

# **Technological University Dublin** ARROW@TU Dublin

**Prospectus: Bolton Street** 

**Dublin Institute of Technology** 

1950

# Printing and Book Production: Prospectus for Day and Evening Classes 1950-51

City of Dublin Vocational Education Committee

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### DEPARTMENT OF

# PRINTING AND BOOK PRODUCTION

TECHNICAL INSTITUTE
BOLTON STREET, DUBLIN
1950-51

PROSPECTUS
FOR DAY AND EVENING
CLASSES

# CALENDAR FOR SESSION 1950-51

1950—SEPT. 4 MONDAY	Day Apprentice School resumes work.
" 18 MONDAY	Evening Courses open for enrol- ment.
" 25 MONDAY	Evening Classes commence work.
DEC. 20 WEDNESDAY	Final Class Meetings before Christmas Vacation.
1951—JAN. 8 MONDAY	All Classes resume work after Christmas Vacation.
MAR. 17 SATURDAY	St. Patrick's Day. School closed.
" 20 TUESDAY	Final Class Meetings before Easter Vacation.
" 28 WEDNESDAY	Evening Classes resume work after Easter Vacation.
APR. 2 MONDAY	Day Apprentice School resumes work after Easter Vacation.
MAY 4 FRIDAY	Final Meetings of Evening Classes.
" 14 MONDAY	Whit Monday. School closed.
JUNE 28 THURSDAY	Summer Term closes.

an roinn clodóireacta azus leabair obair

DEPARTMENT OF

# PRINTING

AND BOOK PRODUCTION

Head of Department:

WILLIAM J. FITZPATRICK, FULL TECH., C. & G., LOND.

# CONTENTS

				PAGE
CALENDAR		Inside	Front	Cover
CITY OF DUBLIN VOCATIONAL	Education	Сомміттен		4
CITY OF DUBLIN VOCATIONAL (BOLTON STREET)		SUB-COMMI	TTEE	5
Joint Printing Apprentice	Advisory	Sub-Commi	TTEE	5
DEPARTMENTAL ADMINISTRAT	ION			6
Teaching Staff				7
GENERAL REGULATIONS				8
Conditions Regulating Adm	IISSION TO	CLASSES	N	13
Description of Courses				15
Examinations		*		18
SCHOLARSHIPS AND PRIZES				18
FEES		Tred tred		19
EQUIPMENT				20
Courses and Time-tables				21
SYLLABUS OF INSTRUCTION				27
GENERAL CURRICULUM OF SO	chools Un	D 2		Cover

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- Mr. M. P. Rowan, 52 Capel Street, Dublin.
- Mr. John Swift, Four Provinces House, Harcourt Street, Dublin.
- Mr. Hilary Williams, 46 Lambay Road, Drumcondra, Dublin.
- Offices: The Technical Institute, Bolton Street, Dublin.

MARTIN M. GLEESON, M.A., B.Comm., H.Dip.Ed.,

Chief Executive Officer.

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Mr. Michael O'Reilly, Irish Engineering Industrial Union.

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Mr. M. P. Rowan, 52 Capel Street, Dublin.

Mr. W. J. Whelan, Dublin Typographical Provident Society.

Mr. Hilary Williams, Ancient Guild of Incorporated Brick and Stonelayers.

Mr. G. E. Hetherington, Master Printers' Association.

Offices:-The Technical Institute, Bolton Street, Dublin.

MARTIN KEADY, B.E., B.SC., A.R.C.SC.I.

Principal.

Telephone: 73553-4.

# JOINT PRINTING APPRENTICE ADVISORY SUB-COMMITTEE

J. ROBERTSON

G. E. HETHERINGTON

G. FITZGERALD

A. J. WILSON

T. LYNAM

W. J. WHELAN

BRENDAN O'CARROLL, B.A., LL.B.

Dublin Master Printers' and Allied Trades'

Union.

Dublin Typographical Provident Society.

J. McCann, Lithographic Printers' Society.

SENATOR M. COLGAN, Irish Bookbinders' and Rulers' Union.

E. HEALY, Stereotypers' Society.

- J. Dunne, Dublin Newspaper Managers' Committee.
- J. JEFFERS, Lithographic Artists' and Process-Workers' Society.

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Vice-Principal:

DONAL O'DWYER, B.ARCH., M.R.I.A.I.

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THE PRINCIPAL

Assistant Head of Department:

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Head of Motor Car Engineering Division:

W. D. PILE, A.M.I.M.E., A.M.I.A.E.

Chief Instructor (Mechanical Engineering Trades):

H. FITZGERALD

# DEPARTMENT OF ARCHITECTURE AND BUILDING

Head of Department:

THE VICE-PRINCIPAL

Assistant Head of Department:

B. O'REILLY, B.ARCH., A.R.I.B.A.

Chief Instructor (Building Trades):

R. GRIMES, A.B.I.C.C., FULL TECH. C. & G. LOND.

# DEPARTMENT OF PRINTING AND BOOK PRODUCTION

Head of Department:

W. J. FITZPATRICK, FULL TECH. C. & G. LOND.

#### SCIENCE DIVISION

Head of Division:

J. NUNAN, B.SC., H.DIP.ED.

#### DAY JUNIOR TECHNICAL SCHOOL

Teacher-in-Charge:

L. MAC AMHLAOIBH, B.A.

Stock-taker:

W. J. N. O'BRIEN, DIPL. ING.

Clerk:

TOMAS O SOMACHAIN

# DEPARTMENT OF PRINTING AND BOOK PRODUCTION

#### TEACHING STAFF

Compositors' Work:	Letterpress Machine
W. J. FITZPATRICK	W. R. Quinn
C. J. McCullagh	B. QUINN
J. McManus	J. WHELAN

Lithographic Art:
-------------------

J. REDDIN

G. MULVANY

# Lithography: K. WALKER

J. Ross

# Linotype and Intertype Operating:

J. F. KEARNS

## Photo-Lithography: Camera Operating:

A. Bowie

### Monotype Operating:

J. L. SULLIVAN

#### Photo-Lithography: Printing Down:

J. Ross

### Monotype Casting:

P. McManus

# Stationery and Letterpress

Binding:

J. Tormey

# Costing and Estimating:

W. J. KIERNAN

#### Book-edge Gilding:

J. KINSELLA

# GENERAL REGULATIONS FOR THE SCHOOLS AND CLASSES OPERATING UNDER THE AUTHORITY OF THE COMMITTEE

#### 1. ADMISSION AND ENROLMENT

(a) In general, applicants for admission to the Classes and Courses must be not less than 14 years of age, but admission to a whole-time Day Course may be granted where the applicant is over 13 years of age and has been enrolled for at least one year in the Sixth Standard of a Primary School. This Regulation does not apply to the School of Music or Colaiste Muire, Cathal Brugha Street.

