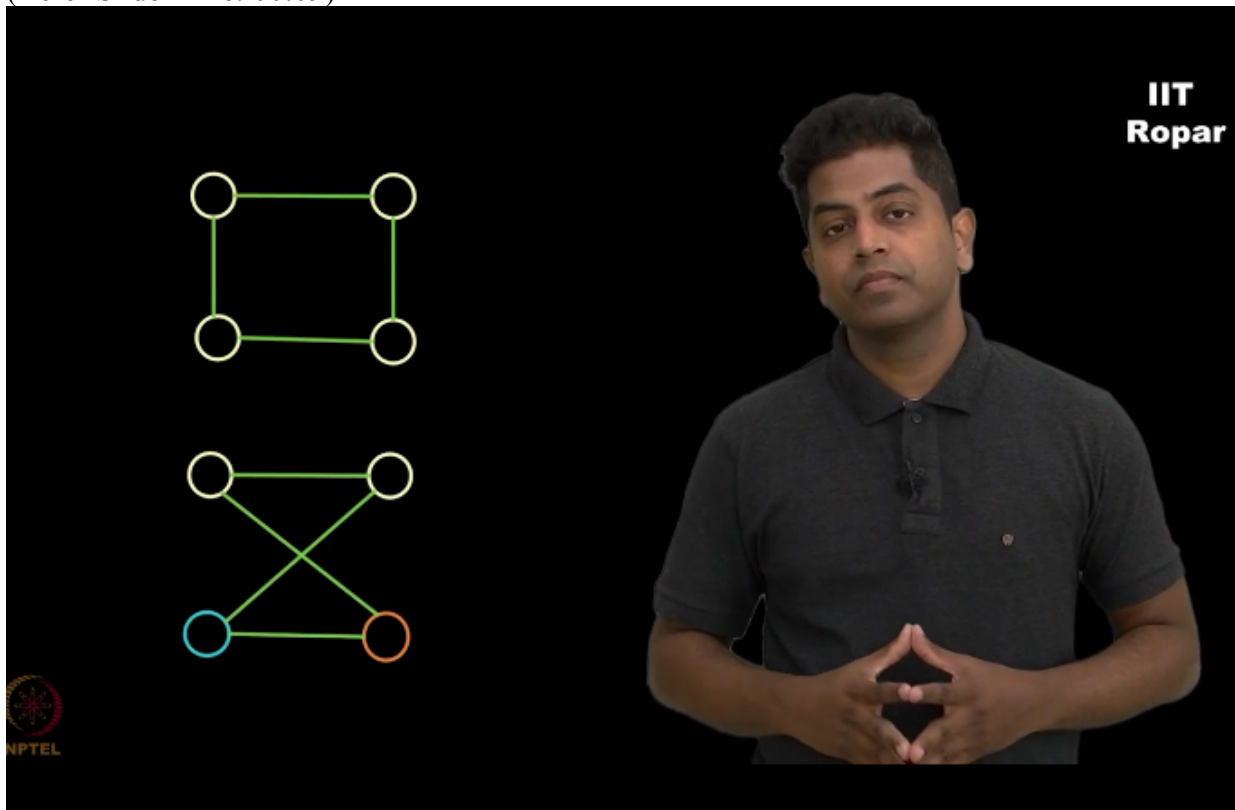
NPTEL ONLINE CERTIFICATION COURSE

**Discrete Mathematics
Graph Theory - 2**

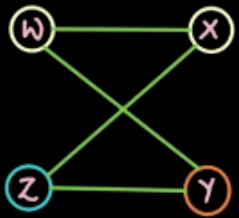
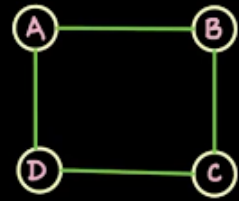
Isomorphism - Introduction

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Do you see these two friendship networks between 4 people,
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here are a friends A, B, C, D, and then here again we have 4 other friends W, X, Y, Z,
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as you can see these 4 are different people, those 4 are different people, but if I were to exclude the people here and only look at these two graphs, are they structurally the same? Doesn't look like it, look at it now,
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Same?

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don't you think it is the same structurally, it is indeed, so such graphs are called isomorphic graph, by iso we mean same, but morphic we mean same yet different, (Refer Slide Time: 00:56)

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ISOMORPHIC

Same Different

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iso same, morphic means different, so there is a very well-known English oxymoron which goes like this we say same difference, which means it is different but they are similar.

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