

Robotique : Modélisation et Commande



Component

École Nationale
Supérieure
d'Électrotechnique
d'Électronique
d'Informatique
d'Hydraulique
et des
Télécommunications



Semester

Automne

In brief

> **Code:** N9EE19C

Presentation

Objectives

Be able modeling and generating trajectory in 3D or following a mechanical structure.

Be able to model frame displacement and attitude : Denavit-hartenberg convention, Euler angles, Roll-Pich-Yaw...

Be able establishing geometric, cinematic, dynamic models of mobile robots or Manipulators.

Be able establishing controler based on available informations.

Pre-requisites

Linear algebra (vector and matrix). Solid Dynamics principles. Closed loop control principle.