(b) The Committee, in accordance with the means and facilities at its disposal, has provided classes for the sole purpose of supplementing the practical trade training of persons actually employed at and engaged in the various operations of the trade and whose employment as such is accepted by the recognised Unions of the trades concerned.

(c) In determining whether an applicant for admission to one of these practical trade classes complies with the above conditions the Committee is guided, where necessary, by the evidence supplied by the Masters' Associations and the official Trade Unions of the trade concerned.

(d) Admission to a particular class or course is subject to the published regulations relative to that class or course.

(e) One month after the opening date of classes or courses students will be permitted to enrol only with the special permission of the School Authority.

(f) Pupils in attendance at Primary and Secondary Schools are not eligible for enrolment except by special permission of the School Authority.

- (g) The educational fitness of a student to enrol in a particular course may be decided by an examination or other means considered necessary.
- (h) A student is not entitled to enrol in a class or course which the School Authority decides is too advanced for his/her standard of knowledge.

### (i) Enrolment procedure:-

- (i) Intending students must enter on the Enrolment Form supplied all the information required by the School Authority.
- (ii) The classes or courses to be taken are decided in interview with a member of the School Staff.
- (iii) The appropriate fee is then paid to an officer of the Committee and a receipt issued therefor. A student who pays a fee must insist that he receives an official receipt for the amount of the fee paid.
- (iv) The appropriate class ticket/tickets is then issued to the student.
- (i) No student may attend a class until he/she has received a class ticket.
  - (ii) On first attendance at each class the student must tender to the teacher in charge his/her appropriate class ticket, together with the receipt for fee paid.
- (k) Students will be enrolled during the period and at the times stated in the Committee's publications.
- (1) The School Authority is authorised to refuse an enrolment, pending a decision thereon by the Committee.

#### 2. FEES

(a) The fees payable for the several classes and courses included in the Scheme of Instruction are stated in the publications of the Committee, and must be paid in full on enrolment unless otherwise stated.

(b) Where a course includes subjects of different stages, the total fee will be computed on the basis that the initial fee is that of the highest stage.

(c) For enrolments in subjects ancillary to the original enrolment, in the same or another School or Department, the additional fee will be computed on the basis that all the classes have been selected on first enrolment. Where the additional subjects are deemed not to be ancillary, the fee payable will be as for a separate enrolment.

(d) The School Authority is authorised to decide if the additional enrolment is ancillary to the original enrolment.

(e) For fee purposes, Irish and/or Physical Training will be regarded as additional subjects to any class or course.

(f) Fees will not be refunded except where a class does not form.

(g) Cheques should be crossed and made payable to the City of Dublin Vocational Education Committee.

#### 3. TRANSFERS

An enrolment is not transferable from one student to another. Transfers from one class to another; from one School to another; from Day classes to Evening classes; or from Evening classes to Day classes, with allowance for the fees paid, will be permitted only for a satisfactory reason and by special permission of the School Authority.

#### 4. PRODUCTION OF ORIGINAL RECEIPT

Where applications are made for additional enrolments, or for transfers, the original receipt must be produced.

#### 5. FORMATION AND CONTINUANCE OF CLASSES

The Committee reserves the right at any time to add or delete classes or courses to or from its Scheme of Instruction; to extend the period of a class; and to close a class, or to alter the day or times of a class meeting.

#### 6. DISCIPLINE

The School Authority may suspend any student for breach of rules and regulations; absence from classes; irregular or unpunctual attendance; disorderly conduct in the School or within the School precincts; disobedience to a member of the staff; or for any other reason deemed sufficient. The Committee reserves the right to confirm such suspension and to cancel the enrolment without refund of fee. Where immediate action is required because of indiscipline on the part of the students, any member of the School Staff has authority to take appropriate measures, pending report to the School Authority.

#### 7. SMOKING

Smoking is not permitted in the Schools.

#### 8. INJURY TO STUDENTS

The Committee does not accept responsibility for injury to students resulting from careless conduct or neglect or disregard of regulations.

#### 9. STUDENT PROPERTY

The Committee does not accept any responsibility for loss or damage to any student property—bicycles, hats, coats, books, etc.

#### 10. SCHOOL PROPERTY

Where School property is damaged wilfully or through careless conduct on the part of students, such students (or their parents or guardians) may be required, on the order of the Committee, to pay for such repairs or replacements as may be necessary.

### 11. CHANGE OF ADDRESS

Students should notify the School Authority of any change of address.

# 12. BOOKS, STATIONERY, EQUIPMENT, DRESS

Students are expected to provide themselves with such books, stationery, equipment, and dress as may be required.

# 13. INFECTIOUS AND NOTIFIABLE DISEASES

The head of the household must inform the School Authority immediately of any infectious or notifiable disease which may occur in the house in which a student is residing. Such a student must not resume attendance until permitted to do so by a medical officer.

#### 14. EXAMINATIONS

Permission to sit for Scholarship, Sessional, or other examinations held under the authority of the Committee, will be governed by the conditions relevant to the examinations.

## 15. SCHOOL AUTHORITY

The term "School Authority," as used in these Regulations indicates the Chief Executive Officer, or an officer delegated to act on his behalf.

The above Regulations have been adopted by Resolution of the Vocational Education Committee for the City of Dublin and approved by the Minister for Education.

# Conditions Regulating the Admission of Students to Classes and Courses

## Practical Workshop Classes in Trade Subjects

These classes are provided for the sole purpose of supplementing the practical trade training of persons actually employed at and engaged in the various operations of the trade. The Committee realise that it is impossible for a person to learn a trade solely by attendance at these classes, and are further of the opinion that the admission to the classes of persons not actually engaged in the trades would be, not only of little use to such persons, but would prejudicially affect the instruction of those for whom the classes have been organised. Accordingly, the Committee reserve the right to restrict enrolment in the trade practical classes to those persons who are actually employed in the several processes and operations of the trade.

The classes to which this regulation refers in the Session 1950-51 will be the Evening Trade Classes in:

Fitting and Turning; Garage Practice; Metal Plate Work; Brassfinishing; Patternmaking; Boilermaking; Smithwork; Art Iron Work; Oxy-Acetylene and Electric Welding: Foundry Work-Iron Moulding: Brass Moulding; Watchmaking; Bricklaving; Carpentry and Joinery; Plumbing; Plastering; Painting and Decorating; Cabinetmaking: Woodcutting Machinists' Work: Coachbuilding; Coachpainting; Coachtrimming; Typography; Bookbinding: Lithography.

