

**Course Number: 28019**  
**Course Name: Control System Design**

Course Type:
Prerequisite:
Level: Graduate
Group: Applied Design

Type & Max Unit: 3
Corequisite:
First Presentation:
Last Edition:

**Objectives:**

**Topics:**

Basic definitions of control systems  
Steps for execution of control system project  
Classification of control systems from actuation power point of view  
Circuit design and hardware specifications of Hydraulic systems  
Electrical systems, Industrial electrics and electronics, Electric drive systems  
Relay switching and logic circuits, Power circuits  
Circuit design and hardware specifications of pneumatic systems  
Hydro-electric and Hydro-pneumatic systems  
Process control and design of utility and process control circuits  
Analogue control systems specifications and standards  
Digital control systems design and specifications  
PC and PLC digital control systems, DSC control systems  
PLC programming languages.

**References:**