

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

NPTEL Video Course - Mechanical Engineering - NOC:Manufacturing Processes - Casting and Joining

Subject Co-ordinator - Prof. Sounak Kumar Choudhury

Co-ordinating Institute - IIT - Kanpur

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

- Lecture 1 - Casting: Introduction to Casting
- Lecture 2 - Various aspects of Casting
- Lecture 3 - Patterns and Moulds
- Lecture 4 - Sand Mould and Gating System
- Lecture 5 - Gating System Design
- Lecture 6 - Aspiration Effects and Riser Design
- Lecture 7 - Solidification of Metals and Alloys
- Lecture 8 - Stress, Strain and Strain Rate and Shear Plane Angle
- Lecture 9 - Steps in Sand Casting Processes
- Lecture 10 - Expendable Mould Casting Processes
- Lecture 11 - Permanent Mould Casting
- Lecture 12 - Various Casting Processes and Cost Analysis
- Lecture 13 - Cost analysis, Casting Defects and Product Design
- Lecture 14 - Introduction to Joining Processes
- Lecture 15 - Characteristic Features of Welding Processes
- Lecture 16 - Various Welding Processes
- Lecture 17 - Advanced Welding Processes
- Lecture 18 - Characteristic Features of Arc Welding
- Lecture 19 - Shielded metal arc welding, MIG and TIG Welding
- Lecture 20 - Gas Welding, Brazing and Soldering, Welding Defects