1946

Curriculum and Time Table: Session 1946-47

City of Dublin Vocational Education Committee

City of Dublin
Vocational Education Committee

Foras na Saois nDéantúsach

Seisiún 1946-47

Institute of Science and Technology
KEVIN STREET

CURRICULUM AND TIME-TABLE

CALENDAR—SESSION 1946-47

1946—SEPT. 2 MONDAY	Whole-time Day Schools open for enrolment, and Day Apprentice Schools resume work.
„ 9 MONDAY	Part-time Day Classes open for enrolment, and Whole-time Day Schools commence work.
„ 16 MONDAY	Evening Courses open for enrolment, and Part-time Day Classes commence work.
„ 23 MONDAY	Evening Classes commence work.
NOV. 1 FRIDAY	*All Saints' Day.* Whole-time Day Schools, excepting Day Apprentice Schools and Special Classes, closed.
DEC. 8 SUNDAY	*Feast of the Immaculate Conception.*
„ 20 FRIDAY	Close of Christmas Term.
1947—JAN. 6 MONDAY	*Feast of the Epiphany.*
„ 7 TUESDAY	All Classes resume work after Christmas Vacation.
MAR. 17 MONDAY	*St. Patrick's Day.* Schools closed.
APR. 1 TUESDAY	Close of Easter Term.
„ 4 FRIDAY	*Good Friday.*
„ 6 SUNDAY	*Easter Sunday.*
„ 9 WEDNESDAY	Evening Classes resume work after Easter Vacation.
„ 14 MONDAY	All Day Classes resume work after Easter Vacation.
MAY 2 FRIDAY	Evening Classes close, excepting where otherwise arranged.
„ 15 THURSDAY	*Ascension Day.* Whole-time Day Schools, excepting Day Apprenticeship Schools and Special Classes, closed.
„ 26 MONDAY	*Whit Monday.* Schools closed.
JUNE 5 THURSDAY	*Feast of Corpus Christi.* Whole-time Day Schools, excepting Day Apprentice Schools and Special Classes, closed.
„ 14 SATURDAY	Irish Proficiency Entrance Scholarship Examinations.
„ 27 FRIDAY	Summer Term closes, except where otherwise arranged.
„ 29 SUNDAY	*Feast of Saints Peter and Paul.*

Schools closed on all Bank Holidays not specified in above Calendar.

INSTITUTE OF SCIENCE AND TECHNOLOGY

PROGRAMME

for

SESSION 1946-47

AUTUMN TERM:

Monday, 2nd September, to Wednesday, 18th December, 1946

Full-time Day Course Enrolments: Week commencing September 2nd.

Part-time Day Course Enrolments: Week commencing September 9th.

Evening Course Enrolments: Week commencing September 16th.

Autumn Term Examinations commence December 9th.

LENT TERM:

Tuesday, 7th January, to Wednesday, 30th April, 1947.

Term Course Enrolments: Week commencing January 7th.

Lent Term Examinations commence March 24th.

SUMMER TERM:

Thursday, 1st May, to Saturday, 19th July, 1947.

Term Course Enrolments: Week commencing May 1st.

Sessional Examinations: June 16th to July 5th.

CONTENTS

* Tutorial Courses

EVENING COURSES : ELECTRICAL ENGINEERING TECHNOLOGY :

EVENING COURSES : RADIO ENGINEERING; TELECOMMUNICATIONS :

CITY OF DUBLIN VOCATIONAL EDUCATION COMMITTEE

Alderman Martin O'Sullivan, T.D., P.C., 74 Ballymun Road, Glasnevin, Dublin. (Chairman).

Rev. John Fitzpatrick, M.A., D.D., 1 Frankfort Ave., Rathgar, Dublin. (Vice-Chairman).

Rt. Hon. Alderman John McCann, T.D., Lord Mayor, Mansion House, Dublin.

Councillor Cormac Breathnach, T.D., LL.D., 384 Clontarf Road, Dublin.

Councillor John Breen, 1 Arran Quay Terrace, Dublin.

Alderman Bernard Butler, B.A., T.D., 16 Healthfield Road, Terenure, Dublin.

Councillor Patrick J. Cahill, P.C., 64 Aungier Street, Dublin.

Councillor Michael O'Higgins, 11 St. Mary's Road, Ballsbridge, Dublin.

Padraig T. Breathnach, Ph.D., M.A., F.C.P., 66 Iona Road, Glasnevin, Dublin.

Mrs. Mary Mulvey, P.C., Readsvale, Main St., Dundrum, Co. Dublin.

Mr. Maurice F. O'Connell, B.A., H.Dip.Ed., 17 Oakley Road, Ranelagh, Dublin.

