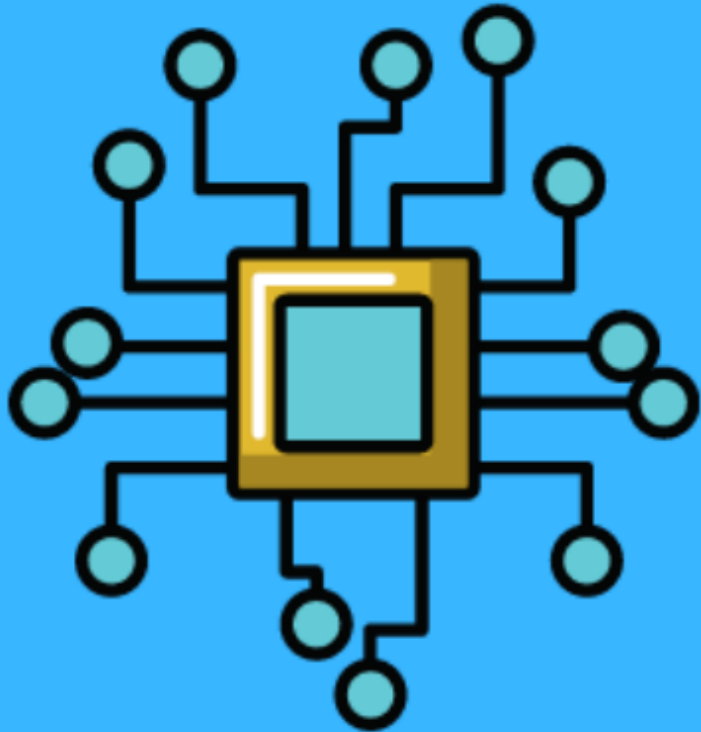


# Electronics



## Lab 5 & 6 Rectification circuits

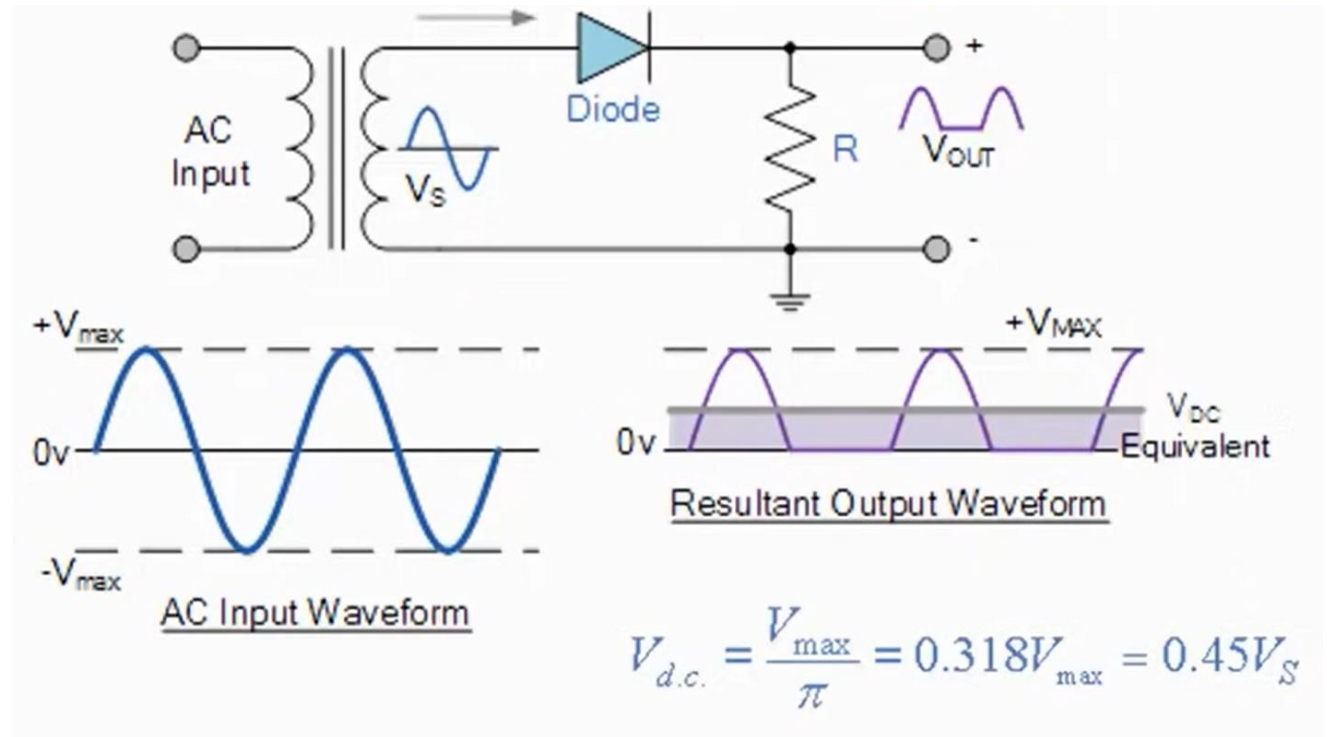
Eng. Mohamed Goda  
Eng. Manar Ibrahim  
Eng. Ismail Ahmed

