# ST. HELENS TECHNICAL COLLEGE



Prospectus

#### Department of Mining

Head of Department: R. DICKIE

Senior Lecturer: One Vacancy (Provisional)

Lecturer: R. GILL

Assistants:

Grade B: J. H. BLINSTON, J. CRITCHLEY, P. HENRY, J. HOUSLEY, A. POWNALL, W. SMITH (with responsibility), G. TABERNER

Laboratory Steward: (One Vacancy)

Courses provided in the Department of Mining range from those for Juvenile Entrants in the Mining Industry to those designed to meet the needs of older men, with many years of service in the industry, who wish to acquire a qualification which will fit them for positions of greater responsibility.

#### NEW ENTRANTS' COURSE

This course, which is approved by the Ministry of Fuel and Power and which is organized and operated in conjunction with the National Coal Board, exists to provide the statutory training which the Coal Mines (Training) General Regulations, 1945, require to be given to all juveniles of 15 to 18 years of age entering the industry. All students on the course are nominated by the National Coal Board, and spend half of the sixteen weeks which the course occupies receiving theoretical instruction in the Technical College, and the remainder in practical training at a colliery.

The syllabus includes Mining Science, Workshop Practice and General Topics. In addition a certain proportion of time is spent in Physical Training

in the College gymnasium, playing field or swimming bath.

Students of promise are encouraged to enrol later for one of the following courses.

#### INTRODUCTORY MINING COURSE (1)

This course is of one year's duration and students who pass satisfactorily through it may proceed to the Ordinary National Certificate Course (First Year) or to the Second Year of the General Mining Certificate Course.

Practical Mathematics	w	9-10.30
Drawing	W	10.30-12
Mining Science	W	1.15-2.45
Workshop Processes	W	2.45-3.45
Workshop Practice	W	3.45-4.45
English	W	5-6

## ORDINARY NATIONAL CERTIFICATE COURSE IN MINING MINING MINING MECHANICAL ENGINEERING

This course is of three years' duration and students wishing to take the course must be at least 16 years of age and have gained a good Pass in the Introductory Course in Mining, or otherwise produce evidence of a satisfactory standard of general education. The first two years are common to Mining students, Electricians and Mechanics.

First Year	Mathematics	F	11-12
(2)			3.15-4.15
	Engineering Science	F	9–11
	Mining Science	F	4.45-6.45
	Drawing	F	1.15-3.15
Second Year	Mathematics	Th	2.15-4.15
(3)	Mechanical Engineering Science		9-11
(3)	Electrical Engineering Science		11-12 and
	Licetical Liighteering Science		
	Mining Coiones	Th	1.15-2.15 4.45-6.45
	Mining Science	111	4.45-0.45
Third Year	Mathematics	M	11-12 and
(4)			1.15-2.15
	Mining Technology	M	2.15-4.15
	0		(all students)
	Electrical Engineering Science	M	9-11
	8		nd Electricians)
	Mechanical Engineering Science		4.45-6.45
	8		and Mechanics)
	Electrical Practice and Regulations		4.45-6.45
			ectricians only)
	Mechanical Practice and Regulations		9-11
	Wiccinament Fractice and Regulations		lechanics only)
Evening c	ourses will be arranged if a sufficient nu	100 C	
Literang C	ourses with so urranged it a summer in	THE CALL OF	7

#### GENERAL MINING CERTIFICATE COURSE

This course is designed for students who require a training which will enable them to qualify as Deputies, Overmen, Colliery Electricians and Colliery Mechanics. The first year of the course is common to all these groups, whilst the second and third years contain the specialized subjects appropriate to each group.

FIRST YEAR (5)

Course A	Calculations and Drawing	W	11-12 and
			1.15-2.15
	Mining Science	W	9–11
	Workshop Technology and Practice	W	2.15-4.45

Course B	Calculations and Drawing	Th	11-12 and
	Mining Science Workshop Technology and Practice	1/	1.15-2.15 9-11 2.15-4.45
	SECOND YEAR (6)		
Course A (Mining)	Calculations and Drawing  Engineering Science Mining Science and Technology	and Tu	11.30-12.30 1.45-2.45 2.45-4.45 9-11.30
	Calculations and Drawing Engineering Science	Tu Tu	9-11 11-12 and 1.15-2.15
	Electrical Practice and Regulations  Calculations and Drawing  Engineering Science  Workshop Technology and Practice	Tu Tu	2.15-4.45 2.45-4.45 9-11 11-12 and 1.15-2.45
	THIRD YEAR (7)		
Course A (Mining)	Mining Technology and Regulations Mining Electrical Equipment Mining Mechanical Equipment Mathematics	F F F	2.15-4.15 4.45-6.45 9-11 11-12 and 1.15-2.15
Course B (Electricians)	Mining Technology and Regulations  (a) Electrical Technology  Electrical Practice and Regulations	M M M	4.45-6.45 2.15-4.15 11-12 and 1.15-2.15
	Mathematics	M	9-11
Course C (Mechanics)	Mechanical Technology	M	11-12 and 1.15-2.15 2.15-4.15
	Mechanical Practice and Regulations Mathematics	M M	9-11 4.45-6.45

### COLLIERY ELECTRICIANS AND MECHANICS ADVANCED CERTIFICATE COURSES

These courses, of two years' duration, are designed to prepare students for the examinations of the City and Guilds of London Institute for the award of Colliery Electricians' or Mechanics' Advanced Certificates. Such Certificates are approved by the Mining Qualifications Board for the award of Class I Certificates. Students taking these courses must have first gained an Ordinary National Certificate in Mining (in the appropriate group) or an Electrians' or Mechanics' Certificate in the Mining Industry General Course.

