



Basic Electricity – Unit 16: Transformers

Study Guide

In order to successfully complete this unit, complete the following tasks:

1. Review the course structure.
2. Watch <https://www.youtube.com/watch?v=XrIXioEn3yQ>
Title: Transformer Core Types
Author: Learn Engineering
3. Watch <https://www.youtube.com/watch?v=Gcr1jawpmn4>
Title: Construction S P transformer
Author: i-learn
4. Watch <https://www.youtube.com/watch?v=ZDBfDTEMGaQ>
Title: Mutual Inductance
Author: SHArPEdgeGlobal
5. Watch https://www.youtube.com/watch?v=vh_aCAHThTQ
Title: How Does a Transformer Work?
Author: Learn Engineering
6. Watch <https://www.youtube.com/watch?v=eZVpufRn3ao>
Title: TRANSFORMERS
Author: Public Resource Org
7. Read *Mutual Inductance and Basic Operation*, Chapter 9: Transformers found at:
<http://www.allaboutcircuits.com/textbook/alternating-current/chpt-9/mutual-inductance-and-basic-operation>
8. Read *Step-up and Step-down Transformers*, Chapter 9: Transformers found at:
<http://www.allaboutcircuits.com/textbook/alternating-current/chpt-9/step-up-and-step-down-transformers>
9. Read *Transformer—Power Supply*, Chapter 4: AC Circuits found at:
<http://www.allaboutcircuits.com/textbook/experiments/chpt-4/transformer-power-supply>





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10. Read *Three-phase Transformer Circuits*, Chapter 10: Polyphase AC Circuits found at:
<http://www.allaboutcircuits.com/textbook/alternating-current/chpt-10/three-phase-transformer-circuits>
11. Read *Practical Considerations – Transformers*, Chapter 9: Power Capacity found at:
<http://www.allaboutcircuits.com/textbook/alternating-current/chpt-9/practical-considerations-transformers>
12. Complete worksheet and answer questions 1-19 on “Impedance Matching With Transformers” found at:
<http://www.allaboutcircuits.com/worksheets/impedance-matching-with-transformers>
13. Complete exercises 1-2 (pdf files) on Transformers and submit to lab instructor.





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