Mr. James P. Trainor, 2 Dawson Street, Dublin.

Mr. John Swift, 37 Lower Gardiner 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.

LOCAL SUB-COMMITTEE.

INSTITUTE OF SCIENCE AND TECHNOLOGY.

Alderman M. O'Sullivan, T.D., 74 Ballymun Road, Dublin.

Rev. M. Geraghty, C.C., The Presbytery, High Street, Dublin.

Mr. W. J. Whelan, 61 Lower Beechwood Avenue, Dublin.

Mr. J. W. Kelly, 16 St. Joseph's Parade, Nelson Street, Dublin.

Mr. J. Andrews, B.Sc., Messrs. A. Guinness, Son & Co., James's Street, Dublin.

Mr. John Swift, 37 Lower Gardiner Street, Dublin.

The Rt. Hon. Alderman J. McCann, T.D., Lord Mayor, Mansion House, Dublin.

Councillor P. J. Cahill, P.C., 64 Aungier Street, Dublin.

Mr. Thomas J. Conway, 31 Connolly Gardens, Inchicore, Dublin.

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

ADVISORY AND EDUCATION SUB-COMMITTEES.

SCHOOL OF BAKERY

J. Swift (Chairman) P. Hogan M. Conroy P. O'Neill G. Daly	Irish Bakers', Confectioners' and Allied Workers' Union.
L. Kennedy H. E. O'Donohoe	Dublin Master Bakers' Committee.

FLOUR MILLING

George Shackleton -	Geo. Shackleton & Sons, Ltd., Lucan.
E. A. Spratt - -	Dublin North City Milling Co., Ltd.
William Fowler -	Dock Milling Co., Ltd.
W. J. De Lacy - -	Johnston, Mooney & O'Brien, Ltd.
Robert MacQuillan -	National Flour Mills, Ltd., Cork.

CINEMA AND THEATRE (PROJECTION)

T. J. Gogan P. O. Farrell	Theatre and Cinema Managers' Association.
F. Robbins R. Tait P. Clarke	Cinema Branch, I.T.G.W.U.

RADIO SERVICE WORK

W. B. Dalton T. R. Kent J. A. Kearney W. B. Farmer	Wireless Dealers' Association.
F. Brownlee J. Joyce B. Golding R. Wynne	Irish Radio Manufacturers' and Wholesalers' Association.

OPHTHALMIC OPTICS

The President and Two Members of Council, Association of Opticians, Ireland.
Principal and Teaching Staff (Applied Optics).

ELECTRICAL INSTALLATION WORK

Principal and Departmental Staff members acting with representatives of the following Bodies :—

ELECTRICITY SUPPLY BOARD.

IRISH ENGINEERING AND INDUSTRIAL UNION.

ELECTRICAL CONTRACTORS' ASSOCIATION.

ELECTRICAL TRADES' UNION.

BOOTMAKING AND MANUFACTURE

A. SMALLEY : Jas. Winstanley, Ltd.

H. SMITHSON : S. A. Wiltshire & Co., Ltd.

C. CRONIN
T. B. HEALY
L. DONOHOE
C. ENGLISH

} Handicraft Trade.

THE PRINCIPAL.

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

1. Admission and Enrolment.

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.

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

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.

Admission to a particular Class or Course is subject to the published regulations relative to that Class or Course. The educational fitness of a student to enrol in a particular Course may be decided by an examination or other means considered necessary.

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.

No student may attend a Class until issued with a Class Ticket.

Students will be enrolled during the period and at the times stated in the Committee's publications.

The School Authority is authorised to refuse an enrolment, pending a decision thereon by the Committee.

2. Fees.

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.

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.

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.

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

For fee purposes, Irish and/or Physical Training will be regarded as additional subjects to any Class or Course.

Fees will not be refunded except where a Class does not form.

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.

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.

6. Smoking.

Smoking is not permitted in the Schools.

7. Injury to Students.

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

8. Students' Property.

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

9. 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.

10. Change of Address.

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

11. Books, Stationery, Equipment, Dress.

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

12. 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.

13. 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.

14. 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.

REGULATIONS GOVERNING ADMISSION TO TRADE COURSES

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

REGULATIONS IN REGARD TO ENROLMENT, PAYMENT OF FEES AND CLASS REGISTRATION

1. Acceptance for admission to any Course of Study must be certified on the standard enrolment form by the responsible Lecturer or Instructor, or by the Principal.

2. The requisite Course Fees, together with the completed form of enrolment must be lodged in the office of the Institute; the sole certification of enrolment in a Course is the official receipt for the Course Fees paid.

3. Registration on Class Rolls and entry on the Course of Study provided by any Class may be made *only* on presentation to the Lecturer or Instructor in control of the Class, of the appropriate official Course receipt.

