

SEMESTER <i>Seventh</i>	DEPARTMENT <i>Power Engineering</i>	COURSE TITLE <i>Distribution Systems</i>
COURSE CODE <i>EP708</i>	HOURS: 3 UNITS: 3	COURSE SPECIFICATIONS <i>Theoretical Content</i>
<p>1. Describe the General Layout of the Distribution Systems.</p> <ul style="list-style-type: none"> ➤ Define the main features of the distribution systems. ➤ Classify the distribution systems. ➤ Investigate the distribution systems. ➤ Know the methods used in solving the problems of the radial, ring, graded, and uniformly loaded feeders. 		
<p>2. Demonstrate the Operating Characteristics of the Transformers. Explain the Safety Earthing and Earthing Systems in Distribution Networks.</p> <ul style="list-style-type: none"> ➤ Define the operating characteristics of the power distribution transformers. ➤ State system planning. ➤ Understand and designs earthing systems for distribution networks. ➤ Know lightning protection principles and equipment. 		
<p>3. Demonstrate the Means of Transmitting the Generated Electrical Energy.</p> <ul style="list-style-type: none"> ➤ Design overhead lines (the electrical and mechanical design of L.V. and M.V. distribution lines) and knows their standards. ➤ Design underground cables and knows their standards. 		
<p>4. Explain the Importance of Power Factor Improvement.</p> <ul style="list-style-type: none"> ➤ Determine the daily load curve. ➤ Explain methods of power factor correction, and calculate it. 		

5. Explain the Methods Used in Solving the Problems of The Distribution System.

- Explain distribution systems problems.
- Illustrate distribution systems planning.
- Design lighting networks.

References:

1- Dr.M. Alam, Book, *Power System Analysis*.

2- *A.B.B. Library*