

## 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 what will be 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 three terms lec. lab./tut.
1.001/2 Physics I, Part 2 .....	1½ — 1½
2.001/2 Chemistry I, Part 2 .....	1½ — 1½
5.301 Engineering Mechanics .....	1½ — 0
10.12/2 Mathematics* .....	1½ — 0
Social Science Elective .....	1 — 0
	6½ — 3½

\* From 1963 this subject will be replaced by 10.022/2 Mathematics, 2 hours per week.

### SECOND STAGE

(30 weeks part-time course)

	Hours per week for three terms lec. lab./tut.
1.212 Physics II(T) .....	1½ — 1½
8.131 Structures .....	2 — 2
8.141 Engineering Computations .....	1 — 0
8.222 Engineering Materials (Soil Mechanics)* .....	2 — 0
8.521 Hydraulics .....	1 — 1
	7½ — 4½

\* First term only.

## SURVEYING—FULL-TIME COURSE

### FIRST YEAR

(30 weeks day course)

	Hours per week for 30 weeks lec. lab./tut.
1.001 Physics I .....	3 — 3
2.001 Chemistry I .....	3 — 3
5.001 Engineering I .....	3 — 3
10.001 Mathematics I .....	4 — 2
	13 — 11

## SECOND YEAR\*

(24 weeks day course)

	Hours per week for 24 weeks lec. lab./tut.
1.212S Physics II(T) .....	2 — 2½
7.531S Geology .....	2 — 1
8.421S Engineering Surveying§ .....	1½ — 1½
8.811S Surveying§ .....	1 — 1
8.841S Surveying Computations .....	1 — 1
8.861S Cartography .....	1 — 1½
8.871S Land Utilisation .....	1½ — ½
10.022S Mathematics .....	3 — 2
10.361S Statistics .....	1½ — 0
50.011S English† .....	3 — 0
	17½ — 11

\*Lectures cease at end of 4th week of 3rd term.

†Terms 1 and 2 (20 weeks) only.

§A two week survey camp must be attended in third term.

## THIRD YEAR\*

(24 weeks day course)

	Hours per week for—	
	10 weeks lec. lab./tut.	14 weeks lec. lab./tut.
5.501S Fluid Mechanics .....	1 — 1½	1 — 1½
8.812S Surveying .....	1 — 2	1 — 0
8.241S Soil Mechanics .....	1 — 1½	1 — 1½
8.821S Geodesy§ .....	2 — 3	1 — 3
8.831S Astronomy§ .....	2 — 0	2 — 2
8.842S Surveying Computations .....	1½ — 1½	1 — 0
8.851S Photogrammetry .....	1 — 1½	2 — 3
8.611S Civil Engineering .....	3 — 0	3 — 0
8.891S Theory of Instruments .....	1 — 0	1 — 0
51.011S History or } .....	1½ — 0	1½ — 0
52.011S Philosophy } .....	1½ — 0	1½ — 0
Social Science Elective .....	1½ — 0	1½ — 0
	16½ — 10½	16 — 10½

\*Lectures cease at end of 4th week of third term.

†Terms 1 and 2 (20 weeks) only.

§A two week survey camp must be attended in third term.

FOURTH YEAR\*—Pass Course  
(24 weeks day course)

	Hours per week for 24 weeks lec. lab./tut.
7.533 Geophysics .....	2½— 0
8.613S Civil Engineering .....	4½— 0
8.822S Geodesy .....	1 — 1
8.832S Astronomy .....	1½— ¾
8.852S Photogrammetry .....	1 — 1½
8.862S Cartography .....	2 — 0
8.872S Land Valuation .....	1 — 0
8.881S Survey Laws and Regulations .....	1½— 0
11.411 Town Planning .....	1 — 1
Minor Thesis .....	3 — 0
Humanities, Advanced Elective† .....	3 — 0
	21½— 4½

\*Lectures cease at end of 4th week of third term.  
†Terms 1 and 2 (20 weeks) only.

FOURTH YEAR—HONOURS COURSE  
(30 weeks day course)

	Hours per week for 24 weeks* lec. lab./tut.
7.533 Geophysics .....	2½— 0
8.613S Civil Engineering .....	4½— 0
8.822S Geodesy .....	1 — 1
8.832S Astronomy .....	1½— ¾
8.852S Photogrammetry .....	1 — 1½
8.862S Cartography .....	2 — 0
8.872S Land Valuation .....	1 — 0
8.881S Survey Laws and Regulations .....	1½— 0
11.411 Town Planning .....	1 — 1
Humanities, Advanced Elective† .....	3 — 0
Two Honours subjects are to be selected from Geodesy, Surveying and Photogrammetry .....	3 — 0
	21½— 4½

† Terms 1 and 2 (20 weeks) only.