And the Part-time Day Apprentice Workshop Classes in:

Cabinetmaking; Carpentry and Joinery; Plumbing; Painting and Decorating; Printing; Fitting and Turning; Hairdressing; Garage Practice.

For admission to the trade classes as named, proof of actual employment in the several processes and operations of the trade will be certificates to that effect from the Masters' Associations and/or the official Trades Unions of the trade concerned.

The above Regulations have been adopted by Resolution of the Vocational Education Committee for the City of Dublin and approved by the Minister for Education.

## **DESCRIPTION OF COURSES**

#### PART-TIME DAY APPRENTICE COURSE

In co-operation with the Dublin Master Printers' and Allied Trades' Union, and the Dublin Typographical Provident Society, the Vocational Education Committee have arranged for the technical instruction of all First and Second Year Apprentices in Compositors' Work and in Letterpress Printing to be carried out in Daytime Classes.

The Syllabus of Instruction covers the Junior Stage of the Trade Certificate Examinations of the Department of Education. All Day Apprentices at the end of their second year sit for this Examination.

On completion of the Day Course, Apprentices continue their instruction in the Evening Classes in preparation for the Department of Education Senior Stage Examination and the Senior Examinations of the City and Guilds of London Institute.

Educational visits to supplement the general training are made to paper mills, newspaper offices, ink factories, etc.

#### **EVENING COURSES**

The courses are designed for apprentices engaged in the Printing and Book Production Trades. Where possible, separate classes for journeymen will be arranged in Trade subjects. The following courses are provided:

Compositors' Work and Letterpress Machine Work. These are 2-year courses for senior apprentices and journeymen engaged in the respective trades, and cover the examination syllabus of the Department of Education Senior Stage Certificates and the Senior Examinations of the City and Guilds of London Institute.

The Binding Course is divided into two stages and covers the whole range of manual binding operations and workshop practice on practical lines. Special classes in Book-edge gilding are also included.

Mechanical Composition—Linotype and Intertype; Monotype Keyboard. These courses are designed on a 2-years' basis and are intended for Senior Compositor apprentices and for journeymen Compositors.

As the accommodation in these classes is limited, preference will be given to the following:

(a) Students who have obtained the Senior Trade Certificate (Compositors' Work) Department of Education with an attendance of at least 75 per cent. at each of the evening classes (Practical and Theory) for Third and Fourth Year Courses in Compositors' Work.

(b) Students with an attendance of at least 75 per cent. at each of the evening classes (Practical and Theory) for Third and Fourth Year Courses in Compositors' Work.

(c) Journeymen who have served their apprenticeship as Compositors.

**Lithography.** The Junior and Senior Classes in Lithography and Offset work cover all branches of the trade and give specialised instruction in proofing, transferring and offset machine work.

Lithographic Art. This course is arranged to work in close co-operation with the Lithography and Photo-Lithography courses. Students are trained in making original drawings and sketches for reproduction by these processes.

**Photo-Lithography.** The classes in this course cover all the essential operations in Camera Operating and Printing-down. Individual practice is afforded to students where possible. Exercises are arranged in conjunction with the machine department, whereby work may be proofed and printed.

Costing. The British Master Printers' Federation Costing System is taught in the School, and students are prepared for the Federation Examinations. Estimating. The course is devoted primarily to the study of estimating methods, operational times and machine outputs in various departments, and calculations for determining the amount and cost of materials required.

Frinting Technology. A Specialised Course of instruction for students who have completed the advanced course in one of the Printing Trades. The Course will normally occupy two years and the subjects of instruction are: Composing, Letterpress Machine Work, Bookbinding, Lithography, Photo-Lithography, Costing and Estimating.

Physical Training. An Evening Course in Physical Training for students is provided.

Irish Language. Special Evening Courses in Irish, graded to meet the requirements of students, are conducted in the Branch School in Capel Street. All students are earnestly recommended to attend one of these courses and thereby to play a vital part in the language revival and at the same time to equip themselves more fully to take their proper places in the industrial life of a Gaelic State.

Irish Courses in any of the Technical Institutes conducted by the City of Dublin Vocational Education Committee are available to students of this Institute at a nominal fee.

#### **EXAMINATIONS**

Courses are provided to prepare students for the following examinations:—

### Department of Education Examinations:

Trade Certificate Examinations in Compositors' Work, Letterpress Machine Work.

City & Guilds of London Institute.

British Master Printers' Federation Costing Examination.

#### SCHOLARSHIPS AND PRIZES

The Department of Education offers the following medals and prizes annually in connection with their examinations:

Trade Certificate Examinations. A prize of £1 in each of the practical and written examinations of the Junior Stage. A bronze medal and a prize of £2 in each of the practical, and a prize of £1 in each of the written, examinations of the Senior Stage.

The William Rooney Memorial Shield is awarded each year to the student of second year status in the Day Apprentice Courses in Printing who shows greatest proficiency in his craft and the most competent knowledge of oral Irish.

The Dublin Master Printers' and Allied Trades' Union Prizes. Prizes to the value of £10 are awarded annually to students of the Day Apprentice Courses in Printing.

The Dublin Typographical Provident Society's Prizes. Prizes to the value of £10 are awarded annually to students of the Day Apprentice Courses in Printing.

The Young Master Printers' Group Prizes. Prizes to the value of £7 10s. 0d. are awarded annually to students of the Evening Courses in Printing.

# SCHOLARSHIPS AND PRIZES (Contd.)

Irish Bookbinders' and Allied Trades Union Prizes. Prizes to the value of £10 are awarded annually to students of the Evening Courses in Bookbinding and Book-edge Gilding.

Society of Lithographic Artists, Designers, Engravers and Process Workers' Prizes. Prizes to the value of £5 5s. 0d. are awarded annually to the apprentices of the Society attending the Evening Courses in Lithographic Art and Camera Operating for Photo-Lithography.

#### FEES

Course Part-time Day Apprentice C	LASSES			S	EE :	ION
Compositors' Work Letterpress Machine Work				1	0	0
EVENING COURSES AND CLASSE				1	0	0
All Courses Additional Subjects	•••			0	10	0
- Subjects	•••	•••	•••	0	3	0

#### **EQUIPMENT**

The following is a brief summary of the Equipment in the sections of the Department:—

Caseroom furnished with ten wooden random-top frames; imposing surfaces, proof presses, and all necessary auxiliary fitments; and a wide range of book and display types.

LINOTYPE AND INTERTYPE ROOM equipped with two Linotype machines and one Intertype with side magazines.

Monotype—Keyboard room containing three Keyboards and a Monotype Caster, with lead and rule and display type attachment.