Refund of Fees

Refund of Fees will not be made except in cases where Classes or Courses for which the student has enrolled do not form.

DAY COURSE FEES: SCIENCE AND TECHNOLOGY

WHOLE-TIME DAY COURSES :		£	s.	d.
Junior Course : Electrotechnology and Engineering Science	per Session	1	0	0
Electrical Installation Work (Apprentices)	do.	1	0	0
Preparatory Course : Electrical and Radiotechnology	per Session	3	0	0
Preparatory Course : Science	do.	3	0	0
Testing, Maintenance and Servicing of Radio Equipment	per Session	6	0	0
Radio Engineering	Per Term	3	0	0
Preliminary Science Course :				
Opticians	do.	3	0	0
Radiography	do.	3	0	0
Pre-University : Physics, Chemistry, Biology	do.	3	0	0
Pre-University : Mathematics, Engineering Science	do.	3	0	0

		£	s.	d.
Applied Science (Univ. of Lond., B.Sc.) ...	do.	3	0	0
Applied Biology and Food Technology ...	do.	3	0	0
Engineering and Chemical Technology for Manufactures	per Session	18	0	0

RADIO OFFICERS' CERTIFICATION COURSES:

Marine Radio Officers' 1st Class Certificate	Per Term	4	0	0
Aircraft Radio Officers' 1st Class Certificate	do.	4	0	0
Radiotechnology (Part Course) ...	do.	4	0	0

SUMMER COURSES FOR OPTICIANS:

Part I—Practical		3	0	0
Parts II and III—Practical		3	0	0
One subject only		1	10	0

PART-TIME DAY COURSES:

Bakery Practice (Apprentices) ...	per Session		7	6
Certificate Course in Breadmaking and Flour Confectionery	per Session	1	0	0
Cinema Projection Technology (Apprentices)	per Session		10	0
Practical Pharmacy	per Term	1	0	0
X-Ray Physics and Apparatus ...	do.	1	0	0
Single subjects (see list page 43) ...	do.	1	0	0

EVENING COURSE FEES: SCIENCE AND TECHNOLOGY

Applied Chemistry		1	0	0
Physical Chemistry		1	0	0
Bio-Chemistry		1	0	0
Technology of Foods		3	0	0
Technology of Foods ...	Summer Term only	1	0	0
Brewing		1	10	0
Industrial Bacteriology		1	10	0

EVENING COURSES—Contd.	£	s.	d.
Milk Processing	1	10	0
Specialised Technical Analysis	1	10	0
Pharmaceutical Chemistry (Lec. and Lab.)	2	5	0
Ditto, ditto (Lectures)	1	10	0
Ditto, ditto (Lab. Certificate)	1	0	0
Ditto, ditto (Practice) ... ... per Term		15	0
Medical Chemistry (Lec. and Lab.)	2	5	0
Ditto, ditto (Lectures)	1	10	0
Ditto, ditto (Practice) ... ... per Term	1	0	0
Pharmacy (Practical) ... ... do.	1	0	0
ELECTRICAL TECHNOLOGY AND ENGINEERING PRACTICE; ELECTRICAL INSTALLATION WORK (COURSE C); RADIO SERVICE WORK; RADIO COMMUNICATION; ELECTROTECHNICAL DRAUGHTSMANSHIP; POST OFFICE ENGINEERING AND TECHNOLOGY; FLOUR MILLING TECHNOLOGY:			
Intermediate Courses		10	0
Final Courses	1	0	0
DRAWING OFFICE TRACERS' COURSE	1	0	0
ASSOCIATE MEMBERSHIP COURSE (I.E.E.):			
Part I	1	0	0
Part II	1	0	0
CERTIFICATION COURSES FOR OPTICIANS:			
Part I ... ... per Session	3	0	0
Part II ... ... do.	3	0	0
Part III ... ... do.	3	0	0
One subject only	1	10	0

EVENING COURSES—Contd.	£	s.	d.
Technical Physics: Special Courses	1	0	0
Illuminating Engineering ... ... per Session	2	0	0

CERTIFICATION COURSES FOR RADIO OFFICERS:

Marine Radio Officers' 1st Class Certificate per Session (3 terms)	4	0	0
Aircraft Radio Officers' 1st Class Certificate do.	4	0	0
Radiotechnology (Part Course) do.	2	0	0

GRADUATESHIP (B.I.R.E.):

Part I	0	10	0
Part II	0	10	0
Part III	1	0	0

AIR NAVIGATION COURSES:

