

Course Title: Petri Nets

Course Code CSE-870

Course Objectives:

To provide the introduction of Petri Nets as Modeling Approach, To Understand the Mathematical models for Petri Nets & their use for modeling and verification of complex systems

Course Outcomes:

After the course the student will be able to use Petri Nets to model and analyze variety of systems at different levels of abstraction. These systems include complex biological regulatory networks, software systems, communication systems, control systems, production systems and many others.

Course Contents

- Introduction to Petri Nets
- Properties of Petri Nets
- Non-Autonomous Petri Nets
- Timed Petri Nets
- Autonomous, Continuous and Hybrid Petri Nets
- Timed Continuous Petri Nets
- Timed Hybrid Petri Nets
- Hybrid Petri Nets with Speed

Recommended / Reference Books:

- Discrete, Continuous, and Hybrid Petri Nets by René David, Hassane Alla