Letterpress Machineroom equipped with the following machines:
"Pony" Miehle, Phoenix, Victoria, Arab and Favourite
Platens, Heidelberg Automatic Platen; Dawson Payne S.W.
Automatic Cylinder Machine; Payne Demy Stop-Cylinder
Wharfedale, with face-up delivery.

BOOKBINDING SECTION—equipment includes all the usual appliances for Forwarding and Finishing both Stationery and Letterpress Binding, Book-edge Gilding, Marbling, Gold Blocking, etc.

LITHOGRAPHIC SECTION—equipped with Royal Folio Waite Rotary Offset machine, four transfer presses and a Copperplate press.

Photo-Lithography section includes one 12 ins. x 10 ins. Hunter Camera, illuminated by Boardman Arc lamps, and the usual equipment for dark room, printing-down frame, plate whirler, electric drying fan, etc.

# Day Apprentice Course

#### COMPOSITORS' WORK

429 43)	JUNIOR: Transfer and Presswork Do,	Monday Thursday	7.30-9.30 7.30-9.30	A 4 A 4	K. Walker K. Walker	2 2
431 432	SENIOR: Offset Machining Printing-down (Photo-Litho)	Wednesday Thursday	7.30-9.30 7.30-9.30	A 4 A 12	J. Ross J. Ross	3

	THIRD YEAR:							
	Book and Magazine We	ork.			,			
400	Practical—A			Monday	7.30-9.30	A1	J. McManus	9
401	Theory—A			Wednesday	7,30-9.30	C1	J. McManus	10
402	Practical—B			Friday	7.30-9.30	A 1	J. Reddin	9
403	Theory—B			Tuesday	7.30-9.30	A 4	J. Reddin	10
	FOURTH YEAR:							
	Display Work.							
404	Practical—A			Thursday	7.30-9.30	A 1	C. McCullagh	11
405	Theory—A			Tuesday	7.30-9.30	C 1	J. McManus	12
406	Practical-B	***		Tuesday	7.30-9.30	A 1	C. McCullagh	11
407	Theory—B	***	***	Friday	7.30-9,30	A 4	C. McCullagh	12
	ADVANCED:							1

#### SECOND YEAR—GROUPS A AND B

6	Monday	2.0 -3.30	Trade	: Practical (A)		Mr. McManus	A1	3
		3.30-5.0	"	Theory (A)		Mr. McManus	A9	4
		2.0 -3.30	"	Theory (B)	***	Mr. McCullagh	A9	4
		3.30-5.0	"	Practical (B)	***	Mr. McCullagh	A1	3
7	Tuesday	2.0 - 3.30	,,	Practical (A)		Mr. McManus	A1	3
		3.30-5.0	"	Theory (A)		Mr. McManus	A9	4
		2.0 -3.30	,,	Theory (B)		Mr. McCullagh	A9	4
		3.30-5.0	,,	Practical (B)		Mr. McCullagh	A1	3
8	Wednesday	2.0 -3.30	,,	Practical (A)	***	Mr. McManus	A1	3
		3.30-5.0	,,	Theory (A)		Mr. McCullagh	A9	4
		2.0 -3.30	,,	Theory (B)		Mr. McCullagh	A9	4
		3.30-5.0	"	Practical (B)		Mr. Fitzpatrick	A1	3
9	Thursday	2.0 -3.30	1,	Practical (A)		Mr. McManus	A1	3
	The same of the	3.30-5.0	,,	Theory (A)		Mr. McManus	A9	4
		2.0 -3.30	,,,	Theory (B)		Mr. McCullagh	A9	4
		3.30-5.0	"	Practical (B)		Mr. McCullagh	A1	3
10	Friday	2.0 - 3.30	,,	Practical (A)		Mr. McManus	AL	3
		3.30-5.0	,,	Theory (A)		Mr. McManus	A9	4
		2.0 -3.30	,,	Theory (B)		Mr. McCullagh	A9	4
		3.30-5.0	,,	Practical (B)		Mr. McCullagh	A1	3

# Day Apprentice Course

#### LETTERPRESS MACHINE WORK

FIRST YEAR—GROUPS A AND B

Caseroom furnished with ten wooden random-top frames; imposing surfaces, proof presses, and all necessary auxiliary fitments; and a wide range of book and display types.

POOM equipped with two Linotype

#### MONOTYPE CASTER

8	Practical Operating and			1	1	1
	Caster Mechanism	Monday	7.30-9.30	A2	P McManus	52
9	Do.	Tuesday				1 2
)	Do.	Luciday	7.30-9.30	A 2	P. McMarus	1 8
	20.	Thursday	7 30-9.30	AZ	P. McManus	32
1	Do.	Friday	7.30-9 30			2:
-	-4		7.50-9 50	A 2	P. McManus	1 25

# LETTERPRESS MACHINE WORK

THIRD YE Practical Theory Practical FOURTH Y	A and B B	 	Monday Thursday Friday	7.30-9.30 7.30-9.30 7.30-9.30	CI	B. Quinn B. Quinn B. Quinn	2 2 2 2
Practical Theory SPECIAL:		 	Thursday Tuesday	7.30-9.30 7.30-9.30	A 3 A 3	J. Whelan J. Whelan	2 2
Practical Theory		 	Wednesdav Friday	7.30-9.30 7.30-9.30	A 3 C 1	-	27

#### LITHOGRAPHY

No.	Subject	Day	Hour	Room	Teacher	No. of Syllabus
	JUNIOR:					
429	Transfer and Presswork	Monday	7.30-9.30	A4	K. Walker	29
430	Do.	Thursday	7.30-9.30	A 4	K. Walker	29
	SENIOR:					
431	Offset Machining	Wednesday	7.30-9.30	A4	J. Ross	30
432	Printing-down (Photo-Litho)	Thursday	7.30-9.30	A 12	J. Ross	33

#### LITHOGRAPHIC ART

	Drawing for Stone and Plate Design for Lithography		Monday Thursday			G. Mulvany G. Mulvany	31 31
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#### PHOTO-LITHOGRAPHY

435 432	Camera Operating Printing-down	***		Monday Thursday	7,30-9,30 7,30-9,30		A. Bowie J. Ross	32
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#### BOOKBINDING

	JUNIOR STAGE					
436	Stationery and Letterpress					
	Binding	Tuesday	7.30-9.30	A 9	J. Tormey	34
437	Do.	Friday	7.30-9.30	A 9	J. Tormey	34
	SENIOR STAGE					
433	Stationery and Letterpress					
	Binding	Monday	7.30-9.30	A 9	J. Tormey	3
439	Do.	Thursday	7.30-9.30	A 9	J. Tormey	3.
440	Book-edge Gilding	Monday	7.30-9.30	A 9	J. Kinsella	3
441	Do.	Thursday	7.30-9.30	A 9	J. Kinsella	3

# 3—COMPOSITORS' WORK—SECOND YEAR : PRACTICAL

Working in the Composing Room — More advanced forms of straight setting. Approved methods of hand-setting table and tabular work, with or without rules, involving single, double or treble justification, such as programmes, balance sheets, price lists, ledger and account book headings, etc. Imposition—4, 8, and 16 pages; dressing the forme, determining margins, use of mechanical and wooden quoins; tying-up and storing; dropping and distribution; Locking up—Locking up for general jobbing, and simple two-colour work; account book and ledger headings, etc.

