9SEMESTER	***DEPARTMENT***	***COURSE TITLE***
Seventh	*Power Engineering*	*Power Station Components Lab*
COURSE CODE	***HOURS:*** 3	***COURSE SPECIFICATIONS***
EP702	***UNITS:*** 1	*Practical Content*

1. Description

- Process techniques for electricity and heat generation.
- Measurement and arrangement of energy balances and characteristic curves in a typical power plant
- Technical criteria for energetic assessment of process control.
- Steam turbine process, combined heat and power monitoring.

- Practical measurements of necessary readings for evaluating the plant efficiency.
- Coproduction of experiment reports
- Excursions to Benghazi North power plant.

References:

1. A J. Woods and B. F. Wollenberg, ***Power Generation, Operation, and Control***, 2nd ed., John Wiley & Sons, 1996.
2. Mohammad Rasul, ***Thermal Power Plants***, Publisher: InTech | ISBN: 9789533079523, 9533079523, 1st edition 2012
3. Mukund R. Patel, ***Wind and Solar Power Systems***, CRC Press,1999.
4. ***Renewable and Efficient Electric Power Systems*** – Gilbert M. Masters, IEEE Press – Published by John Wiley and Sons, Inc. Hoboken, New Jersey, USA, 2004.
5. Weisman & Eckart, ***Modern Power Plant Engineering***, 1985.