# CCST Exam Preparation Course Syllabus

| Week | Topic |
|---|---|
| 1 | Introduction to Process Control<br>Types of Processes<br>Continuous<br>Batch<br>Discrete<br>The Feedback Loop<br>Intro to P&ID Drawings<br>Study Questions |
| 2 | Controlling the Process<br>Process Characteristics and Controllability<br>Controller Responses<br>Control system architectures<br>Single Loop Controllers<br>Distributed Control Systems<br>Programmable Logic Controllers<br>Conclusion<br>Study Questions |
| 3 | CCST Exam Questions |
| 4 | Fundamentals of Electricity<br>Understand polyphase voltages and currents found in the industrial environment<br>Apply safety considerations when measuring electrical values or working around electrical equipment<br><br>Study Questions |
| 5 | Fundamentals of Electronics<br>Study Questions |
| 6 | CCST Exam Questions |
| 7 | Pressure Measuring Instruments<br>What is Pressure?<br>Units of Measurement<br>Pressure Measurement<br>Understanding the Effects of Gravity<br>Pressure Standards<br>Math Review<br>Unit Conversion Calculations<br>Study Questions |

 

 

 

39 CCST Exam Questions

40 Digital Control Systems
Distributed Control Systems
Programmed Control Systems
Sequential Control systems
The Allen-Bradley PLCs
Study Questions

41 Selected Industrial Bus Structures
NetLinx
Foundation Fieldbus
ControlNet
EtherNet/IP
Profibus
Modbus Plus
Study Questions

42 CCST Exam Questions

43 Analytical Troubleshooting – Part 1
Advanced P&ID Drawings
Understand the purpose and use of the National Electrical Code (NEC)
Grounding, Noise and Power Considerations for Instruments, Equipment and Computers
Study Questions

44 Analytical Troubleshooting – Part 2
Analytical Troubleshooting Techniques
Logical Analysis
Common Problems
Study Questions

45 Preliminary CCST Exam Questions – Mock Practice Exam
Identify any need for review in specific knowledge area

46 Final CCST Practice Exam

The participant will be expected to spend approximately five hours per week on the lessons.