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

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NPTEL Video Course - Mechanical Engineering - NOC: Aircraft Propulsion
Subject Co-ordinator - Dr. Vinayak Kulkarni
Co-ordinating Institute - IIT - Guwahati
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Overview of Basic Thermodynamics
Lecture 2 - Solved Examples for Flow process
Lecture 3 - Turbomachines
Lecture 4 - Components of Gas Turbine Power Plant, Gas Turbine Attachments
Lecture 5 - Introduction to Various Aircraft engines, Engine Performance parameters
Lecture 6 - Air Standard Ideal Brayton Cycle
Lecture 7 - Examples for Ideal Brayton Cycle
Lecture 8 - Non-Ideal Brayton Cycle
Lecture 9 - Examples for Non-Ideal Brayton Cycle
Lecture 10 - Brayton Cycle with Heat Exchanger / Re-heater
Lecture 11 - Brayton Cycle with Intercooler / All Attachments
Lecture 12 - Examples of Gas Turbine Attachment
Lecture 13 - Examples of Gas Turbine Attachment
Lecture 14 - Stagnation Conditions, Real Brayton Cycle with Stagnation Conditions
Lecture 15 - Polytropic Efficiency of Compressor and Turbine
Lecture 16 - Examples of Real Cycle
Lecture 17 - Nozzle Flow
Lecture 18 - Aircraft Engine Intake, Intake Efficiency
Lecture 19 - Propelling Nozzle, Nozzle Efficiency
Lecture 20 - Turbojet engine
Lecture 21 - Turbofan engine
Lecture 22 - Ramjet engine
Lecture 23 - Examples of Ramjet Engine
Lecture 24 - Thrust Augmentation and Engine performance parameters for Aircrafts
Lecture 25 - Introduction to Turbomachinary
Lecture 26 - Centrifugal Compressor
Lecture 27 - Centrifugal Compressor
Lecture 28 - Examples of Centrifugal compressor
Lecture 29 - Axial Flow Compressor
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Lecture 30 - Axial Flow Compressor

Lecture 31 - Examples of Axial Flow Compressor

Lecture 32 - Examples of Axial Flow Compressor

Lecture 33 - Examples of Axial Flow Compressor

Lecture 34 - Axial Turbine

Lecture 35 - Radial Turbine

Lecture 36 - Examples of Axial Turbine

Lecture 37 - Practice examples of Axial Turbine and cetrifugal compressor

Lecture 38 - Cascade theory and Blade design

Lecture 39 - Cascade variables and Turbine Cascade

Lecture 40 - Velocity diagrams of Turbine Cascade, Compressor cascade

Lecture 41 - Turbine cooling methods

Lecture 42 - Practice examples of aircraft engine