

183. It remains now to consider how far the University schools of engineering should provide courses for non-degree students. The Committee is of opinion that, since degree courses should be conceived as a unit rather than an aggregate of separate subjects, the inclusion in University degree classes of students who, though doing similar work, are not similarly prepared for it and are not aiming at a full University course is distracting and unsatisfactory both to staff and to degree and non-degree students alike. As has already been pointed out, some 82 such students were in attendance at the schools during 1948. On general principles the Committee thinks that provision should be made elsewhere for such students, and it has recommended the establishment of diploma courses. In the immediate future, however, it may be necessary for some non-degree students to attend the University schools until the technical schools are able to accommodate them in diploma courses.

RECOMMENDATION—

That, as soon as the necessary facilities can be made available in technical schools or technological colleges for other students in engineering, the University engineering course be restricted to those students proceeding to a degree in engineering.

(6) FURTHER COURSES

184. It is necessary now to consider certain branches of engineering for which degree courses are not at present available. The Committee received evidence that, despite the very great importance of refrigeration in our economy, opportunities for training in this branch of engineering are inadequate. Evidence on the subject of telecommunication engineering was even more convincing. There is at present little engineering training for this important public service. Recruitment is at present from graduates in science, but there is reason to believe that a course in engineering, with a special bias towards telecommunications, would be a more suitable preparation for at least some of the people engaged by the Post and Telegraph Department and the Broadcasting Service. It was represented, too, that the previously existing course in locomotive engineering should be reinstated.

RECOMMENDATIONS—

That optional subjects (locomotive engineering and refrigeration engineering) be added to the list of subjects for the third professional examination for the degree of Bachelor of Engineering (Mechanical).

That a subject (telecommunications) be added to the list of subjects for the third professional examination for the degree of Bachelor of Engineering (Electrical), and that this subject be optional with hydraulics and pneumatics.

(7) DEGREES

185. Courses are at present offered for B.E. and B.E. (Honours). The honours degree, as has already been mentioned, involves a course of at least four professional years and is awarded only to candidates who have presented a satisfactory thesis. Some witnesses considered that the nature of the degree of B.E. (Honours) might not be readily understood. It was further suggested that there was room for some form of degree that would indicate that the successful candidate had pursued his studies after completing his Bachelor's degree, and had, after gaining experience in the practice of his profession, made a significant contribution in his special field. The Committee does not feel justified in expressing a final opinion on this matter, but recommends—

RECOMMENDATION—

That the University of New Zealand be asked to investigate the question of establishing a Master's Degree in Engineering.