Full Course—Navigator's Licence (2nd Class) per Session (2 terms)	6	0	0
Navigator's Licence (1st Class) per Session (2 terms)	8	0	0
Part Courses—Section A (D.R. and D.F.) do.	2	0	0
Section B (Maps, Charts, etc.) per Session (2 terms)	2	0	0
Section C (Meteorology) do.	2	0	0
Section D (Astronomical Navigation) per Session (2 terms)	2	0	0
Revision Course—Summer Term	3	0	0
All other Evening Courses (Each Stage)		7	6

Institute of Science and Technology

Kevin Street

(Telephone 51801)

STAFF:

E. MORTON, B.SC., A.R.C.SC.I., *Principal and Head of the Schools of Physics, Electrical Engineering, Radio Engineering and Applied Chemistry.*

ORGANISATION OF STUDIES: ADVISORY PANEL.

Physics: Mathematics: Special Trades ...	MR. F. NOLAN
Applied Chemistry: Biology: Manufactures ...	MR. W. LOOBY
Electrotechnology: Associated Trades ...	MR. W. FEGAN
Telecommunications: Associated Courses ...	MR. H. HODGENS
Art Courses	MR. W. WHELAN
Records: Interdepartmental Co-ordination ...	MR. J. M. FORDE

Clerk—

MATHEMATICS, PHYSICS.

FRANCIS NOLAN, M.SC.; HENRY C. CLIFTON, B.A.; P. J. O'CALLAGHAN, B.SC., A.R.C.SC.I.; E. G. KELLY, B.E.; R. W. RYDER, B.E., B.SC.; M. HENDERSON, B.E.; E. HYNES, B.E.; J. M. FORDE, B.E.; H. FLOOD, B.SC., A.R.C.SC.I.; P. WHELAN, B.SC., A.R.C.SC.I.; B. J. DIXON, B.SC., A.R.C.SC.I.; T. SHIEL, M.A., H.DIP.ED.; J. G. COLEMAN, DIP.OPT.A.O.I., F.I.O.; H. HAND, A.I.E.E.; T. S. MASON, F.B.O.A.; P. J. LYONS, B.SC.

APPLIED CHEMISTRY AND BIOLOGY.

W. J. Looby, D.Sc., A.R.C.Sc.I., H.Dip.Ed.; B. G. Fagan, B.A., B.Sc., F.R.I.C., A.R.C.Sc.I.; P. J. Hurley, M.Sc.; H. D. Thornton, F.R.I.C., B.Sc., A.R.C.Sc.I.; F. J. Barragry, M.P.S.I.; M. J. Gorman, B.Sc., A.R.C.Sc.I.; John Shiel, M.D., B.L., Ph.C.; D. W. Morrissey, B.Sc.; D. Slattery, B.Sc., A.R.C.Sc.I.; Dr. N. McNally; Miss W. Brophy, M.Sc.; Dr. Brendan J. Senior; Miss Frances Doherty, B.Sc.; W. De Lacy (Milling); Miss Mary T. Lucey, B.Sc.

ELECTRICAL ENGINEERING TECHNOLOGY.

William Fegan, A.M.I.E.E.; Geo. K. Ring, B.E., A.R.C.Sc.I.; J. J. O'Doherty, B.Sc., B.E., A.M.I.E.E.; E. Hynes, B.E.; A. D. Whelan, B.E.; W. Trundle, Tech. Dip., City & Guilds, Lond.; J. Cronin, B.E.; E. Hanley, B.E.; E. G. Kelly, B.E.; J. C. Costello, B.Sc., Tech., B.E. (hons.), A.M.I.E.E.; Messrs. J. Williams and J. G. Moore (Electrotechnical Draughtmanship).

RADIO ENGINEERING: TELECOMMUNICATIONS.

Harold Hodgens, Assoc.I.E.E.; Hugh De Lacy, B.E.; P. J. Byrne, B.E. (hons.), B.Sc., Tech., A.M.B.I.R.E.; J. Honan, A.M.B.I.R.E.; T. J. Carroll, Tech. Dip., City & Guilds, Lond.; P. Sullivan, Tech. Dip., City & Guilds, Lond.; H. J. Barriscale, B.E.; G. Jones, M.Sc.; J. W. Devon; W. O'Connor, B.E.; B. Mangan, B.E. Messrs. M. J. O'Rorke, B. Brennan, V. P. Roddy, Certificated Radio Officers.

AIR NAVIGATION.

Harold Hodgens, Assoc.I.E.E.; M. J. O'Rorke; Lieut. B. M. Flanagan; Capt. M. Higgins; Capt. P. Swan; Capt. T. C. Walsh.

LANGUAGES.

F. NOLAN, M.SC.	Technical German.
W. LOOBY, B.SC., A.R.C.SC.I., H.DIP.ED.	Technical Irish.
J. MOYNIHAN	Irish; English; General Subjects.

