

# EP315 MICROPROCESSOR LAB

## PROJECT INFORMATION

You have about five weeks to complete the project. It will constitute about 30% of your final grade for this course. Note that marks will be allotted to *each* member of the group based on their contribution to work performed in the project.

With the aim of training for submitting and completing a real research project, you are expected to submit the following things:

1. **PROJECT ABSTRACT:** A paragraph long summary of what you plan to do in the project. I have already distributed some suggestions – you can pick from that list (there is no ‘competition’) you are free to come with new ideas. The TA’s and faculty will review all the submitted abstracts and give you feedback in a day or so on their feasibility in terms of time, resources and your past performance in this lab.
2. **PROJECT PROPOSAL:** A detailed description of your project pointing out how you incorporated the TA’s feedback. The proposal should:
  - a. Explain the implementation of your ideas with a block diagram.
  - b. Give detailed specifications for the system – its inputs, outputs and the tests you will use to determine it functions properly.
  - c. A statement of how the work will be divided between the group members (use arrows on the block diagram to point this out). The partitioning of the project should be into separately testable subsystems – with each group member responsible for one of the subsystems.
3. **PROJECT WORK:** When your abstract is approved, you can start work on your project. You will have to get all needed parts. The Arduino board will be yours to keep for the duration of the project. Some of the other parts you need may be available in the electronics lab, but you may need to go out to the market (Lamington Rd) and buy the others yourself (limited funds will be provided). We will devote most of both the Monday and Friday sessions to project work. I may use some time on some days to lecture. You can also use the lab at other times subject to availability.
4. **REVIEW:** Near the end of the term we will have a final review and presentation of the project work. Each student’s work will be reviewed individually by TA’s and faculty. Depending on time, we may have short powerpoint presentations by the groups to the rest of the class on their project.