

Maulana Abul Kalam Azad University of Technology, West Bengal
(Formerly West Bengal University of Technology)
Syllabus for B. Tech in Electrical Engineering
 (Applicable from the academic session 2018-2019)

Name of the course		POWER SYSTEM-II LABORATORY
Course Code: PC-EE 691		Semester: 6th
Duration: 6 months		Maximum marks:100
Teaching Scheme		Examination scheme:
Theory: 0 hr/week		Continuous Internal Assessment:40
Tutorial: 0 hr/week		External Assessment: 60
Practical: 2 hrs/week		
Credit Points:1		
	Laboratory Experiments:	
1.	Study on the characteristics of on load time delay relay and off load time delay relay.	
2.	Test to find out polarity, ratio and magnetization characteristics of CT and PT.	
3.	Test to find out characteristics of (a) under voltage relay (b) earth fault relay.	
4.	Study on DC load flow	
5.	Study on AC load flow using Gauss-seidel method	
6.	Study on AC load flow using Newton Raphson method.	
7.	Study on Economic load dispatch.	
8.	Study of different transformer protection schemes by simulation	
9.	Study of different generator protection schemes by simulation	
10.	Study of different motor protection schemes by simulation	

11.	Study of different characteristics of over current relay.
12.	Study of different protection scheme for feeder.

Institute may develop experiments based on the theory taught in addition to experiments mentioned.

Course outcome: After completion of this course, the learners will be able to

1. Identify appropriate equipment and instruments for the experiment.
2. Test the instrument for application to the experiment.
3. Construct circuits with appropriate instruments and safety precautions.
4. Validate the characteristics of under voltage relay, over current relay, earth fault relay, on load time delay relay, off load time delay relay, CT and PT.
5. Validate protection schemes of transformer, generator, motor and feeder.
6. Apply software tools to find bus voltage, currents and power flows throughout the electrical system.
7. work effectively in a team

Special Remarks: The above-mentioned outcomes are not limited. Institute may redefine outcomes based their program educational objective.