

UNIVERSITY ADMISSIONS

Who will Get into University?

Now is the time of year when aspiring university entrants in Britain are choosing courses and filling in application forms which the Universities Central Council on Admissions (UCCA) will distribute to the universities of their choice. Some idea of their chances of success can be obtained from last year's figures (published in the fifth report of UCCA, 1966-67). The percentage chances of being accepted for courses which began in October 1967 are shown in the table, which are in error to the extent that acceptances are shown under the candidates' first choice.

University course	Applied	Accepted	Per cent chance of acceptance
Education	654	148	22.6
Medicine, dentistry and health	8,255	2,434	29.4
Engineering and technology	13,686	7,677	56
Agriculture, forestry, veterinary science	1,975	896	45.5
Pure science	18,306	12,850	70
Social, administrative, business studies	24,882	9,533	39.4
Architecture and other professional and vocational subjects	2,049	485	23.7
Language, literature	13,181	6,509	49.5
Arts other than languages	7,633	3,986	52.2

The difficulty facing candidates for medicine and the social sciences is underlined by UCCA's figures for candidates placed in universities during the clearing operation in October 1967. The object of this operation is to assist the universities to fill their remaining places with suitably qualified candidates before the academic year begins. In October 1967, 1,273 candidates for medical courses were still unplaced. In the end, places were found for 331 of these, some in courses other than medicine. Fifty of those finally placed had A-level results consisting of grades *AD* and *E* or *B* and *B* or their equivalents in UCCA's scoring system, on which $A=5$, $B=4$, $C=3$, $D=2$ and $E=1$. In sociology, ninety-one out of 1,043 candidates were placed during clearing, most of whom had A-level grades *ADE*, *BB* or better, that is scores of 8 to 11. Nineteen of them had grades equivalent to *ABE* or *AA*. Two hundred and eleven out of 1,784 unplaced economics candidates were placed during clearing. Most of these had scores of between 6 and 12, and the largest proportion (forty) had grades *ADE*, *BB* or the equivalent.

The situation was brighter for mathematics and physics, and as a result of the clearing operation 206 out of 488 mathematicians and 215 out of 366 physicists were placed in universities. Thirty-four of the mathematicians had A-level grades *BE*, *CD* or their equivalent, and thirty-five of the physicists had *DE*. In engineering the situation was similar. A total of 505 out of 1,603 candidates were placed during clearing. Of these the largest number had A-level grades *BE*, *CE* or the equivalents. A slightly higher standard was evident in biology. Out of 360 candidates remaining in October 1967, 109 were placed and the largest proportion of them had A-level grades *BD*, *AE* or the equivalent.

DISTINCTIONS

Fermi Prize for Wheeler

THE Enrico Fermi Prize, worth \$25,000 and a great deal of public acclaim, has been awarded to Professor J. A. Wheeler of Princeton University, according to a statement by the US Atomic Energy Commission. The intention is that there should be some kind of a ceremony to mark the presentation on December 2 this year, the anniversary of the occasion when the Fermi pile at Chicago first became critical twenty-six years ago. By the award of this prize, Dr Wheeler joins the small band of people who have by now lent the Enrico Fermi award such distinction that it must soon come to match even the Nobel Prize in grandeur. Dr Wheeler's most direct contribution to the subject with which the AEC is chiefly concerned is the paper with Niels Bohr in which, in 1939, a rudimentary theory of the fission process was worked out. During the Manhattan Project he worked at Chicago on the design of production reactors which culminated in the building of the Hanford plutonium reactors. Academically, however, Dr Wheeler is best known for his contributions to the theory of particle scattering in the years before the Second World War, for his work on nuclear structure immediately after it and, more recently, for his provocative and continuing interest in the foundations of quantum theory and of gravitational theories.

With the addition of Professor Wheeler to the list of recipients, interest is bound to quicken in the long-term future of the Enrico Fermi award. Sooner or later, it would seem, the AEC is bound to have to decide whether it can continue to make the award to people who have contributed directly to the development of atomic energy as such. The fact that the terms of the 1954 Atomic Energy Act which authorized the awards allow the commission to look outside the United States for potential recipients does offer some latitude, and there is still a plentiful supply of potential recipients in the United States. But how long will this last? Will progress in fusion research be quick enough to augment the supply of recipients? Or will the AEC find itself turning to high energy physics, with all the dissension that could bring?

ELECTRICAL ENGINEERING

Turbogenerators keep Growing

ENGLISH ELECTRIC LTD must be pleased that, in the midst of the battle between Plessey and GEC for control, Mr J. W. H. Morgan, the general manager of its electrical machines group, has received an award from the Royal Society marking his contribution to the development of large hydrogen cooled turboalternators. The award is the S. G. Brown medal, given annually to a recipient nominated in turn by the Institutions of Civil, Mechanical and Electrical Engineers. Mr Morgan has been involved at English Electric in the sequence of increases of output from a single turboalternator which have now made it possible to manufacture units of 800 and 1,100 MW. Mr Morgan talked last week of how these advances have come about.

In 1950, the largest turboalternators in Britain were air cooled 60 MW machines. The trend towards larger units has been made possible chiefly by new cooling methods. The 500 MW units now in service produce