#### COLLIERY MECHANICS ADVANCED COURSE

#### FIRST YEAR (8)

Mechanics and Applied Heat	Th	11-12 and
		I-3
Workshop Technology and Practice	Th	5.30-6.30
Colliery Mechanical Engineering		3-5
Mining Legislation		9-10
Social Studies	Th	10-11

#### SECOND YEAR (9)

Mechanics and Applied Heat	Tu	9-12
Workshop Technology and Practice	Tu	5.45-6.45
Colliery Mechanical Engineering	Tu	1.15-3.15
Mining Legislation	Tu	3.15-4.15
Social Studies	Tu	4.45-5.45

#### COLLIERY ELECTRICIANS ADVANCED COURSE

#### FIRST YEAR (10)

Electrical Technology	W	9-12
Colliery Electrical Engineering	W	2.15-3.15
Electrical Engineering Practice	$\mathbf{w}$	4.45-6.45
Mining Legislation	W	3.15-4.15
Social Studies	W	1.15-2.15

#### SECOND YEAR (11)

Electrical Technology	F	9-12
Colliery Electrical Engineering	F	2.15-3.15
Electrical Engineering Practice	F	4.45-6.45
Mining Legislation	F	3.15-4.15
Social Studies	F	1.15-2.15

#### GENERAL MINING ADVANCED CERTIFICATE COURSE (12)

This course, of two years' duration, is designed to prepare students for the City and Guilds of London Institute Examinations at the end of the Course. The Course is suitable for intending Overmen and other underground specialists.

Mining Electrical Equipment	Tu	4.45-6.45
Mining Mechanical Equipment	Tu	9-11
Mining Technology	Tu	11–12 and
		1.15-2.45
Mining Legislation	Tu	2.45-4.15

### SPECIAL COURSE FOR THE TRAINING OF COLLIERY DEPUTIES AND SHOTFIRERS (13)

	First Day	Second Day
Mining Science	1.15-4.15	
Mine Working	S	1.15-4.15
Mine Machinery		9-12
Supervision	10.30-12	-
Legislation	9-10.30	

### FULL-TIME COURSE FOR COLLIERY ENGINEERING APPRENTICES (14)

A full-time course of one year's duration will be available if required for Colliery Engineering Apprentices, and details will be arranged by agreement with the National Coal Board.

#### FIRST AID COURSES (15)

These courses are of 10 week's duration and consist of 6 lectures given by a medical practitioner, three practice classes and an examination on the last evening conducted by the St. John Ambulance Association. Courses are arranged in agreement with the management of collieries in the St. Helens area.

#### GEOLOGY (16) and SURVEYING (17)

Evening or Day Classes will be arranged to meet the requirements of students studying for the General Certificate of Education.

Intermediate B.Sc. Geology and Mineralogy W 7.30-9.30

### EXAMINATIONS IN GAS TESTING AND HEARING FOR COLLIERY DEPUTIES AND SHOTFIRERS

Examinations in Gas Testing and Hearing will be held in the Mining Department, commencing 9-30 a.m. on the following dates:

Saturday, October 15th, 1960 Saturday, January 14th, 1961 Saturday, April 15th, 1961 Saturday, July 1st, 1961

Application Forms may be obtained from the Principal, to whom they should be returned, together with the fee of 7/6d., so as to be received not later than two days preceding the date of the examination.

#### **FULL-TIME STAFF**

Principal: T. E. A. K. JACKSON, M.A. (Oxon), Ph.D. (Manchester)

Head of Building Department:

H. Slater, F.I.Q.S., Registered Architect.

Lecturing Staff:

W. T. Appleton, R.P., M.R.S.H.

J. Bridge, L.I.O.B., A.I.B.I.C.C.

E. Cropper, L.I.O.B.

H. Flavell, H.N.C. Building, A.I.B.I.C.C.

J. Ledwick, H.N.C. Building, A.I.B.I.C.C., A.IM.Wood T.

W. E. Oakes, R.P., A.R.S.H., Full Tech. Cert. Plumbers' Work.

Head of Commerce Department:

H. S. Godfrey, B.Com. (Lond.), F.C.I.S., A.A.C.C.A.

Lecturing Staff:

F. Ashcroft, M.A. (Oxon.), A.C.W.A., A.Com.A.

H. H. Billington, F.F.T.Com., F.S.C.T.

Bridget A. Clark, B.A. (Dunelm).

