

SYLLABUS :-

Prerequisite â Machine Tool and Machining Drive systems of robots, Electrical and hydraulic systems, AC and DC drives, Servo drives using voltage control, current control and direct torque control, PID control systems and performance issues. Feedback systems. Single loop and multi-loop, DSP based motion control systems, Sensors for industrial robots, encoders, resolvers, hall-effect sensors, acoustic sensors, ultrasonic and optical/infrared sensors, Elements of robot vision, Integration using PLCs. Digital motion planning systems. Introduction, classification, design features and control features of CNC machines; Programming : G