# 4-COMPOSITORS' WORK-SECOND YEAR: THEORY

Type—How type is made; metal alloys. Paper—Its manufacture. Description of the various finishes and qualities of paper and boards. Calculations—More advanced forms of casting-up and casting-off; solid and leaded matter; sizes and quantities of paper. Blocks—Brief description of line and half-tone blocks, stereos and electros. Display Work—Elementary principles as applied to the layout and setting of announcements and advertisements; study of the various factors governing design and construction of layouts.

# 5—LETTERPRESS MACHINE WORK—FIRST YEAR: PRACTICAL

Work of the Machineminder—Management; cleaning and oiling of the handpress, platens and wharfedales; making all necessary adjustments; characteristics of good machine work; method of securing clean and rapid working; preparation of machines for printing. Different classes of packing and when to use; results of overpacking and underpacking; feeding machines; how to make a pitch gauge; printing off simple formes. Making Ready—Dressing of cylinder and platen machines; positioning sheet on feed board and setting lays; positioning forme on bed; planing down and locking up formes; running up colour; positioning forme on sheet; patching up skeletons and touching up; setting duct and getting colour correct; setting rollers; working off.

# 6—LETTERPRESS MACHINE WORK—FIRST YEAR: THEORY

Historical—History and Development of the Art of Printing. Prevention of Accidents—Precautions necessary for avoidance. Machine Room Equipment—Description; care and uses of the handpress, platen and wharfedale machines; also the various tools and appliances used. Paper—Short history, how manufactured (handmade and machine-made), different classes and their uses; standard sizes; multiples and sub-divisions of printings and writings. Cards and Boards—Sizes, qualities. Inks—Composition and manufacture; care and treatment. Rollers—Composition and manufacture; care and setting; qualities; seasoning and cleaning. Printing Surfaces—Type: foundry, lino and mono; stereos (ordinary and nickel-faced), how manufactured, uses and care.

# 7—LETTERPRESS MACHINE WORK—SECOND YEAR: PRACTICAL

Work of the Machineminder—Care and management of platens (jobbing and Heidelberg), Wharfedales and Miehle machines and auto-feeders; making ready and printing off more difficult formes than in first year, including stereos, electros, line and half-tone blocks; underlaying, interlaying, making hand and mechanical chalk overlays; set-off causes and how to avoid. Imposition and Plate Laying—4, 6, 8, and 16 pages, half-sheet and sheet work, tumbler formes, sections, perfecting or backing up, tests for correctness.

# 8—LETTERPRESS MACHINE WORK—SECOND YEAR: THEORY

Historical—The evolution of printing machinery. Machine Room Equipment—Description; care and use of the Heidelberg Autoplaten, Miehle and Universal Auto-Feeder. Paper—Different properties and suitability for different classes of work; cockling, creasing and stretching; equivalent weights and how to ascertain

them; paper standardisation. Inks—Adapting inks to paper; mixing and matching. Printing Surfaces—Electros, line and half-tone blocks, how manufactured; their uses, differences and limitations; the care of plates and blocks; cleaning and storing. Colour—The primary, secondary and tertiary colours; combinations of colours; selecting colours for contrast, harmony, etc. Calculations—Quantities of paper required for different classes of work; allowance for overs; equivalent weights and how ascertained.

# 9—COMPOSITORS' WORK BOOKWORK, THIRD YEAR: PRACTICAL

Straight setting of solid matter for book and magazine by hand. Handling of Linotype, Intertype and Monotype. Proofing and correcting galleys. Make-up of pages, single, double and treble columns. Running heads, folios, side, shoulder, and cut-in headings. Insertion of initials and blocks in text. Make-up of illustrated pages, tables, etc. Chapter and Section headings. Title pages, and other preliminary matter. Proofing and correction of pages. Imposition and dressing of forme of eights, twelves, sixteens, and thirty-twos. Checking furniture for desired margins. Locking up and sending to machine. Corrections at press. Making up and dissecting for colour work and register work.

# 10-BOOKWORK, THIRD YEAR: THEORY

Material and Equipment—Description and uses of modern composing room material and equipment; planning of composing room; lighting. Paper—Manufacture; classification; definitions; finishes; sizes and qualities for various classes of bookwork; choosing the right paper. Book Typography—Layout of preliminary matter and text pages, including chapter headings, page headlines, etc.; choosing appropriate typeface and size for specified books; deciding dimensions of printed page and margins; parts of a book; methods of binding and their effect upon imposition; signatures and their uses; handling of Monotype, Linotype or Intertype matter. Imposition—8, 12, 16 and 32 pages; determining of margins and dressing of formes for bookwork. Plates—Original and duplicate, making and uses of

wood-cuts; scraper boards, line blocks, half-tone blocks; making and uses of stereos (nickel and chromium faced); ordering; storing. Calculations—Cost and quantity of paper; equivalent weights; allowance for overs; area and cost of blocks; advanced casting off; determining type size for given area. Estimating—Principles of estimating for the composition of bookwork; time for make-up and composition. Machine Composition and Casting Units—General principles and capacity of Linotype and Intertype, Monotype (keyboard, caster and supercaster); suitability of these machines for different classes of work.

# 11—DISPLAY WORK, FOURTH YEAR: PRACTICAL

Layout, composition and make-up of Advertisements and general commercial jobbing, such as letterheads, menus, etc. Utilisation of resources of Modern Case Room in Commercial Work. Linotype, Intertype and Monotype make-up in Display Advertisement. Borders and Ornaments. Head and Tail pieces. Line and Half-tone blocks and Stereos in Commercial jobbing. Cut-in, run around and pierced blocks. Dressing and lock-up of composite formes. Corrections at press.

