FACULTY OF ENGINEERING

SIXTH STAGE

(30 weeks part-time course)

		Hours per week for 30 weeks lec. lab./tut.
8.131	Structures	2 - 2
8.141	Engineering Computations	1 0
8.222	Engineering Materials	1 — 1
8.611	Civil Engineering	2 - 0
8.612	Civil Engineering	2 — 0
	One 30-hour General Studies Elective	1 — 0
		9 — 3

CIVIL ENGINEERING — CONVERSION COURSE

(A.S.T.C. Diploma to B.Sc. (Tech.) Degree)

Recent A.S.T.C. diploma holders in Civil Engineering may qualify for the degree of Bachelor of Science (Technology) by completing the following course of study. The programme outlined is that required of recent diplomates. Diplomates of many years standing may be required to take additional subjects.

FIRST STAGE (30 weeks part-time course)

		Hours per week
		for 3 terms lec. lab./tut.
		icc. iab./tat.
1.001/2	Physics I, Part 2	$1\frac{1}{2}$ — $1\frac{1}{2}$
2.001/2	Chemistry I, Part 2	$1\frac{1}{2}$ — $1\frac{1}{2}$
5.301	Engineering Mechanics	14 3
10.022/2	Mathematics	1½ ½
	One 30-hour General Studies Elective	1 — 0
		
		63 41

SECOND STAGE (30 weeks part-time course)

		Hours per weel for 3 terms lec. lab./tut.
1.212	Physics II(T)	11 11
8.131	Structures	2 - 2
8.141	Engineering Computations	1 — 0
	Engineering Materials (Soil Mechanics)*	
8.521	Hydraulics	1 1
		$7\frac{1}{2}$ — $4\frac{1}{2}$

^{*} First term only.

DEPARTMENT OF SURVEYING

The Department of Surveying offers a four-year full-time course and a seven-year part-time course, both leading to the degree of Bachelor of Surveying.

Surveying is broad in its scope. The academic training is first in the basic sciences of mathematics, physics and geology; a number of engineering subjects are studied; then surveying and its various branches, geodesy, astronomy and photogrammetry; and their application in trigonometric, engineering, cartographic and cadastral work. There is a correspondingly wide choice of types of surveying open to the graduate in surveying.

Surveying involves taking measurements in the field, and the course includes practical classes in which the theory studied in lectures is applied to actual surveys and acquaintance is made with surveying instruments. Survey camp must be attended for two weeks at the end of the second and third years of the course. In addition, students must gain practical experience under a surveyor for at least twenty-four weeks during vacations, preferably for eight weeks after the second year and for sixteen weeks after the third year.

For those wishing to become Registered Surveyors after graduation the degree confers exemption from all written examinations of the Board of Surveyors. Additional time must, however, be served under a Registered Surveyor, some exemption from this time being obtainable in respect of vacation experience, provided the Board gives prior recognition. For further information consult the Registrar of the Board.

SURVEYING—FULL-TIME COURSE

Bachelor of Surveying

FIRST YEAR

(30 weeks day course)

		Hours per week for 3 terms lec. tut., etc.
1.001	Physics I	3 - 3
5.001	Engineering I	3 — 3
8.801	Surveying I	2 — 4
10.001	Mathematics I	4 — 2
		12 —12
		· · · · · · · · · · · · · · · · · · ·

FACULTY OF ENGINEERING

SECOND YEAR

(30 weeks day course)

		Hours per week for 3 terms lec. lab./tut.
1.212	Physics II(T)	2 — 2
8.711	Engineering for Surveyors	$2\frac{1}{2}$ — $\frac{1}{2}$
8.802	Surveying II*	$3 - 2\frac{1}{2}$
8.841	Surveying Computations	1 ½
10.022	Mathematics	3 — 2
10.361	Statistics	$1\frac{1}{2}$ — 0
25.531	Geology†	11 3
26.501	English or	1 +
26.571	An Introduction to Modern Drama	1 2
		$\frac{15\frac{1}{4}-8\frac{3}{4}}{1}$

THIRD YEAR**

(21 weeks day course)

		for 21 weeks lec. tut., etc.
	Engineering for Surveyors Surveying III* Geodesy*	$\begin{array}{ccc} 2 & - & 0 \\ 2 & - & 1\frac{1}{2} \\ 2\frac{1}{2} - & 2 \end{array}$
8.831S 8.842S	Astronomy Surveying Computations Photogrammetry	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
8.881S	Land Law, Valuation and Utilization† Two 30-hour General Studies Electives	$\frac{3\frac{1}{2}-0}{3-0}$
		$\frac{18\frac{1}{2}7}{}$

FOURTH YEAR (30 weeks day course)

