

179. For reasons which will appear later in this section fifty additional places are distributed between the two schools. An examination of Table H will show that the numbers at present enrolled in the first professional year are almost identical with the estimated enrolments. In civil engineering the Auckland figure remains about the same as that for present enrolments, but the Canterbury figure shows a decided reduction. In electrical engineering the estimated figures assume that Auckland will increase its enrolment and that the Canterbury enrolment will decrease. The estimated figures for mechanical engineering (totalling 24) are less than half the present number of students. It has already been pointed out that in mechanical engineering many professional engineers obtain their qualifications by means of Associate Membership of the British Institution of Mechanical Engineers. It may well happen that in future the demand for graduates will increase at the expense of those qualified by other means, in which case the estimated number of 24 may be greatly exceeded.

180. It must be emphasized that the estimated figures in Table H are purely hypothetical. The Committee does not suggest that the numbers should be rigorously limited in accordance with the estimate, but on the evidence available it would seem that some such enrolment would meet requirements. Whether the estimates are sufficiently high to provide the necessary number of graduates depends on what may be broadly called the efficiency of the schools—that is to say, anything that can be done to increase the percentage of passes in the professional years without reducing the quality of the work done will have the effect of increasing the output of graduates. The Committee's attention was drawn to the fact that a number of students took longer than the normal time to complete their courses because failure to pass all the examinations of one professional year may prevent their completing the succeeding year. The Committee considers that this difficulty would be partly overcome by instituting a system of supplementary examinations conducted before the commencement of each academic year. At these examinations students whose work is very little below pass standard might present themselves for a second examination and so avoid losing a full year. It would, of course, be necessary to provide safeguards against an abuse of this system.

RECOMMENDATION—

That the University of New Zealand consider the institution of supplementary examinations for the professional years of the B.E. degree.

181. In general, the estimates in Table H may be said to suggest that the Canterbury school should be stabilized at an enrolment somewhere about 250 and that further places should be developed in the Auckland school. This raises the broader question of co-ordination of the work of the two schools. In the opinion of the Committee there should be some body responsible for such co-ordination, a body able to decide the number of student-places to be made available in each school and to guide the development of specialist courses. Such matters should be considered by the Council of Engineering Education (recommended elsewhere) in collaboration with the two faculties.

182. Broadly speaking, then, the Committee does not think that the immediate need is for an over-all increase in the number of student-places. Indeed, as has been shown in Section 8, the recruitment of any greatly increased number of entrants to the first professional year would, in present circumstances, be extremely difficult. The Committee thinks rather that there should be a reduction in the numbers of students at the Canterbury school and that the enrolments at the Auckland school should be gradually increased. It considers, further, that everything possible should be done to ensure that the reasonable progress of students from year to year is not unnecessarily retarded and that for this purpose conditions of building, staffing, and equipment should be improved, where necessary, as soon as possible.