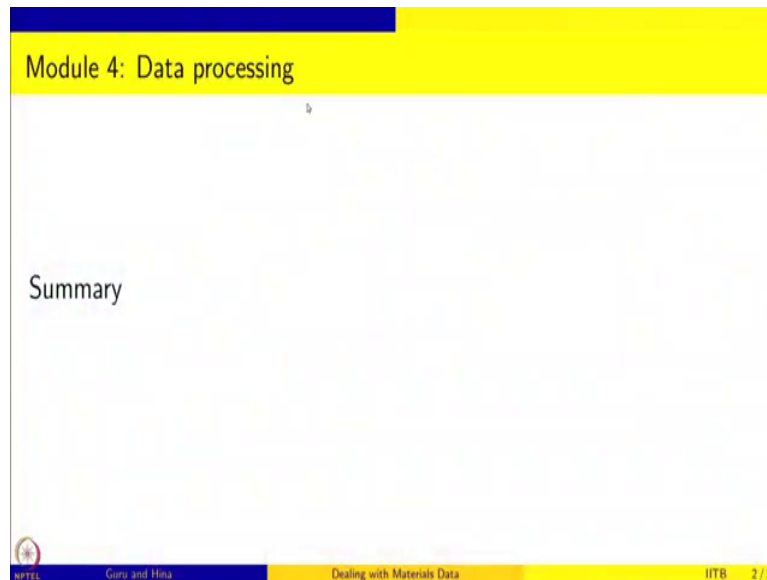**Dealing with Materials Data: Collection, Analysis and Interpretation**
Professor M P Gururajan
Professor Hina A Gokhale
Department of Metallurgical Engineering and Materials Science
Indian Institute of Technology, Bombay
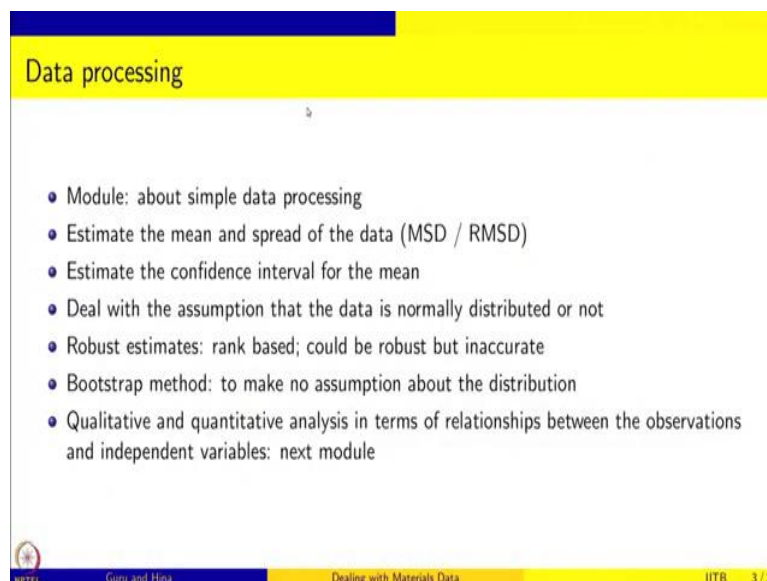**Lecture 67 - Summary: Data processing**

(Refer Slide Time: 0:24)

Welcome to Dealing with Materials Data: Collection, Analysis and Interpretation, we are in module 4 data processing. This is the summary session. This module is about simple data processing, we estimated the mean and spread of data and we estimated the confidence interval for the mean for the distribution from which this data is sampled. So, we basically connected these values to the distribution. And we assumed that the data is normally distributed and we found out how to deal with it.

So, that involves normal distribution, t distribution and chi-squared distribution. But when the data is not normally distributed, it is also possible to do the analysis. So, we did some robust estimates which are ranked based, they are robust, but they can be inaccurate. And, we also looked at bootstrap method which makes no assumption about the underlying distribution. So, but these are not the only data analysis that we do, qualitative and quantitative analysis in terms of relationships between the values that you measure and the independent variables that you have in your experiment is also very important and that leads us to the regression and modeling and curve fitting and those kind of analysis, which we are going to do in the next module.

So, this is very simple data processing or data processing one, we are going to do more detailed data processing in the module to come. Thank you.