		Hours per week for 3 terms lec. tut., etc.
6.811	Electronic Instrumentation for Surveyors	1 — 0
8.822	Geodesy	$2 - 1\frac{1}{2}$
8.832	Astronomy	$1\frac{1}{2}$ — 1
8.852	Photogrammetry	$1 - 3\frac{1}{2}$
8.882	Cadastral Surveying	1½ ½
11.411	Town Planning*	1 — 1
25.533	Geophysics†	2 — 0
8.081	Thesis	3 — 0
	General Studies, Advanced Elective	2 — 0
		$15 - 7\frac{1}{2}$

SURVEYING—PART-TIME COURSE

Bachelor of Surveying

FIRST STAGE

(30 weeks part-time course)

	for 3 terms lec. lab./tut.
Surveying I	
	7 — 5

SECOND STAGE

(30 weeks part-time course)

		for 3 terms
		lec. lab./tut.
1.001	Physics I	3 — 3
5.001	Engineering I	3 3
		•
		6 — 6

^{*} Lectures cease at end of Second Term.

^{*} A two-week survey camp must be attended as part of this subject.

[†] Two one-day excursions are an essential part of the course.

^{**} Terms 1 and 2 only.

[†] During Term III there will be only one hour of lectures per week. A one-day Geophysical excursion is an essential part of the subject.

THIRD STAGE

(30 weeks part-time course)

		for 3 terms lec. lab./tut.
1.212	Physics II (T)	2 - 2
8.711	Engineering for Surveyors	$2\frac{1}{2}$ $\frac{1}{2}$
8.841	Surveying Computations	1 — ½
10.022/1	Mathematics II, Part I	$1\frac{1}{2}$ — 1
26.501	English	1 — ½
		$8 - 4\frac{1}{2}$

FOURTH STAGE

(30 weeks part-time course)

		for 3 terms lec. lab./tut.
8.802	Surveying II*	$3 - 2\frac{1}{2}$
10.022/2	Mathematics II, Part II	1½— 1
10.361	Statistics	$1\frac{1}{2}$ — 0
25.531	Geology†	11 3
26.501/2	English	1 — 0
	One 30-hour General Studies Elective	1 0
		9‡— 4‡

FIFTH STAGE

(30 weeks part-time course)

	-	Hours per week for 3 terms lec. lab./tut.
8.712	Engineering	$1\frac{1}{2}$ — 0
8.803	Surveying III**	$1\frac{1}{2}$ — 1
8.831	Astronomy	1½— ½
8.842	Surveying Computations	1 — ½
	Land Law, Valuation and Utilization†	$2\frac{1}{2}$ — 0
	One 30-hour General Studies Elective	1 — 0
		9 — 2
		* ***

^{*} Students must attend a two-week survey camp.

SIXTH STAGE

(30 weeks part-time course)

6.811 8.821 8.851 8.882 25.533	Electronic Instrumentation for Surveyors Geodesy* Photogrammetry Cadastral Surveying Geophysics† General Studies Advanced Elective	Hours per week for 3 terms lec. lab./tut. 1 — 0 $1\frac{1}{2}$ — $1\frac{1}{2}$ $1\frac{1}{2}$ — $1\frac{1}{2}$ 2 — 0 2 — 0
		$9\frac{1}{2}$ 3

SEVENTH STAGE (30 weeks part-time course)

8.852	Photogrammetry	 fours per week for 3 terms lec. lab./tut. 2 — 1½ 1½— 1 1 — 3½ 1 — 1
		5½— 7

SCHOOL OF ELECTRICAL ENGINEERING

In preparation for a career in any branch of electrical engineering students must acquire a knowledge of the basic sciences of mathematics and physics. Students should realize that electrical engineering, perhaps more than most other branches of engineering, is closely linked with the pure sciences, and requires a scientific outlook and approach for a proper understanding of its problems.

The School offers a full-time course of four years' duration leading to the degree of Bachelor of Engineering (pass or honours), and a six-year part-time course for the degree of Bachelor of Science (Technology). This course may also be completed in three years of part-time and two years of full-time study. Special conversion courses are provided for holders of the A.S.T.C. diploma in Electrical or Radio Engineering.

The degrees of Bachelor of Engineering and Bachelor of Science (Technology) are recognized by the Institution of Electrical Engineers, England, as giving complete exemption from the examinations required for admission to the grade of Associate Member.

[†] Two one-day excursions are an essential part of the course.

^{**} A one-week survey camp must be attended as part of this subject.

^{*} A one-week survey camp must be attended as part of this subject. † A one-day Geophysical excursion is an essential part of this subject.

^{** 20} weeks only. Lectures cease at end of Term II.