TRADES AND HANDICRAFTS

R. HOWARD	Instrument Making; Metal Work.
W. TRUNDLE	Metal Work; Electl. Inst. Work.
W. J. BRADY, TECH. DIP. ...	Glass Blowing.
E. J. MCNAMARA	Electrical Installation Work.
J. O'TOOLE	Electric Welding.
M. O'KEEFE	Electric Cable Jointing.
A. MULVANEY, TECH. DIP. ...	Do.
P. J. CASEY	Boot Manufacture.
K. ENGLISH	Do.
S. ANTHONY, TECH. DIP. ...	Breadmaking and Flour Confectionery.
W. CLARKE	Confectionery.

ART AND ARTISTIC CRAFTS.

WILLIAM L. WHELAN, Art Master's Certificates, Board of Education, London, Silver and Bronze Medalist, National Competition, South Kensington; Medalist, Irish National Art Competition—*Head of the Arts and Crafts Department.*

MISS MARGARET WHELAN, Certificated Art Teacher, Medalist.

SCHOOLS OF PHYSICS AND MATHEMATICS, APPLIED CHEMISTRY AND BIOLOGY, ELECTRICAL ENGINEERING, RADIO TECHNOLOGY AND TELECOMMUNICATIONS.

PROGRAMME OF DAY COURSES.

SESSION 1946-47.

(i) JUNIOR AND PREPARATORY COURSES :

Electrical; Radio Communication; Science.

(ii) PRELIMINARY AND PRE-UNIVERSITY COURSES :

Optics; Radiography; Pharmacy; Matriculation.

(iii) ADVANCED SCIENCE AND ENGINEERING COURSES :

University of London (B.Sc.).

(iv) TECHNOLOGICAL COURSES :

Applied Biology and Food Technology.
Ophthalmic Optics.
Radio Engineering; Radio Service Work.
Radio Officers (Marine and Aircraft).
Apprentice Courses (Electrical : Projection).

ADMISSION TO DAY COURSES

In general, applicants for admission to all Day Courses in Applied Science or Technology, other than the Junior Course in Electrotechnology and Engineering Science, must not be under sixteen years of age.

ENTRANCE STANDARDS AND EXAMINATIONS

Intending students are required to show evidence of ability to profit by the instruction before being approved for admission to any stage of a particular Course.

ENROLMENT PERIODS

Whole-time Day Courses

Week commencing Monday, 2nd September, 1946.

Part-time Day Courses

Week commencing Monday, 9th September, 1946.

Enrolment subsequent to Monday, 30th September, 1946, may be made only on the authority of the Principal.

DAY COURSE FEES: Enrolment and Registration

The requisite Sessional Course Fees, or Term Course Fees, where these are arranged, must be paid in the Office of the Institute on enrolment, and subsequent registration in any Class may be effected only on presentation of the appropriate official Course Fee Receipt.

SESSIONAL EXAMINATIONS AND COURSE PROMOTION REGULATIONS

Examinations are held at end of Session in respect of each Class-subject; no student shall be admitted to the Examinations who has not made at least three-fourths of the possible attendance, except in very special circumstances and at the discretion of the Principal.

Promotion to a Higher Year of instruction is contingent on passing the Sessional Examinations in the Lower Year.

An Experimental Record Book is required to be maintained by each student of a Laboratory Class; an assessment shall be made at end of Session of each student's progress in laboratory technique and experimental ability.

SCHOOLS OF PHYSICS AND MATHEMATICS, APPLIED CHEMISTRY AND BIOLOGY, ELECTRICAL ENGINEERING, RADIO TECHNOLOGY AND TELECOMMUNICATIONS.

DAY COURSES.

JUNIOR AND PREPARATORY.

1D. Full-time Junior Course—Electrotechnology and Engineering Science.

(Session—September to July).

The Course provides a pre-apprenticeship training of a high standard suitable for those who intend to enter Electrical Trades or the Offices of Consultant Engineers or Electrical Contractors.

The Course is designed to cover two Sessions and provides approximately 28 hours of instruction per week in Mathematics, Physics, Chemistry, Mechanics, Electrical Technology and Workshop Practice, and in Irish and English and Religious Instruction.

Intending students should not be over sixteen years of age and should have attained a minimum standard of general education equivalent to that of the Second Year of the Intermediate Course in Secondary Schools.

Applicants for admission to the Course are required to pass the entrance examination in Mathematics prior to enrolment. Students accepted for enrolment must provide themselves with the following requisites :

(i) Drawing instruments of specified quality.

(ii) Engineer's overalls and certain specified tools.

(iii) Stationery and Text books.

