

Electronics and Electrical Measurements

Electronics and Communication Engineering Electrical Engineering Department



Semester Project

Problem Statement:

Create a project using one of the following ideas or according to your thinking:

- 1.300W or greater RGB Controller Two line or Four line output.
- 2. 10W or greater RGB spot.
- 3. Two pages Advertising panel.
- 4. Square, Sine and Triangle Generator.
- 5. Voltage and Current measuring circuit.
- 6. 300W load temperature based alarm.
- 7. 1A transformerless Power supply.

Requirements:

You must do the following tasks to get complete grade:

- 1. Measure the total power of circuit and load power experimentally.
- 2. Make application using software design such as (Labview) and connect this application with hardware.
- 3. Make two layers PCB design.
- 4. Make report file about your work.
- 5. Make presentation about your work.

Deliverables:

ZIP archive organized as follows:

- 1. Create folder and Name it (**Project Name**) that contains:
 - A. Text file that contains names of team.
 - B. Hardware folder that contains schematic and layout.
 - C. Software folder that contains software work.
 - D. Presentation folder that contains one power point file.
 - E. Report folder that contains project data in one word file.
- 2. Compress the folder into a single zip archive.
- 3. Upload the archive to the course page.

Due Date:

Before the oral exam that will be held one or two weeks earlier than the final exam. Start working on the project immediately.

Grading:

The grading percentage of project is:

- 1. Hardware (50%) [Two layers PCB is required].
- 2. Software (30%) [Monitoring or Control one task is required at minimum].
- 3. Finishing (20%) [Organize your job].