

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. SEMESTER : VIII

POWER ELECTRONICS ENGINEERING

Subject Name: **PROJECT-II**

This is a laboratory oriented subject focusing on enhancing practical, design, presentation and project management skills required for Power Electronics. This is based on the topics/subjects already covered in previous semesters and subjects of current semester.

Objectives:

1. Developing capacity in students to use the theory learnt to put in to practice.
2. Developing understanding of inter subject relationship among various subjects in students.
3. Developing capacity to find logical solution and implement the same practically for some commonly used processing requirements of many electronics products.
4. Developing capacity in students to find and solve common faults arising in various electronic circuits and software development.
5. Minimize mistakes commonly made by the students during laboratory work.
6. Developing technical report writing and technical presentation skills in students.
7. Developing attitude for team work in students.

Guidelines for work to be carried out during the semester:

The students should continue the project work decided in Project – I subject of 7th semester and carry out the following work for the same as stated below:

1. Based on the work done in the subject Project-I of 7th semester, students will continue their work on their project title.
2. Based on the specifications, block diagram, simulation results and testing & implementation plans, they will implement the hardware of the project, test it and obtain the results of the same.
3. They will test and verify the results of the hardware with the simulation results obtained.
4. Students should prepare a report as specified by the university or internal guide covering the brief history of work done in the last semester and all the above points with reference to the project work taken up by the group.

Formatting of the report should be strictly as per the guidelines given by the university or internal guide.

Guidelines for presentations and assessment:

A report as specified by the university or internal guide should be prepared by the students indicating work carried out and results obtained. The work done should be demonstrated to teachers and other students practically and through presentation slides as stated below:

- Presentations should be given by each group during the semester as per schedule decided by the concerned faculty (Ideally two presentations should be scheduled in the 5th and 10th week of the term).
- The first presentation should cover the names of group members, brief description of the work carried out in the previous semester and the progress of the work done to be done in the current semester.
- The second presentation should include the results of testing of the hardware, verification of actual results of the circuit with respect to the simulation results obtained, possible future modifications and conclusion.
- The report of the work carried out during the semester should be submitted before the viva-voce examination.
- Appropriate weightage should be given to the presentations, report and viva-voce along with the semester work for assessing the performance of the student in the subject.