Sessional Fee, £1.

DAY COURSES.

2D. Full-time Preparatory Course—Electrical and Radio Technology

(Session—September to July).

The Course provides a preparatory training for students who intend later to take a specialised Course in (*a*) Radio Engineering or (*b*) Radio Telegraphy (Radio Officers), or who intend to take up Radio Service Work.

The subjects of the Course include Mathematics, Physics, Chemistry, Electrotechnology, Principles of Radio Communication, Workshop Practice, and Telegraphy.

The requisite Entrance Standard of general education is equivalent to that connoted by the Intermediate Certificate (Secondary Schools).

Sessional Fee, £3.

3D. Full-time Preparatory Course—General Science and Mathematics.

(Session—September to July).

The Course provides preparatory instruction for students who intend later to take more advanced courses in Science or Engineering.

The Course subjects include Mathematics, Mechanics, General Physics, Heat, Light, Magnetism and Electricity and Inorganic Chemistry.

Sessional Fee, £3.

DAY COURSES.

PRELIMINARY, PROFESSIONAL, AND PRE-UNIVERSITY.

4D. Full-time Course—Preliminary Science for Opticians

(October—June : Three Terms).

The Course is approved by the Association of Ophthalmic Opticians, Ireland, in relation to the requirements of the Preliminary Examination Syllabuses; the Course Certificate awarded on the results of the Sessional Examinations held in the month of June in each Session is accepted by the Association in fulfilment of the educational conditions governing admission to Registration and to enrolment in the Professional Courses.

The Course provides full-time instruction over one Session of approximately 39 weeks in General Science, Heat, Light, Sound, Magnetism and Electricity, Chemistry, Elementary Physiology and Biology and Mathematics.

Intending students should not be less than 17 years of age and should have attained a suitable standard of general education. Application for admission should be made to the Principal, accompanied by full information in regard to age and educational standard.

Per Term, £3; Three Terms, £9.

5D. Full-time Course—Preliminary Science for Radiography

The Course is offered as a preparatory scientific training for women students who subsequently intend to enter on a hospital Course of Training leading to Certification in Radiography; a preliminary course of scientific instruction is essential.

DAY COURSES.

The general description of the Instruction is as for the preceding Course, with the addition of lectures on the Electron Theory, Conduction of Electricity through Gases, Ionic Emission, Thermionic Valves, X-Ray and Vacuum Tubes and accessory X-Ray plant equipment.

Intending students should have attained the Matriculation or Leaving Certificates.

Per Term, £3; Three Terms, £9.

6D. Full-time Courses—Mathematics and Science Subjects

PRE-UNIVERSITY AND HIGHER COURSES.

(Session—October to July).

COURSE A—Specialising in Physics, Chemistry, Biology.

COURSE B—Specialising in Mathematics, Engineering Science Subjects.

COURSE C—Specialising in subjects for the Preliminary and Professional Examinations of the Association of Ophthalmic Opticians (Ireland) and of the British Optical Association.

COURSE D—Specialising in subjects for the Preliminary and Membership Examinations of the Society of Radiographers (women students only).

The Courses provide a thorough general scientific training suited to the requirements of students who intend to enter scientific occupations as **Pharmaceutical Chemists, Opticians, Radiologists, Meteorological Assistants,** etc., or who desire to train for entrance to some branch of Chemical or Engineering Industry having a scientific basis.

Intending Students should consult the Principal.

DAY COURSES.

The Courses also serve to provide a specialised pre-University course of instruction for students who already have matriculated or who are preparing for University Entrance, Matriculation or higher Examinations.

Day Courses to suit individual students may be arranged by options made from the following schedule of studies :

> Mathematics (Geometry, Co-Ordinate Geometry, Algebra, Trigonometry, Calculus Elements); Applied Mathematics (Statics, Dynamics, Hydrostatics); Physics (Heat, Sound, Light, Magnetism and Electricity); Chemistry; Metallurgy; Botany; Biology; Workshop Practice; Descriptive Geometry; Technical Drawing; Irish; English; French; German.

The Syllabuses of instruction generally conform with those of the Department of Education (T.I.B.), and with those for the Matriculation and First University Examination of the National University.

Per Term, £3; Three Terms, £9.

DAY COURSES

ADVANCED SCIENCE AND ENGINEERING.

7D. Full-time Courses—Applied Science (Univ. of Lond., B.Sc.)

FOR MATRICULATION COURSES, see Pre-University Courses A & B.

THE INTERMEDIATE SCIENCE COURSE provides full-time instruction in Pure Mathematics, Applied Mathematics, Physics, Chemistry, Botany, Biology, Engineering, Drawing, and Languages.