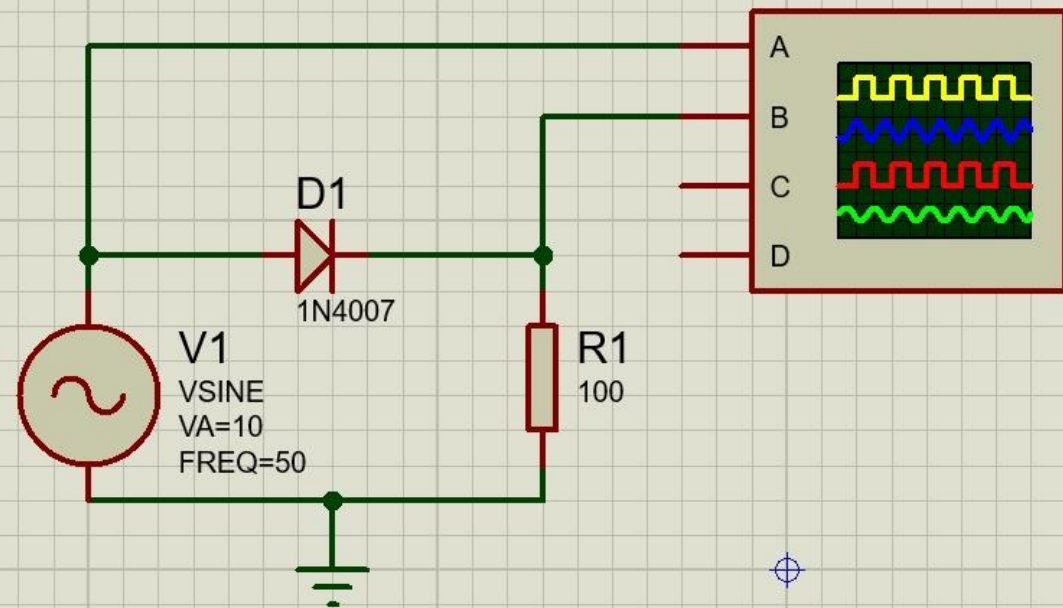
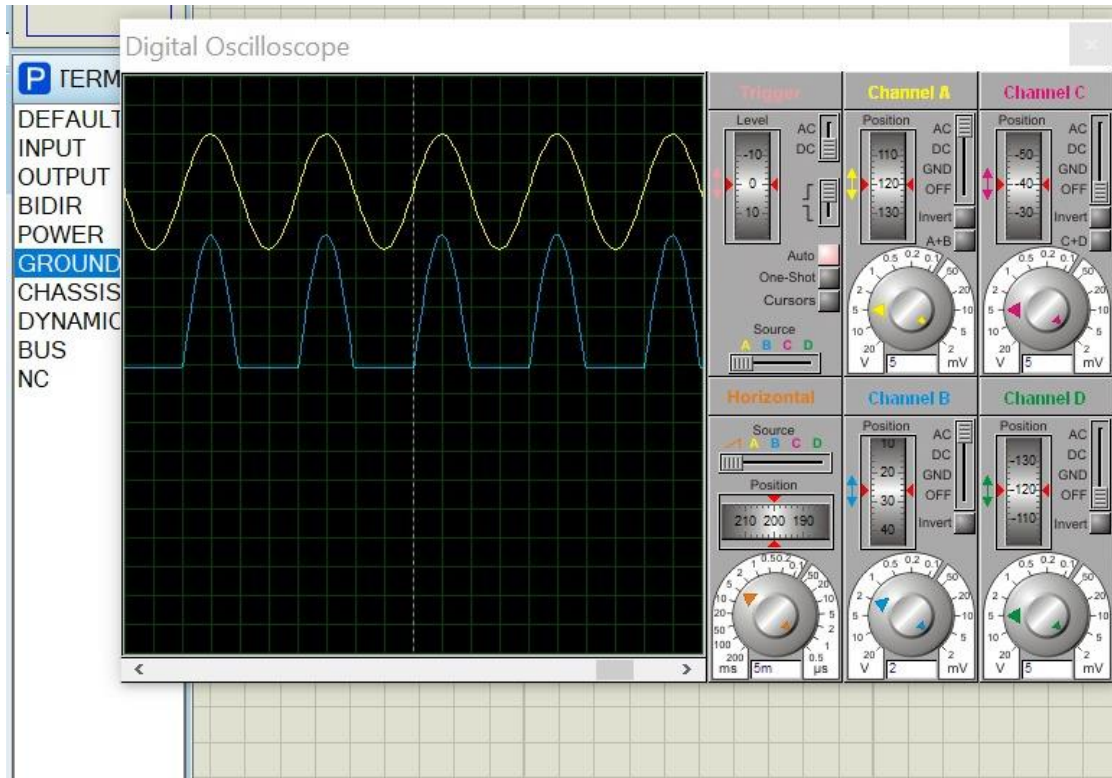
# Rectification

