

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

NPTEL Video Course - Mechanical Engineering - Introduction to Fluid Machines and Compressible Flow

Subject Co-ordinator - Prof. S.K. Som

Co-ordinating Institute - IIT - Kharagpur

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

- Lecture 1 - Introduction to Fluid Machines 1
- Lecture 2 - Energy Transfer in Fluid Machines Part - I
- Lecture 3 - Energy Transfer in Fluid Machines Part - II
- Lecture 4 - Energy Transfer - impulse and Reaction Machines, efficiencies of Fluid Machines
- Lecture 5 - Principles of Similarity in Fluid Machines
- Lecture 6 - Concept of specific speed and introduction to Impulse Hydraulic Turbine
- Lecture 7 - Analysis of force on the Bucket of Pelton wheel and Power Generation
- Lecture 8 - Specific speed, Governing and Limitation of a Pelton Turbine
- Lecture 9 - Introduction to reaction Type of Hydraulic Turbine - A Francis Turbine
- Lecture 10 - Analysis of Force on Francis Runner and Power Generation
- Lecture 11 - Axial Flow Machine and Draft Tube
- Lecture 12 - Governing of Reaction Turbine
- Lecture 13 - Introduction to Rotodynamic Pumps
- Lecture 14 - Flow and Energy Transfer in a Centrifugal Pump
- Lecture 15 - Characteristics of a Centrifugal Pump
- Lecture 16 - Matching of Pump and System Characteristics
- Lecture 17 - Diffuser and Cavitation
- Lecture 18 - Axial Flow Pump
- Lecture 19 - Reciprocating Pump - Part I
- Lecture 20 - Reciprocating Pump - Part II
- Lecture 21 - Centrifugal Compressor - Part I
- Lecture 22 - Centrifugal Compressor - Part II
- Lecture 23 - Centrifugal Compressor - Part III
- Lecture 24 - Axial Flow Compressor - Part I
- Lecture 25 - Axial Flow Compressor - Part II
- Lecture 26 - Introduction to Compressible Flow - Part I
- Lecture 27 - Introduction to Compressible Flow - Part II
- Lecture 28 - Thermodynamic Relations and Speed of Sound
- Lecture 29 - Disturbance propagation, Stagnation and Sonic Properties

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

www.digimat.in

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

- Lecture 30 - Effects of Area Variation on Properties in an Isentropic Flow
- Lecture 31 - Choking in a Converging Nozzle
- Lecture 32 - Isentropic Flow through Convergent - Divergent Duct
- Lecture 33 - Normal Shock - Part I
- Lecture 34 - Normal Shock - Part II
- Lecture 35 - Normal Shock - Part III
- Lecture 36 - Normal Shock - Part IV
- Lecture 37 - Normal Shock - Part V
- Lecture 38 - Oblique Shock - Part I
- Lecture 39 - Oblique Shock - Part II
- Lecture 40 - Introduction to Expansion Wave and Prandtl Meyer Flow