Margaret J. Coombes, P.C.T., Typewriting Teachers' Diploma.

C. Jones, B.Sc. (Econ.) (Lond.).

C. K. Lysons, A.C.I.S., A.M.B.I.M.

C. Parkinson, B.A. (Liverpool).

G. J. Presland, M.A. (Cantab.).

Cynthia A. M. Skerritt, R.S.A. Teachers' Certificate Typewriting and Shorthand.

J. C. Semple, A.M.H.C.I., M.C.F.A.

Head of Electrical Engineering Department:

W. I. Place, M.Sc., (Leeds), M.I.E.E., F.Inst.P., M.A.M.E.M.E., F.P.S. (Chartered Elec. Eng.).

Lecturing Staff:

H. Barton, Grad.I.E.E., H.N.C. (Mech. Eng.).

J. Burrows, H.N.C. (Elec. Eng.), A.M.A.S.E.E.

J. T. Carr, B.Eng. (Liverpool).

J. J. Fillingham, A.M.I.E.E.

G. C. Freeman, B.Sc. (Dunelm). E. H. Lewis, C.G.L.I. Radio IV.

J. Mercer, B.Sc. Tech., A.M.I.E.E., (Chartered Elec. Eng.) W. H. Strettle, Grad.I.E.E., H.N.C. (Mech. Eng.).

Head of Mechanical Engineering Department:

J. Jennings, B.Sc. (Manch.), M.I.Mech.E.

Lecturing Staff:

R. Bennett, A.M.I.B.F.

J. Blundell, A.M.I.Prod.E., A.M.I.E.I., H.N.C. (Mech. Eng.).

H. Booth, A.M.I. (Mech. E.), H.N.C. (Mech. Eng.).

H. Cowser, H.N.C. (Mech. Eng.), M.I.E.D.

B. Cunliffe, G.I.Mech.E., H.N.C. (Mech. Eng.), M.Q.B.

J. Day, C.G.L.I. Final Machine Shop Engineering.

A. Fenney, C.G.L.I. Final Elec. Arc and Oxy-Acetylene Welding, A.M.I.W.

J. Garner, A.M.I.Mech.E.

L. Hamilton, National Craftsmans' Cert., M.V.Serv. Mech., M.V. Tech. Cert., C.G.L.I., Grad. I.M.I.

P. Helliwell, B.Sc. (Eng.).

H. Hurst, A.M.I.Prod.E., Full Tech. Cert. Machine Shop Eng.

H. Lea, C.G.L.I. Final Machine Shop Eng.

A. Lindon, H.N.C. (Mech. Eng.).

K. H. Lowe, Full Tech. Cert. Sheet Metal Work.

H. E. O'Neill.

C. Owen, Full Tech. Cert. Sheet Metal Work.

R. Platt, Grad.I.Prod.E., H.N.C. (Mech. Eng.), Full Tech. Cert. Machine Shop Eng.

A. Seddon, G.I.Mech.E., H.N.C. (Mech. Eng.).

W. Speakman, A.M.I.Mech.E., H.N.C. (Elec. Eng.), A.M.Inst.F.

K. T. Turner, Grad.I.Prod.E., C.G.L.I. Final Machine Shop Eng.

R. Westall, B.Sc., A.M.I.Mech.E.

#### Head of Mining Department:

R. Dickie, B.Sc., F.G.S.

Lecturing Staff:

J. H. Blinston, A.M.I.Min.E., M.A.M.E.M.E.

J. Critchley, Grad.I.Prod.E., C.G.L.I. Final Machine Shop Engineering.

R. Gill, B.Sc.Eng., A.C.G.I., A.M.I.E.E., M.A.M.E.M.E.

P. Henry, F.B.A.P.T.

J. Housley, C.C.M.

A. Pownall, A.M.I.Min.E., C.C.M.

W. Smith, Mining Diploma, A.M.I.Min.E., M.A.M.E.M.E., C.C.M.

G. Taberner, A.M.I.Min.E., C.C.M.

#### Head of Science Department:

L. W. M. Tyrrell, B.Sc. (Lond.), Ph.D., F.R.I.C.

Lecturing Staff:

G. T. Barnes, B.Sc.

J. Blackledge, M.Sc. (Manch.), Ph.D. (Bristol), A.R.I.C. G. J. Burrows, B.Sc. (Manch.), B.Sc. (Lond.), A.I.F.

W. Caldwell, B.Sc. (Lond.).

D. C. Jenkins, B.Sc. (Wales).

D. Keenan, B.Sc. (Tech.).

A. D. Levaggi, B.Sc. (Manch.), A.R.I.C.

W. Norris, B.Sc. (Lond.), Ph.D., A.R.C.S., D.I.C.

L. W. Swift, B.Sc. (Lond.).

A. G. G. Thomas, M.A. (Cantab.), A.M.I.E.E.

C. Turner, M.Sc. Tech., Ph.D. (Manch.), F.R.I.C.

H. Willis, B.Sc. (Lond.).