# 12—DISPLAY WORK, FOURTH YEAR: THEORY

Type Design—History of type design, with a knowledge of famous type designers and typographers and their work. Type Faces—Classification and characteristics of the various groups; gothic, roman, italics; sanserif, etc.; selection of type for different classes of display work; use of rules, borders and ornaments. Layout—The purposes of layout and its advantages; general principles of typographic design and layout; choice of type appropriate to copy; grouping, balance and the use of white space; the laying out of advertisements and general jobbing work. Machine Composition and Casting Units—Linotype, Intertype, Ludlow, Elrod, Monotype and Supercaster. Their uses and limitations for display composition. Illustrations—Use of illustrations in advertising, line and half-tone blocks; wood-cuts, linocuts, scraper boards, etc.; originals (copy) for line and half-tone blocks; half-tone screens and their suitability for various surfaces of

### COMPOSITORS' WORK (continued)

paper; uses of stereos and electros; purposes of nickel and chromium facing. Paper—Sizes, qualities, finishes for various classes of display work. Colour—Simple colour schemes and their uses in commercial design; colour used for emphasis; decorative value; principles of harmony. Estimating—General principles for estimating jobbing work composition, hand and machine set; make-up and imposition.

#### 13-ADVANCED STAGE: PRACTICAL

Planning, setting and locking-up of complicated formes of general jobbing; advanced table and tabular composition. Making of layouts for more advanced forms of display, folders, catalogue work, etc., and setting from them; further use of colour. More advanced bookwork—setting of title pages, book jackets and covers from layout; make-up of text, extracts, notes; handling monotype and slug material.

#### 14-ADVANCED STAGE: THEORY

Layout—The principles of fine typography in relation to display work and bookwork and their application in layout: Calculations—Casting off copy for bookwork and display; paper calculations; elementary costfinding and estimating. Imposition—More advanced impositions up to 32 pages; compound schemes. Paper—Selection and suitability to cover a wide range of work. Organisation—General factory arrangement, lighting, etc. Duplicating Processes—Stereotyping and electrotyping; nickel and chromium facing, etc. Allied Processes—Line, half-tone and three-colour; lithography, direct and offset; photo-lithography, collotype and photogravure.

# 15—LINOTYPE AND INTERTYPE OPERATING: JUNIOR STAGE

Mechanical Composition—Various types of Machines in use. General principles to be observed by operators with regard to assembling of matrices, correct measure and body thickness of lines; the proper treatment of matrices and spacebands; exercises specially devised to establish sound fingering methods; the importance of

correct metal temperature to produce sound slugs and avoid "splashing"; gas and electric melting pots; student graduates from special exercises in setting reprint copy and manuscript; interim tests to record advance.

# 16-LINOTYPE AND INTERTYPE MECHANISM

Keyboard—Construction and operation, action of cams and rods.

Matrix—Care of and alignment. Spaceband—Line justification, importance of cleanliness. Assembler—Star wheel, guides, chute, brake, adjustments. Line Delivery Carriage—Components, control adjustments. Magazine—Single, multiple, split, auxiliary, entrance, escapements, changes. Distributor—Distributor bar and box, controls, single and multiple mechanisms, adjustments. Mould—Varieties and care of, making changes. Metal Pot—Component parts and their functions. Knives—Varieties and care of, adjustments. Vice—Jaw and lock, adjustments. Elevators—First and second, adjustment. Cams—Names, functions and adjustments. Driving Mechanism—Clutch and associated mechanism, adjustments. Care of general machine, oiling, cleaning, etc. Automatic stops.

# 17—LINOTYPE AND INTERTYPE OPERATING: SENIOR STAGE

Review of course for Junior Stage. Practical work of a more advanced nature, including table and tabular work of varied kinds and general display advertisement setting, together with twin slug composition and headline work, with special attention to style and corrections. Students are shown how to maintain their machine in running order and to deal with any stoppages caused by metal splashes, distributor bar, and other slight mechanical troubles.

# 18—MONOTYPE KEYBOARD OPERATING: JUNIOR STAGE

Principles of Monotype Composition. The Keyboard—care and cleaning of. System of type measurements; Correct fingering exercises, the Paper Ribbon, care of; reading of perforations; unit

wheel work; multi-justification; how to set and centre lines in wide measures; justification scale and variable space in relation to the caster; letter-spacing; increasing and decreasing the width of characters and spaces by line justification; practical application and uses, operating essentials; setting of easy forms of bookwork and periodical work from reprint, MS. and typescript.

### 19-MONOTYPE KEYBOARD MECHANISM

Action of key buttons and valves, operation of punches and recording units, driving of unit wheel and recording of units, justifying scale and M scale pointer. Recording mechanism, paper feed and take-up and release mechanism, automatic cut-out, operation of bell trip and line counter, reversing valve and switch. Mechanism for adjusting length of line, justifying and reversing keys. Air compressor and filter. Mechanism for automatically moving sticking valves, method of placing keybanks and keybar frames in position.

# 20—MONOTYPE KEYBOARD OPERATING:

#### SENIOR STAGE

Setting intricate forms of table and tabular work; letter spacing and unit adding; the tabular device; the mechanism of the keyboard functions and adjustments; maintaining keyboard in working order and learning to deal with minor mechanical troubles.

## 21-MONOTYPE CASTER OPERATING

Practical operation of caster, including care necessary while working. Explanation of running adjustments.

## 22-MONOTYPE CASTER MECHANISM

Driving gear, cam levers, type carrier and adjustments, pump action, transfer wedges and adjustments. Die centring lever, tong mechanism, locking racks, mould blade moving gear, type pusher, paper tower bridge and its adjustments. Line shifting and galley mechanism. Changing founts, centring, sizing and aligning, justification. Care of matrices, system of locating derangements. The

mould, care and upkeep, disassembly and re-assembly, adjustment. Compressor and air tank. Lead and rule and display type attachment.

# 23-MACHINE WORK, THIRD YEAR: PRACTICAL

Machines—Adjustments and management of Wharfedale and Two-revolution machines; their care and maintenance. Automatic feeders—setting and adjustment for Platen and Cylinder machines. Make-ready for type, half-tone and stereo plate work; preparation of simple mechanical overlays. Rollers—Setting and adjustment of forme-rollers and distributors. Inks—Mixing of colours and tints; matching and reducing; practice in colour schemes. Plate Mounting—Making margins for bookwork; lining-up.

