

NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

NPTEL Video Course - Electrical Engineering - NOC:A brief Introduction of Micro-Sensors

Subject Co-ordinator - Prof. Santanu Talukder

Co-ordinating Institute - IIT - Madras

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 1 - Introduction to Microscale Sensors or MEMS

Lecture 2 - Scaling effect

Lecture 3 - Some Simple Mechanics

Lecture 4 - Basic Mechanics - Part 1

Lecture 5 - Basic Mechanics - Part 2

Lecture 6 - Basic Mechanics - Part 3

Lecture 7 - Electrostatics

Lecture 8 - Electrostatic force

Lecture 9 - Coupled electromechanics

Lecture 10 - Stiction

Lecture 11 - Si crystal structure

Lecture 12 - Si etching

Lecture 13 - KOH etching

Lecture 14 - TMAH etching

Lecture 15 - Deposition and Lithography

Lecture 16 - Lithography

Lecture 17 - Pressure sensor types, membrane, Piezoelectric sensing, capacitive sensing

Lecture 18 - Pressure Sensor - II

Lecture 19 - Pressure Sensor - III

Lecture 20 - Accelerometer - I

Lecture 21 - Accelerometer - II

Lecture 22 - Assignment 1

Lecture 23 - Assignment 2