- A **rectifier** is an electrical device that converts alternating current (AC), which periodically reverses direction, to direct current (DC), which flows in only one direction.

# Half-wave rectification

- In half-wave rectification of a single-phase supply, either the positive or negative half of the AC wave is passed, while the other half is blocked. Because only one half of the input waveform reaches the output, mean voltage is lower.
- Half-wave rectification requires a single diode

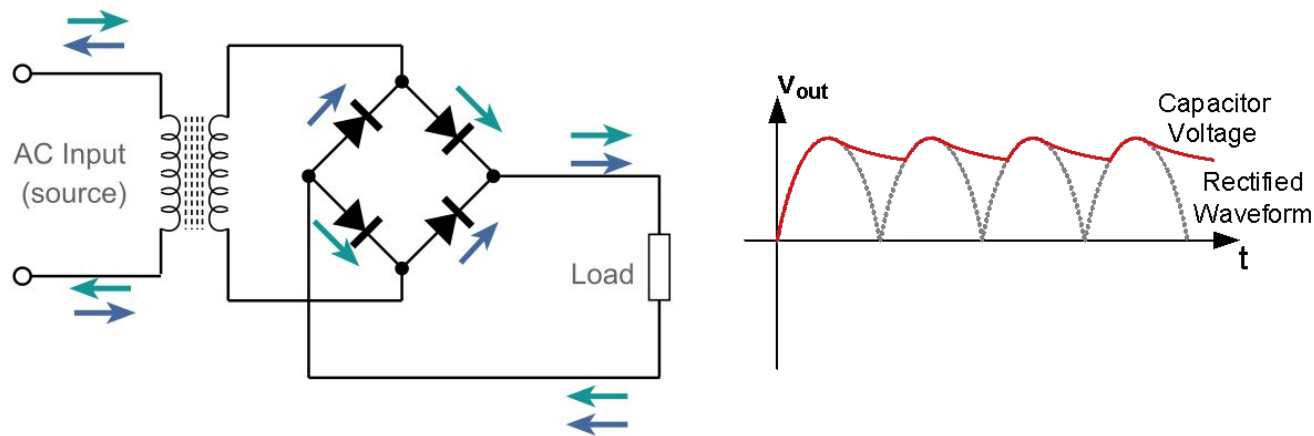




# Full-wave rectification

- A full-wave rectifier converts the whole of the input waveform to one of constant polarity (positive or negative) at its output.
- Full-wave rectification converts both polarities of the input waveform to pulsating DC (direct current), and yields a higher average output voltage.

## Bridge Rectifier Circuit





Enjoy  
with  
your  
Design

**Thank  
You**