\*In the last 6 weeks of third term 18 hours per week will be devoted to work on the thesis. In addition students will be required to attend nine hours per week such course work as may be prescribed.

Geodesy	}	9 hours per week
Surveying		
Photogrammetry		

SURVEYING — PART-TIME COURSE

FIRST STAGE  
(30 weeks part-time course)

	Hours per week for 30 weeks lec. lab./tut.
1.001/1 Physics I, Part I .....	1½— 1½
2.001/1 Chemistry I, Part I .....	1½— 1½
5.001/1 Engineering I, Part I .....	1½— 1½
10.001/1 Mathematics, Part I .....	2 — 1
	6½— 5½

SECOND STAGE  
(30 weeks part-time course)

	Hours per week for 30 weeks lec. lab./tut.
1.001/2 Physics I, Part II .....	1½— 1½
2.001/2 Chemistry I, Part II .....	1½— 1½
5.001/2 Engineering I, Part II .....	1½— 1½
10.001/2 Mathematics I, Part II .....	2 — 1
	6½— 5½

THIRD STAGE  
(30 weeks part-time course)

	Hours per week for 30 weeks lec. lab./tut.
1.212 Physics II(T) .....	1½— 1½
8.421 Engineering Surveying* .....	¾— ¾
8.841 Surveying Computations .....	¾— ¾
8.861 Cartography .....	2/3— 1 1/3
10.022/1 Mathematics II, Part I .....	1 — 1
50.011/1 English Language .....	1 — 0
	5 2/3— 5 1/3

\*Saturday fieldwork additional. A survey camp of one week must be attended in the third term.

**FOURTH STAGE**  
(30 weeks part-time course)

		Hours per week for 30 weeks	
		lec. lab./tut.	
5.501	Fluid Mechanics .....	1	— 1
7.531	Geology .....	1½	— ½
8.811	Surveying .....	½	— ½
8.871	Land Utilisation .....	1	— ½
10.022/2	Mathematics II, Part II .....	1	— 1
10.361	Statistics .....	1	— 0
50.011/2	English Literature .....	1	— 0
51.011	History <i>or</i> } .....	1	— 0
52.011	Philosophy } .....		
		<hr style="width: 50%; margin: auto;"/> 8 — 4	

A survey camp of one week must be attended in third term.

**FIFTH STAGE**  
(30 weeks part-time course)

		Hours per week for—	
		20 weeks	10 weeks
		lec. lab./tut. lec. lab./tut.	
8.891	Theory of Instruments .....	1 — 0	0 — 0
8.241	Soil Mechanics .....	1 — 1	1 — 1
8.821	Geodesy .....	1½ — 2½	1½ — 2½
8.842	Surveying Computations .....	1 — ½	1 — ½
8.862	Cartography .....	2 — 0	1 — 0
	Social Science Elective .....	1 — 0	1 — 0
		<hr style="width: 50%; margin: auto;"/> 7½ — 3½    5½ — 3½	

A survey camp of one week must be attended in third term.

**SIXTH STAGE**  
(30 weeks part-time course)

		Hours per week for—	
		20 weeks	10 weeks
		lec. lab./tut. lec. lab./tut.	
7.533	Geophysics .....	2 — 0	2 — 0
8.611	Civil Engineering .....	2 — 0	2 — 0
8.812	Surveying .....	1 — 1	1 — 0
8.831	Astronomy .....	1½ — ½	1½ — 1½
8.851	Photogrammetry .....	1½ — 1½	1½ — 1½
	Humanities Advanced Elective .....	2 — 0	2 — 0
		<hr style="width: 50%; margin: auto;"/> 9½ — 3½    9½ — 3½	

A one week survey camp must be attended in third term.

**SEVENTH STAGE**  
(30 weeks part-time course)

		Hours per week for—	
		20 weeks	10 weeks
		lec. lab./tut. lec. lab./tut.	
8.613	Civil Engineering .....	3½ — 0	3½ — 0
8.822	Geodesy .....	1½ — 0	1½ — 0
8.832	Astronomy .....	1½ — ½	0 — 1½
8.852	Photogrammetry .....	1 — 1	½ — 1½
8.872	Land Valuation .....	1 — 0	0 — 0
8.881	Survey Laws & Regulations .....	1 — 0	2 — 0
	Town Planning .....	½ — ½	½ — ½
		<hr style="width: 50%; margin: auto;"/> 10 — 2    8 — 3½	

**Note.**—Part-time students are not required to complete a thesis since their professional experience is taken into consideration. For Honours a part-time student must complete one full-time year 4.