EXPERIENCES WITH SHORT COURSES B.K.GAZEY.

DEPT. OF ELECTRONIC & ELECTRICAL ENGINEERING UNIVERSITY OF BIRMINGHAM.

The short course ranging in duration from a few days up to in some cases a month takes a variety of forms including the following:-

- a) <u>Summer Schools</u> highly specialised activities often concerned with advanced concepts and current developments and techniques suitable for participants with a high standard of academic ability who range from raw graduates starting work in a new subject to professional people requiring to update existing knowledge and skills.
- b) Short courses proper which provide a less specialised coverage of principles and applications of a broader topic and are usually more practically orientated. They are intended for a wide variety of participants ranging from professionals wishing to make good some deficiency in basic knowledge, though teachers and lecturers needing specialised knowledge for research and teaching activities to technicians who need to know the basic principles behind their work to enable them to perform their tasks more efficiently.
- c) Modules highly specialised courses of 3-5 days duration forming part of a larger integrated course, often a post-graduate course. They are suitable for participants with some expertise already in the subject or a related one only.
- d) Training courses non-mathematical courses with a large practical content intended for professional people with a variety of existing skills who need to expand quickly into unfamiliar areas. They are also eminently suited for technicians in much the same way as the short course.

The wide range of abilities and interests of the participants on these courses pose many curricular problems. It is essential to strike the correct balance between theoretical and practical aspects appropriate to the particular course. Printed notes are to be recommended for lecture material and ample time outside classes for discussion of individual problems should be provided. Practical sessions where included should be to the point and well staffed. Informality encourages an exchange of ideas between lecturer and class and sideways between participants. Tutorials are generally of little interest but demonstrations are very useful for concentrating effort.

Residential courses are usually more successful as an air of informality is more readily obtained.