## **MOOC Reference Materials**

## Unit 5: Power System Components & Electrical Machines

| Topic                                   | Link                                                                                                                                                                                                       | Duration            | MOOC Source                   |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------|
| Single Phase Transformer                | https://www.youtube.com/watch?v=wFE7J6_9c6w&t=141s                                                                                                                                                         | 32:37               | NPTEL, by Prof. Debapriya Das |
| Three Phase Induction Motor             | Part A: https://www.youtube.com/watch?v=BPflvcxM-Fo&list=PLbRMhDVUMngfdEXVcdf_ijj2Eub-UHs_y&index=59  Part B: https://www.youtube.com/watch?v=7bgq9s9QFMY&list=PLbRMhDVUMngfdEXVcdf_ijj2Eub-UHs_y&index=59 | 24:01<br>&<br>42:15 | NPTEL, by Prof. Debapriya Das |
| Single Phase Induction Motor            | https://www.youtube.com/watch?v=dZyO5gcWP-o                                                                                                                                                                | 1:00:59             | NPTEL, by Prof. L. Umanand    |
| DC Motor                                | https://www.youtube.com/watch?v=0Owe848XA3k&list=PLbRMhDVUMngfdEXVcdf_ijj2Eub-UHs_y&index=62                                                                                                               | 36:59               | NPTEL, by Prof. Debapriya Das |
| Synchronous Machine                     | https://www.youtube.com/watch?v=b24jORRoxEc&t=2756s                                                                                                                                                        | 1:03:34             | NPTEL, by Prof. L. Umanand    |
| Structure of Power System               | https://www.youtube.com/watch?v=Yg6XsepGCKY&list=PLD4ED2FAF3C155625&index=2                                                                                                                                | 59:37               | NPTEL, by Prof. D.P. Kothari  |
| Conventional Sources of Electric Energy | https://www.youtube.com/watch?v=45_nQN-9XSs&list=PLD4ED2FAF3C155625&index=3                                                                                                                                | 51:36               | NPTEL, by Prof. D.P. Kothari  |
| Hydroelectric Power Generation          | https://www.youtube.com/watch?v=JBrdUoU2uTE&list=PLD4ED2FAF3C155625&index=4                                                                                                                                | 53:24               | NPTEL, by Prof. D.P. Kothari  |
| Renewable Energy                        | https://www.youtube.com/watch?v=UW4HYJ36q0Y&list=PLD4ED2FAF3C155625&index=6                                                                                                                                | 51:07               | NPTEL, by Prof. D.P. Kothari  |