Students may make their own options within the range of the Curriculum.

FINAL B.Sc. COURSE: Students requiring instruction for the Degree of the University of London are requested to consult the Principal, who will indicate suitable established Day and Evening Courses, from which the desired options may be made, in:

Advanced Physics, Applied Heat, Chemistry, Inorganic, Organic and Physical, Botany, Biology, Mechanics and Strength of Materials, Electrical Technology, Pure and Applied Mathematics, Generation, Transmission and Utilisation of Electrical Energy, etc.

Per Term, £3; Three Terms, £9.

DAY COURSES.

APPLIED SCIENCE AND TECHNOLOGY.

8D. Applied Biology and Food Technology: Diploma Course.

The purpose of the Course is to give a training and qualification specially adapted to the needs of the Food, Bio-Chemical and Fermentation Industries.

The Full Course of Instruction is designed to cover a period of Three Sessions.

The First and Second Years of the Course are devoted to the study of Inorganic, Organic and Physical Chemistry, with Biology, Botany and Engineering Science as ancillary subjects.

The Third Year of the Course is allocated to Applied Biology, including Bio-Chemistry, Industrial Bacteriology and Fermentation Industries; Technical Entomology; Food Conservation Principles; Food Poisons and Adulterants; Foods and Water Analysis.

Intending students holding approved qualifications may be admitted directly to the Third Year of the Course.

It may be noted that the Syllabuses of Instruction and Content of Laboratory Work constitute a suitable Course for students intending to sit for the Institute of Brewing Examination for Associate Membership.

Per Term, £3; Three Terms, £9.

9D. Full-time Courses—Engineering and Chemical Technology: Manufactures.

The Courses are intended to meet the needs of students of good secondary education requiring a thorough practical basic training preparatory to entering positions in Manufacturing Industry as student-apprentices and where the ultimate aim is technical supervision and management.

DAY COURSES.

It should be noted that while the advantages of such a course of training are generally obvious and would be conducive to achieving entry to employment in Industry on the basis of student-apprentice, the field of opportunity is restricted. It is advised therefore that students and parents or guardians should explore, where no intimate contacts with Industry already exist, the possible avenues of employment in relation to any specific Industry or Manufacture before deciding to enrol; if possible, definite entry to employment should be assured prior to commencing a course of study.

The Course is designed to cover two years; a third year of wholly specialised instruction may be arranged to suit individual needs.

The First Year of instruction will concentrate on basic Physical, Chemical and Electrical Science and applications. In the Second Year the instruction will deal with Electrical Installations and Motive Power, Factory Lay-out and Organisation, Industrial Chemistry and Technology and Technical Analysis.

Liaison will be established throughout the instruction and in accordance with the objective of the individual student, with specialised instruction in association with one or more of the following *technological Courses* :—

> Brewing, Flour Milling, Breadmaking, Flour Confectionery, Milk Processing, Canning and Food Preservation, Technical and Mineral Analysis, Paper, Fertilisers, Oils, Fats and Waxes, Soaps, Pharmaceutical Preparations, Fuels, Cements and Building Materials, etc.

Application for admission to the Course should be made to the Principal, stating age, educational standard and individual aim.

Sessional Fee, £18.

DAY COURSES.

Certification Courses for Ophthalmic Opticians: Diploma in Optometry.

The Courses are organised in conjunction with the Examinations of the Association of Ophthalmic Opticians, Ireland. Intending students are advised in the first instance to apply to the Association for full particulars relating to Syllabuses, Registration and Conditions of Admission to the professional examinations for the Diploma in Optometry (inquiries should be directed to the Hon. Secretary, Association of Ophthalmic Opticians (Ireland), 10 Lower Abbey Street, Dublin, C.8).

Applicants for admission to the Professional Courses should have acquired the Matriculation or Leaving Certificate, or show evidence of an equivalent standard of general education or, alternatively, pass the Preliminary Examination of the Association in the subjects: Physics, Chemistry, Mathematics, and Essay in a modern language (Irish or English may be chosen).

PRELIMINARY EXAMINATION:

Details of the approved full-time Day Course preparing for the Preliminary Examination are outlined on page 24.

PROFESSIONAL EXAMINATIONS:

See page 49 for Time-table and other information relative to the approved Courses preparing for Parts I, II and III of the Professional Examinations.

Full-time Summer Courses of Practical Instruction.

In order to facilitate registered students who are not resident within the City Borough Area and who are following approved theoretical courses of instruction, short full-time intensive courses are organised, each course affording approximately 60 hours of *practical* instruction in Physical Optics, in Anatomy and Recognition of Abnormal Conditions and in Practical Sight Testing and Dispensing.

