

**Scuola di Dottorato del Politecnico di Bari**

**Ph.D. School**

**Theory and applications of stochastic processes**

**CFU: 3 (24 ore)**

**SSD: ING-INF/03**

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| **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. |