# 24-MACHINE WORK, THIRD YEAR: THEORY

Machines-Modern developments in proof presses and machines, including stop-cylinder and two-revolution; use and adjustment of automatic feeders for platen and cylinder machines; flatbed and rotary machines and their uses; average runs per hour; packing; setting rollers, etc.; carton printing. Paper and Boards-Sizes and sub-divisions; characteristics and definitions of the chief varieties; right and wrong side; machine direction; different properties and suitability for various classes of work; paper troubles-cockling, creasing and stretching. Rollers-Effects of atmospheric conditions; methods of inking-disc, slab, cylindrical and pyramid. Illustration Processes-Line and half-tone blocks; principle and method of producing. Duplicate Plate Making-Stereos and electros; brief description of manufacture; classes of work for which each is more suitable; nickel and chromium facing. Ink-Materials used in manufacture; grades for different classes of work-copyable, double-tone, tri-chromatic, etc.; matching and mixing of ink to obtain simple colour combinations; covering power. Imposition-4, 8, 12, 16, and 24 pages, upright and oblong; sheet and half-sheet work; inset work; uses of signatures; order of preliminary matter; stabbed and sewn work. Calculations-Cost and quantities of paper required for

#### 30—LITHOGRAPHY: SENIOR STAGE

Plates—Zinc and aluminium; characteristics and qualities; graining metal plates. Transferring and preparing work on zinc and aluminium; reversal of transfers for offset printing. Papers used in lithographic printing. Colour—Use of; colour charts and colour schemes; brief outline of the nature of light and colour. Rotary Offset—Machine printing; general care and adjustments of machine; setting plates; rubber blankets, rollers, adjustments of printing pressures. Production of actual colour jobs.

#### 31—LITHOGRAPHIC ART

Theory—Invention and principles. Progress and modern methods. Comparison of Stone and Plate. Flat-bed, Rotary and Offset machines. Transferring on Hand-press. Transfer papers and ink. Origin and composition of lithographic stone. Advantages of Zinc and Aluminium plates. Preparation and treatment of stone and plate. Materials used by artists. Procedure in reproduction. Making a key. Determining the number of colours necessary for reproduction. Order of printing colours. Overdrawing colours. Consideration for the printer. Chalk work and mechanical shading mediums. Practical—Drawing on transfer paper, stone and plate, with brush and pen. Drawing on grained surfaces with lithographic chalk. Drawing in gum for reverse lettering. Golour Work—Making a key. Drawing colours for reproduction of flat tints. Hand stippling and using mechanical shading mediums.

#### 32—CAMERA OPERATING (Photo-Lithography)

Lenses and prisms and their optical properties; methods of finding and controlling screen distance, lens aperture and exposure. The Camera, lamps and other apparatus. The half-tone screen and the rules governing its operation. Making line and half-tone negatives by the wet collodion process; the collodion, silver nitrate bath and other solutions, their composition, properties and management. Photographic dry plates: theory. Reverse line negatives; line and half-line negatives; use of circular screen for colour; use of filters for colour work; screen angles.

# 33-PRINTING DOWN (Photo-Lithography)

Preparation of negatives for printing-down, varnishing, lining up, use of air brush, use of shading "mediums" on screen negatives. Zinc and aluminium plates, outline of manufacture, recognition of defects. Gauge of plates, reason for graining, use of different graining materials. Grain required for different classes of work. Storage of plates. Use of "passing bath." Coating and printing-down. Relation between lamp distance and light distribution, effects on exposure. Duplicating on plate and securing register, different types of printing frame. Use of Step and Repeat Machine and Multi-negatives. Developing, additions, alterations. Use of shading mediums. Rolling up, use and action of litho etches, gum, etc., additions after rolling up. Vandyke, "offset deep" and other positive reversal processes.

# 34—BOOKBINDING: JUNIOR STAGE

Materials—Cloth, rexine, leather, imitation leather, etc.: their uses and qualities. Boards—Sizes, qualities and uses; weights and equivalent sizes. Paper—Standard sizes and sub-divisions: simple technical terms. Preparation of glue, paste, and other adhesives. Styles of Binding—Full bound leather work, French joints, laced in, flexible, imitation bands, half-bound plain, half extra, extra full cloth, case book. Preparation of Books for Sewing—Collating, pulling, cleaning, re-sizing, mounting and repairing of sections, fixing of plates; rolling; sewing-in. Sewing—Hand and machine sewing, sewing on tapes, sewing on bands, flexible sewing, etc.; vamping. Endpapers and Boards—Various styles and qualities. Forwarding—Cutting by machine and plough; glueing up. Marbling—Various styles and patterns.

# 35—BOOKBINDING: SENIOR STAGE

Gathering, Collating, Bundling and End-papering—Exercises in various methods. Cutting—Classes of machinery used; methods of working. Glueing up, Rounding and Backing—Hand and machine methods. Lining up—Materials used and methods of working.

Case Making—Hand and machine methods. Blocking of Cases—Gold foil and other blocking agents; types of machines; cutting and dressing leather. Account Book Bindings—Various styles. Marbling—Various styles; mixing of the colours; making of size; treatment of edges.

#### 36—BOOK-EDGE GILDING

Gold leaf as a medium for book decoration; its character and use Gold leaf substitute and imitations. Size—How made. Preparation of Book—Scraping of edges; laying of gold; use of burnishes. Red Under Gold Edges—How to treat various classes of paper. Gilding Presses—Different types: use and care.

#### 37—ESTIMATING

Qualifications and Responsibilities of an estimator; methods of approach. Standard forms and conditions; handling enquiries; specifications; constructing an estimate; methods of following up and tabulation of results. Composing-Hand and mechanical composition; display and text; operational times; casting-off copy; solid and leaded matter; imposition; colour forms in register; proofs. Machining-What the operation involves; classes of machines in general use; average time for make-ready and speed of running for various classes of work; automatic feeders; hand cut and mechanical overlays; interleaving and spraying. Binding-Hand and machine operations-output; trade terms: folding, collating, sewing, etc.; account books; ledger papers; ruling; marbling; letterpress binding, including leathers. Lithography-Commercial offset and chromolithography. Paper-Sizes, printings and writings; weights; qualities; characteristics; finishes suitable for different classes of work. Ink-Selection; varieties; quality and covering power; quantities required. Illustrations-Different processes; half-tone and line blocks; principle and method of producing; suitability of blocks to paper; screens. Duplicate Plate Making-Stereos and electros; brief description of manufacture; classes of work for which each is more suitable; nickel and chromium facing.

#### 38—COSTING

Definition of cost: fallacy of using "flat" percentage on wages, or on wages and materials combined; objects of correct costing; essentials of a proper costing system; value of adoption of uniform methods of costing by the printing industry. Main principles of Federation Costing System. Capital: its various forms and their bearing on cost; inventories of plant value and their relationship to "working" value; depreciation; importance of keeping a plant record.

