Course Title: Stochastic Processes	**Number of Units:**1
SSD : MAT/06	**CFU:** 6
Course aims: To consolidate the fundamental contents of probability theory, in the first part of the course, some definitions and theorems are revisited by means of the formalism of the measure theory. The main purpose of teaching is to provide concepts, theorems, contents and tools that are the basis for both a more detailed study of the theory and for a conscious use in applications of stochastic processes.	
Course Description Conditional Means. Stopping times. Martingales and convergence results. Brownian motion and Brownian bridges. Some laws of Brownian motion. Analytical approach to Brownian motion. Stochastic integration. Ito formula and stochastic differential equations.	
Assumed Background: At least a basic course on probability theory**.**	
Assessment methods: Oral examination.	