
Automatic machinery mechanics

Finalità

The course provides the knowledge required for a proper functional design of automatic machines. For this purpose, cinematic, static and dynamic analysis of machine parts on varying working conditions are studied

Programma

Functional problems in automatic machines.
Rigid automation and flexible automation.
Functional architecture of automatic machines.
Description of operating modes.
Mechanisms for automatic machines.
Dimensioning of automatic machines.
Simulation methodologies.

Attività d'esercitazione

Laboratory exercises are scheduled.

Modalità d'esame

The exam consists in an oral examination about course topics and the discussion of a project assigned during the semester.

Propedeuticità

Progettazione meccanica funzionale (Functional mechanical design).

Testi consigliati

E. FUNAIOLI, A. MAGGIORE, U. MENEGHETTI: "Lezioni di Meccanica Applicata alle Macchine" Voll. 1-2, Patron Editore, Bologna.
P. L. Magnani, G. Ruggieri: "Meccanismi per macchine automatiche" Ed. UTET Torino.