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

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NPTEL Video Course - Mechanical Engineering - NOC: Design Practice-II
Subject Co-ordinator - Dr. Shantanu Bhattacharya
Co-ordinating Institute - IIT - Kanpur
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Design concepts
Lecture 2 - Computer Aided Design (CAD)
Lecture 3 - Geometrical transformation
Lecture 4 - Composition of geometrical transformation
Lecture 5 - Geometric modeling
Lecture 6 - Representation of curves
Lecture 7 - Parametric representation of synthetic curves
Lecture 8 - Curve fitting problem (Hermite case)
Lecture 9 - Problem solving (based on Bezier curve)
Lecture 10 - Representation of Surfaces
Lecture 11 - Introduction to Micro-Elctro mechanical Systems (MEMS)
Lecture 12 - Lab-on-Chip
Lecture 13 - Introduction to Sensors
Lecture 14 - Introduction to Transducers
Lecture 15 - Introduction to device fabrications
Lecture 16 - Introduction to Silicon as a MEMS material
Lecture 17 - Etching processes
Lecture 18 - Types of Photolithography
Lecture 19 - Introduction to actuators
Lecture 20 - Designing of the Micro-Valve
Lecture 21 - Electrochemical valves
Lecture 22 - Micropumps
Lecture 23 - Designing of peristaltic pumps
Lecture 24 - Different types of pumps and sensors
Lecture 25 - Computer Numerical Control
Lecture 26 - Numerical control programming
Lecture 27 - NC part programming
Lecture 28 - Introduction to rapid prototyping
Lecture 29 - Different types of rapid prototyping technologies
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Lecture 30 - Fused Deposition Modeling
Lecture 31 - LAB demonstration of Fused Deposition Modelling Techniques
Lecture 32 - LAB demonstration of Fused Deposition Modelling Process
Lecture 33
Lecture 34
Lecture 35
Lecture 36
Lecture 37
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