Preparation of statement of expenses; necessity for and value of departmentalisation of expenses; sub-divisions of departments; allocation of expenses, method to be applied; multiple businesses; how treated, method of recovering indirect (overhead) expenses, effect of the percentage method on "direct departmental cost." Handling charges on material and outwork; how found and applied, records of stock and of amounts charged to orders. Why time expended, and not wages paid, is used as basis of cost recovery; the meaning of the terms "chargeable" and "non-chargeable." Hourly cost rates; how found and applied, reasons for using inclusive hourly rates, why some operations (e.g., reading) are recovered indirectly.

Explanations of standard printed forms and their place in the Federation Costing System; the importance of correct time-recording and necessity for care by cost clerks in transference of time to costing forms. Individual cost sheet; responsibility of cost clerk for details of labour, materials, etc., and the question of economic cost. Descriptions of essential books of account; analysis of expenses, analysis of sales. Uses to which management may apply information provided by statistics on Forms 3 and 4, and the cost sheet: use of graphs. Relationship between costing and estimating; the necessity for comparison by departments as well as by total of estimated cost with actual cost. Office and factory organisation and terms in use.

#### 39-PRINTING TECHNOLOGY

This course includes specialized instruction in Compositors' Work. Letterpress Machine Work, Bookbinding, Lithography, Photo-Lithography, Costing and Estimating, as shown under their respective syllabus.

### GENERAL CURRICULUM OF THE SCHOOLS

UNDER THE CONTROL OF

The City of Dublin Vocational Education Committee

#### TECHNICAL INSTITUTE, BOLTON STREET.

Mechanical Engineering. Motor Car Engineering. Marine Engineering. Naval Architecture. Mechanical Engineering Trades. Motor Car Engineering Trades. Smithwork and Art Ironwork. Brassfinishing. Watchmaking.

Oxy-Acetylene and Electric Welding. Day Apprentice Courses.

Architecture. Civil Engineering. Quantity and Building Surveying. Building Science. Surveying and Levelling. Building Trades. Furniture Trades.
Coachbuilding, Coachtrimming and Coachpainting.

c Welding. Printing and Book Production.
Day Junior Technical Courses.

#### TECHNICAL INSTITUTE. CAPEL STREET

Post Office Messengers. Continuation Courses. Manual Instruction: Woodwork, Metalwork. Day Junior Technical Courses.
Trade Classes:—Tailoring. Bootmaking. Hairdressing.

#### CABRA TECHNICAL INSTITUTE.

Day Junior Technical School. Day School of Commerce.
Metalwork. Domes General Commercial Subjects. Domestic Science and Housecraft. Physical Training. Woodwork. Languages. Gardening.

#### INSTITUTE OF SCIENCE AND TECHNOLOGY—KEVIN ST.

Pure and Applied Mathematics. Pure and Applied Physics.
Pure and Applied Chemistry. Physical Chemistry. Bio-Chemistry: Botany. Bacteriology. Biology. Pharmacy. Industrial Technology: Manufactures. Illuminating Engineering. Bootmaking.

Ophthalmic Optics. Electrical Engineering and Allied Trades. P.O. Engineering Technology. Instrument Making. Radio Engineering and Service Work. Radio Telegraphy (Radio Officers). Air Navigation. Radar and Radar Systems. Bakery Science and Practice.

#### PARNELL SQUARE TECHNICAL INSTITUTE.

Day School of Commerce and Retail Distribution (Girls). Day Junior School of Domestic Economy. General Commercial Subjects. National Health Insurance. Domestic Science and Housecraft. Preliminary Examinations. Physical Training (Girls). Languages. Retail Distribution.

#### HARCOURT STREET SCHOOL OF DOMESTIC SCIENCE.

Day Junior Domestic Economy. Day and Evening Part-Time Classes in Cookery, Needlework, Dressmaking, etc.

#### PEMBROKE TECHNICAL INSTITUTES.

BALLSBRIDGE.

General Commercial Subjects. Languages. Domestic Science and Housecraft. Art and Art Crafts. Day School of Commerce (Girls). Day Junior Technical Course (Girls).

RINGSEND. Mechanical Engineering. Motor Car Engineering. Oxy-Acetylene and Electric Welding. Woodworking Trades and Handicraft. Day Junior Technical School (Boys). Ship Construction.

# GENERAL CURRICULUM OF THE SCHOOLS

UNDER THE CONTROL OF

The City of Dublin Vocational Education Committee

#### THE HIGH SCHOOL OF COMMERCE.

Phone 92374. Rathmines Road.

JUNIOR DAY SCHOOL COURSES.

Commerce (Boys and Girls), 1st and 2nd Year. Preparatory (Boys).

SENIOR DAY SCHOOL COURSES.

Secretarial. Commercial Diploma. Matriculation. Continuation Education for Youths in Employment.

#### **EVENING COURSES**

Accountants and Auditors. Advertising and Publicity. Art in Industry and Commerce. Banking and Finance. Bookshop Practice and Literature. Company Secretaries. Cost and Works Accountants. Economics and Social Science. Government Accountancy and Finance. Income Tax Law and Practice. Languages.

Leatherwork. Office Practice (Book-keeping, Commerce, etc.). Physical Training. Preliminary Examinations. Promotion Examinations. Secretarial (Shorthand, Typewriting, etc.) Transport. Window and Shop Display. Woodwork for Adults. Insurance (Industrial).

Knitting.

Laundry.

#### RATHMINES SCHOOL OF DOMESTIC ECONOMY.

Rathmines Road. Phone 91783.

DAY COURSES.

Preparatory (Girls). Junior Day Technical School (Girls).

MORNING. AFTERNOON AND EVENING COURSES.

Embroidery. Household Management. Cookery.

Dressmaking. Housecraft. Needlework.

#### ST. MARY'S COLLEGE-CATHAL BRUGHA STREET.

Diploma Course (Training Teachers). Household Management. Institutional Management. Dietetics Course.

Hotel and Institutional Cockery. Apprentice Chefs Course. Evening Classes-Cookery, etc.

#### MARINO TECHNICAL INSTITUTE

General Commercial Subjects. Metalwork and Woodwork. Languages. Physical Training. Domestic Science and Housecraft. Day Junior Technical School (Boys and Girls).

Day School of Commerce.

#### HOWTH TECHNICAL INSTITUTE. Domestic Science. Art Leatherwork.

#### CHATHAM ROW SCHOOL OF MUSIC (Day and Evening Classes).

Pianoforte. Orchestral Playing. Violin. Percussion Band. Viola. Voice Production. Theory. Singing.
Gaelic Singing.
Aural Training. Violoncello. Harmony. Uileann and War Pipes. Double Bass. Sight Reading (Vocal) Drums.

All Woodwind and Brass Instruments. Chamber Music.

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MARTIN M. GLEESON, M.A., B.Comm., Chief Executive Officer.