The University Of Sheffield.

Electronic & Electrical Engineering.

EEE471 YEAR 4 GROUP PROJECT

Credits: 30

Course Description including Aims

The project, performed under the supervision of either two academic supervisors, or one supervisor and one second markers, takes the form of a multidisciplinary investigative or design project usually with a significant industrial input. Students are divided into multidisciplinary teams and presented with the project brief by the industrialists involved. Project activities are based in the research labs of the supervisor(s) although students may also have to make use of other facilities, normally within the Department. Students hold regular minuted progress management meetings with group members rotating their group management responsibilities. Each group is expected to make an oral and poster presentation at a local IEE event, in addition to the assessed activities.

Time Allocation

18 weeks - laboratory sessions at three to four afternoons per week. This amounts to around 200 hours of laboratory time and 100 hours of private study and preparation of dissertations and presentations.

Recommended Previous Courses

EEE221 "Human Resource Management" and in particular the "SHIPS" project in that unit. MEC305 "Engineering Management". Relevant technical material from years 1-3 of the EEE programme.

Assessment

Continuous assessment: Staff and group internal peer assessment of general student performance.
Reports: Group design specification, initial plan and risk assessment at week 6, group interim report at week 12, final group project report (in individual sections). Submission of a project report
Presentations: Group poster presentation. 30 minute group oral presentation (assessed by staff and M.Eng. students from other groups).

Objectives

By the end of this unit successful students will be able to

1. Methodically apply engineering principles to the solution of problems, realization of electronic devices or systems or investigations into the properties of electronic engineering materials or devices.
2. Extract and critically assess information from a variety of sources.
3. Collect and use experimental data to evaluate physical principles and make conclusions.
4. Use their knowledge and understanding creatively to solve unfamiliar problems.
5. Manage projects as part of a team, including specification, procurement and overall cost management to a limited budget, when working under time constraints.
6. Effectively liaise with an external partner, or "customer" as part of the project management.

7. Interact effectively within a team and understand the different roles played by individuals.
8. Maintain detailed log books as records of their technical planning, design and experimental work.
9. Communicate complex technical ideas effectively through oral, poster and written presentations.
10. Work at the forefront of knowledge, seeking and assimilating new knowledge and ideas as required.