

NEW COURSE STRUCTURE IN ELECTRICAL ENGINEERING APPROVED BY SENATE ON STUDENTS TAKING ELECTRICAL ENGINEERING FROM 1975/76 SESSION

Survey of the main changes made as given in the New Course Structure,
Compared with the Current One

General

The B.Sc. in Electrical Engineering is a 3-year course, comprising also 4th term activities in the 2nd year, and an engineering project in 3rd year. Major revisions in the course-structure have not been made over the last eight years, although minor changes were introduced some 5 years ago.

The load on students in the New Course Structure is comparable with other Departments in the Faculty of Engineering.

1st year

Totally, the New Course Structure suggests a decrease in 1st year lectures load compared to the current one. This is effected by a slight reduction of lecture hours in "Electrical Physics," "Electromagnetic Fields," "Electric Circuit Theory" and "Engineering Drawing," removal of the subject ME-15 ("Production Technology") and transfer of the subject "Insulating Materials" to 2nd year. Part of the current syllabus of ME-15 has been included in ME-28, "Mechanical Engineering for Electrical Engineering" in 2nd year. On the other hand, "Electrical Machines" "Electrical Measurements," and "Computing I" have been introduced in the 1st year. This results in a net decrease of 3hrs/week in lecture load.

The practical part, basic measurements laboratory, has been increased from 3hrs/week to 6hrs/week. Design of new experiments are now carried out. All electrical and mechanical engineering syllabi have been revised.

is a 3rd year course. There is a reduction from 4hrs/week to 3hrs/week lectures for "Passive Circuits and Transmission Lines," and "Management for Engineers" has been moved to 3rd year. All syllabi have been revised, and revision of the laboratory programme has partly been done already. The net decrease in lecture load is 2hrs/week.

3rd year

The important change here is that there is suggested 2 possibilities only for the students, in the form of 2 different schemes of study among which one of them is to be chosen. Previously, a student had several options (when studying for honours degree). All students study 4 common subjects ("applied Electronics," "Control Engineering," "Management for Engineers" and "Engineering Project"). Those who choose telecommunication engineering, study "Telecommunications" and "Microwaves & Antennas," whereas those choosing power and machines engineering, study "Electrical Machines & Electrical Power Generation" and "Power Systems." Laboratory experiments are carried out in conjunction with each scheme of study. All syllabi have been revised or completely redesigned.

The idea of the new scheme is to produce engineers whose professional level is more uniform, having also a stronger education within their main field of interest.

The possibility of introducing optional courses may be considered at a later stage, depending upon the staffing at any time and experience with the new scheme. If such courses are introduced, the appropriate adjustments in the regulations for the award of a degree has to be made.

The Award of Degrees

The general regulations follow what is as laid down in the University Calendar for the Faculty of Engineering. However, some additional regulations are necessary to make it completely clear how honours and pass degrees are awarded, and what happens in the case if a student fails in a subject (course).

At this point, it should be mentioned that the Faculty has a subcommittee working on new examination regulations for the Faculty, in order to make the current regulations more flexible, and get more uniform rules for all Departments in the Faculty. This will of course eventually effect the content of this document, as far as rules for the award of a degree is concerned, and we will have to streamline the rules to fit in with such forthcoming regulations. However, in the meantime, some Departmental regulations have to be laid down.

1. A pass degree, Lower Second Class Honours (L.S.C.H.), Upper Second Class Honours (U.S.C.H.) or First Class Honours Degree (F.S.C.H.) is awarded on the basis of the average marks obtained in the 3rd year subjects. The common rules in the Faculty of Engineering, as far as marks versus degrees is concerned, are followed:

Degree	Average Marks
Fail	40
Pass	40 - 49

The candidate must not fail in any subject when the above applies.

2. A 3rd year candidate who has failed in one subject only, may be awarded a pass degree notwithstanding the failed subject, on the following condition:

If such a candidate fails in one subject, the candidate is required to an average mark of at least 45%, counting the marks of all the subjects inclusive of the subject the candidate failed.

3. If a 3rd year candidate fails in one subject, and obtains an average mark of less than 45% including the subject the candidate failed in, the candidate has failed the year.

4. If a 3rd year candidate fails in 2 or more subjects, the candidate has failed the year.