**Scuola di Dottorato del Politecnico di Bari**

**Ph.D. School**

**Theory and applications of stochastic processes**

**CFU: 3 (24 ore)**

**SSD: ING-INF/03**

|  |  |
| --- | --- |
| **Abstract** | The course provides the basic tools, at conceptual, methodological and calculation level, for the development of suitable models to analyze data transmission networks, logistics systems,transport systems, etc.  |
| **Program** | * Review of probability ( 2 hours)
* Poisson Processes (4 hours)
* Finite State Markov Chains (4 hours)
* Renewal Processes (4 hours)
* Countable State Markov Chains (2 hours)
* Markov Processes with Countable state spaces (6 hours)
* Selected Applications (2 hours)
 |
| **References** | Robert G. Gallager – Stochastic Processes Theory for Applications, Cambridge University Press.  |