SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)
COIMBATORE-35
Accredited by NBA-AICTE and Accredited by NAAC – UGC with A+ + Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

19EEE305 / EMBEDDED SYSTEMS
III YEAR / VI SEMESTER

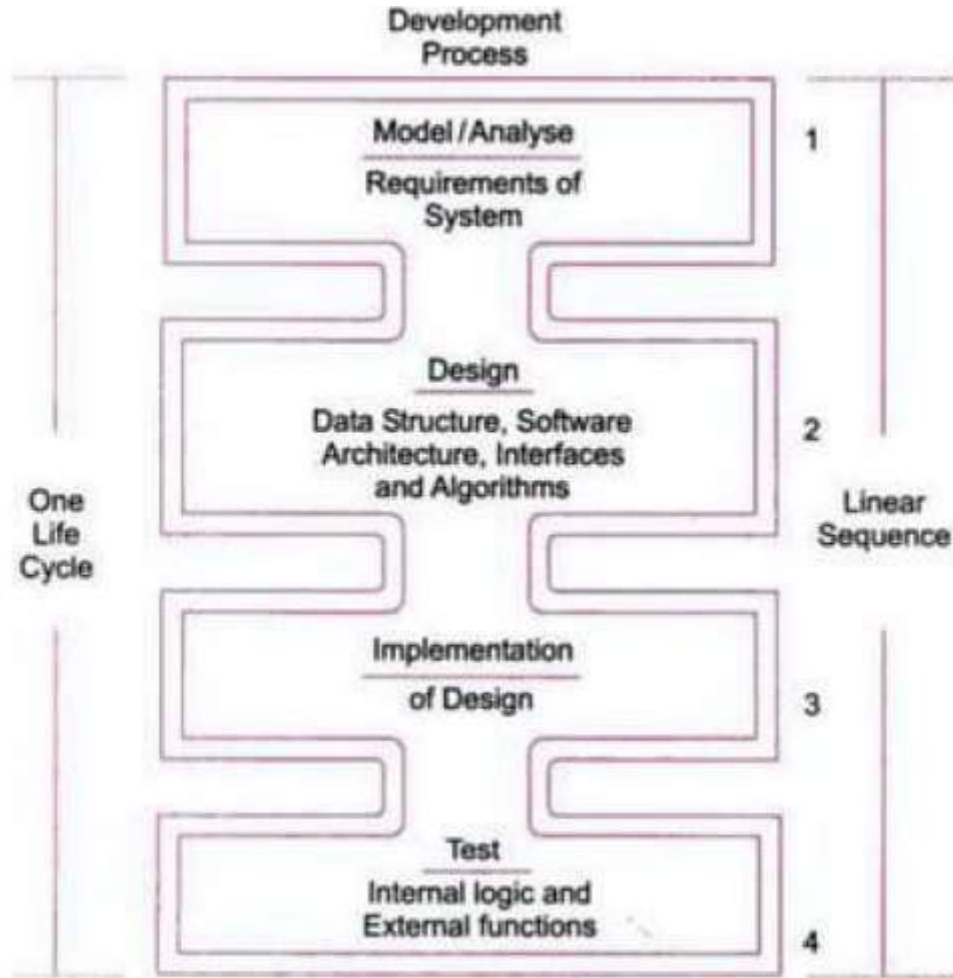## UNIT-I: INTRODUCTION TO EMBEDDED SYSTEMS

DESIGN PROCESS

Design Process in Embedded System

- *Concepts used during Design process*

  — Abstraction

  — Hardware and Software Architectures

  — Extra Functional Properties

  — System Related family of Designs Modular Design

  — Mapping

  — User Interfaces Design Refinements

Design Process in Embedded System

Development Process

Model/Analyse — Requirements of System	1
Design — Data Structure, Software Architecture, Interfaces and Algorithms	2
Implementation of Design	3
Test — Internal logic and External functions	4

One Life Cycle
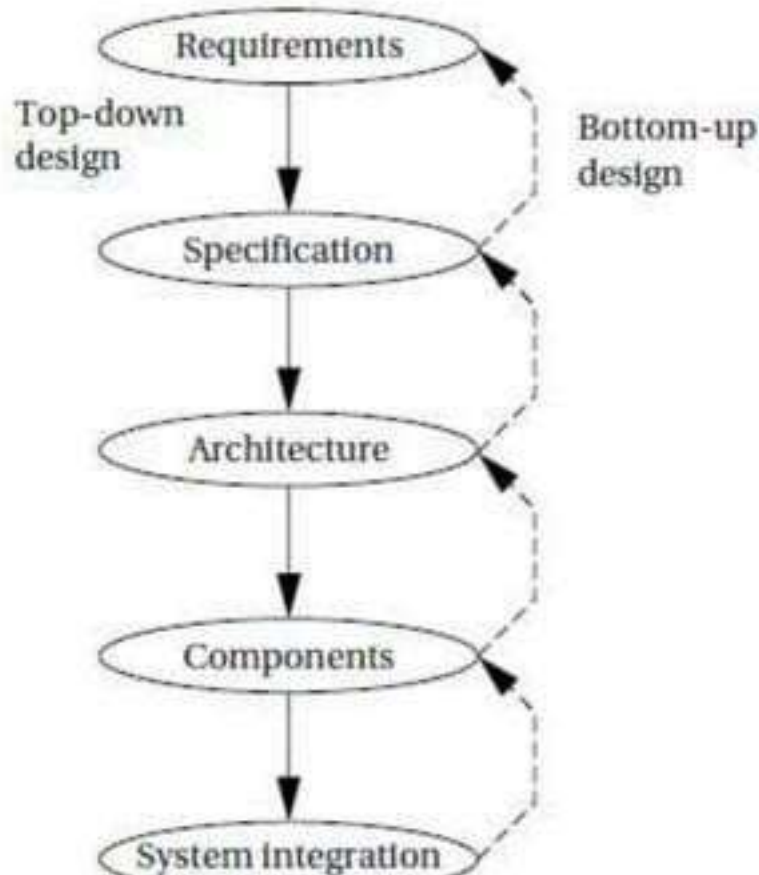
Linear Sequence

- **Design Metrics**
  - Power Dissipation
  - Performance
  - Process Deadlines
  - User Interfaces
  - Size
  - Engineering Cost
  - Manufacturing Cost
  - Flexibility
  - Prototype Development Time
  - Time to Market
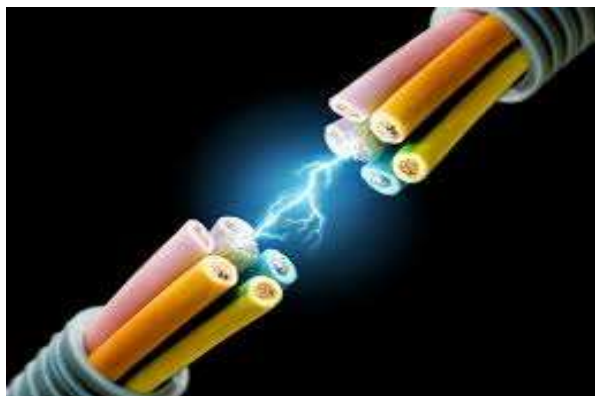 - System and User Safety
  - Maintenance

Design Process in Embedded System

Abstraction of Steps in Design Process

RECAP....

...THANK YOU

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STRUCTURAL UNITS