



Course: Computer-Controlled Systems (CSE422)

Sheet No.: 1

Date: 15/2/2018

Due: 15/2/2018

Time: 2 Hours

Discussion Points:

1. What is a computer-controlled system?
2. How did the advances in computer technology affected? Early computers, microprocessors, distributed systems and SCADA, embedded control systems, networked control systems, cyber-physical systems and IoT.
3. Traditions in industrial automation systems: Controllers for instrument engineers, relays for electricians (PLC).
4. Dependency on sampling time and clock synchronization. (CERN syndrome)
5. Is there a need for computer control theory? Why? (Sampling, aliasing, deadbeat, ...)
6. Machine learning vs. control theory in control systems.
7. What is beyond computer control theory?