

## Variable DC Power Supply

**In a group of 5 students, the following first course project is required:**

Design an adjustable regulated power supply that provides DC voltage in the range 1.2 – 30 Volt.

**The following items should be delivered:**

- [1] Datasheet of the selected electronic components, such as Transformer, Bridge, diodes, ICs, etc.
- [2] A technical report (PDF format)
- [3] Power point presentation for 15 minutes (power point format)
- [4] Simulation of the proposed electronic circuit.
- [5] Hardware implementation of the project like in the figure below



**The technical report must cover the following points:**

- 1) Introduction about the selected electronic circuit
- 2) Theory of operation.
- 3) Technical detail, circuit analysis and simulation results.
- 4) PCB layout.
- 5) Experimental results.
- 6) Discussion and conclusion.