



# MANIPAL UNIVERSITY JAIPUR

School of Electrical, Electronics & Communication Engineering

Department of Electrical Engineering

## ***Lab & Equipment Details (CA Lab)*** ***Location: 1AB Building, Room No. 213***

Name of Laboratory	Control & Automation Lab
Lab Description	The Lab offers students to study the basic concept of control systems by applying and implementing Modelling & Simulation of Systems and automation used in the industry, targeting students who wish to pursue research & development in industries or higher studies in the field of Control Systems & Automation Engineering.
Lab Resources	<ol style="list-style-type: none"> <li>1) Ball Balancing Control System</li> <li>2) Digital Storage Oscilloscope</li> <li>3) Model Based Development Software Platform</li> <li>4) PMSM Hardware Bundle</li> <li>5) Control System Kit (NVIS/3000A)</li> <li>6) Control System Simulator (2454)</li> <li>7) PID Controller Kit (2451)</li> <li>8) My RIO (1900)</li> <li>9) PLC Simatic S7 1200 with HMI</li> <li>10) Sinamics G120</li> <li>11) Pressure Process Controller (VPPA 401 CE)</li> <li>12) Ratio Control Trainer (VPPA 402-CE)</li> <li>13) Inverted Pendulum Trainer Kit</li> <li>14) Digital PID Controller (Microcontroller Based) (VDPID 02)</li> <li>15) Flow Process Control Station (Wheel Flow Meter)</li> <li>16) Temperature Process Control Station (Water Tank 100 Degree Celsius)</li> <li>17) Cascade Control Trainer-Flow Level Integrated Process Controller</li> <li>18) Feed Forward Control</li> </ol>