

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

NPTEL Video Course - Computer Science and Engineering - Real Time Systems

Subject Co-ordinator - Prof. Rajib Mall

Co-ordinating Institute - IIT - Kharagpur

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

- Lecture 1 - Introduction
- Lecture 2 - Real - Time System Characteristics
- Lecture 3 - Few Basic Issues
- Lecture 4 - Modelling Timing Constraints
- Lecture 5 - Modelling Timing Constraints (Continued.)
- Lecture 6 - Basics of Real - Time Task Scheduling
- Lecture 7 - Cyclic Scheduler
- Lecture 8 - Event - Driven Scheduling
- Lecture 9 - Rate Monotonic Scheduler
- Lecture 10 - RMA Scheduling
- Lecture 11 - Deadline Monotonic Scheduling and Other Issues
- Lecture 12 - Few Issues in Use of RMA
- Lecture 13 - Resource Sharing Among Real-Time Tasks
- Lecture 14 - Highest Locker and Priority Ceiling Protocols
- Lecture 15 - An Analysis of Priority Ceiling Protocol
- Lecture 16 - Handling Task Dependencies
- Lecture 17 - Real-Time Task Scheduling on Multiprocessors and Distributed Systems
- Lecture 18 - Real-Time Task Scheduling on Multiprocessors and Distributed Systems (Continued.)
- Lecture 19 - Clock Synchronization in Distributed Real-Time Systems
- Lecture 20 - Internal Clock Synchronization in Presence of Byzantine Clocks
- Lecture 21 - A Few Basic Issues in Real-Time Operating Systems
- Lecture 22 - Tutorial - I
- Lecture 23 - A Few Basic Issues in Real-Time Operating Systems (Continued.)
- Lecture 24 - Unix and Windows as RTOS
- Lecture 25 - Real - Time POSIX
- Lecture 26 - Real - Time POSIX (Continued.)
- Lecture 27 - Open Source and Commercial RTOS
- Lecture 28 - Open Source and Commercial RTOS (Continued.)
- Lecture 29 - Benchmarking Real - Time Computer & Operating Systems

---

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

[www.digimat.in](http://www.digimat.in)

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

---

- Lecture 30 - Benchmarking Real - Time Computer & Operating Systems (Continued.)
- Lecture 31 - Real - Time Communications
- Lecture 32 - Few Basic Issues in Real - Time Communications
- Lecture 33 - Review of Computer Networking
- Lecture 34 - Real - Time Communication in a LAN
- Lecture 35 - Real - Time Communication in a LAN (Continued.)
- Lecture 36 - Performance of Two Real -Time Communication Protocols
- Lecture 37 - Real - Time Communication over Packet Switched Networks
- Lecture 38 - Real - Time Communication over Packet Switched Networks (Continued.)
- Lecture 39 - Real - Time Communication over Packet Switched Networks (Continued.)
- Lecture 40 - Real - Time Databases