The Course for Part I and that for Parts II and III will be organised in the month of May in each Session and will be conducted over a full-time period of two weeks.

DAY COURSES.

Students of the Practical Sight Testing Classes are expected to provide themselves with Trial Cases and Test Charts.

FEES.

PRELIMINARY COURSE (DAY). See page 24 ...	£9 0 0
PROFESSIONAL COURSES (EVENING). See page 49	
Part I	£3 0 0
Part II	£3 0 0
Part III	£3 0 0
SUMMER COURSES (DAY):	
10D. Practical—Part I	£3 0 0
11D. Practical—Parts II and III	£3 0 0

* 12D. Full-time Course—Instrument Making and Laboratory Arts.

(Session—September to July).

The general Course will be conducted over a period of one Session and will mainly be devoted to practical work and the associated technology: a second Session will be assigned to work of a specialised character.

Intending students must have completed attendance at the two-year Day Course in Engineering Science and Electrotechnology or alternatively show evidence of having undergone an adequate training in Workshop Practice and in the elements of Physics (Heat, Light, Sound, Magnetism and Electricity).

It is intended that the Course should provide training for occupations in Industrial, College or Government laboratories and workshops as Laboratory or Instrument Technicians.

The practical work and associated technology will include the following:—

Materials, tools, processes; Lathe work; design and construction of Instruments; Electrical measuring instruments; optical instru-

* Will not be held in present Session.

ments; weighing scales and balances; common laboratory apparatus; temperature control instruments; electrodeposition of metals; silvering of glass; glass blowing of technical apparatus.

The work of the Course will entail attendance at the Institute for approximately thirty hours per week.

A general Course Certificate will be awarded on the assessment of the practical work completed in the first year and on the results of the theoretical examinations. A special Course Certificate will be awarded similarly at the conclusion of the second year specialised Course.

Course students may attend related evening classes on two evenings per week.

Inclusive Sessional Fee, £6.

13D. Full-time Course—Testing, Maintenance and Servicing of Radio Equipment.

(Session—September to July).

The Course, covering a period of one Session, is designed to meet the needs of students desiring full training and certification in Radio Service Work.

Not more than twenty students will be accepted for enrolment.

Applicants must show evidence of having acquired a fundamental knowledge of the principles of Magnetism and Electricity (direct and alternating current). Prior consideration will be given to applications from students possessing qualifications as follows :—

(i) Certificates of satisfactory attendance and progress at the Preparatory Day Course of this Institute or other Course of similar standard. (See page 23, Course 2D.)

Or (ii) City and Guilds Certificate in Radiocommunication.

Or (iii) State Certificate of Proficiency in Radiotelegraphy (Eire or Britain).

The Course provides approximately twenty-five hours instruction per week in subjects including Radio Theory, Circuits, Servicing Equipment and Instruments, Use of Oscilloscope, Location of Faults, etc., Ancillary Mathematics and Electrotechnology, Workshop Repairs and Assembly, Business Methods and Office Routine.

Students are expected to sit for the City and Guilds Examination in Radio Service Work held in the month of May in each year.

Course students may attend related Evening Classes on two evenings per week.

Inclusive Sessional Fee, £6.

Testing, Maintenance and Servicing of Radio Equipment

TIME TABLE—October to July

Day	Hours	Subject
MONDAY	10.0—12.30 2.0—3.0 3.0—5.0	1. PRACTICAL RADIO RADIO TECHNOLOGY MATHEMATICS
TUESDAY	10.0—11.0 11.0—12.30 2.0—4.0	ELECTRICAL THEORY ELECT. LABORATORY WORKSHOP PRACTICE
WEDNESDAY	10.0—12.30 2.0—3.0 3.0—5.0	PRACTICAL RADIO RADIO TECHNOLOGY DRAWING
THURSDAY	10.0—12.30 2.0—5.0	PRACTICAL RADIO WORKSHOP PRACTICE
FRIDAY	10.0—11.0 11.0—12.30 2.0—3.0 3.0—5.0	ELECTRICAL THEORY ELECTRICAL LABORATORY RADIO TECHNOLOGY MATHEMATICS
SATURDAY	10.0—12.30	PRACTICAL RADIO

DAY COURSES.

Full-time Courses for the Training and Certification of Radio Officers (Mercantile Marine and Aircraft).

EQUIPMENT.

The School is fully equipped with modern Marine and Aircraft Radio Apparatus, including a 1½ K.W.I.C.W./C.W. Marine Transmitter, a Marconi Type AD41 Aircraft Transmitter, standard types of Marine and Aircraft valve receivers, and complete Direction Finding Apparatus.

Course of Instruction.

The Course of Training is arranged to prepare students in the shortest possible time for the Examinations of Proficiency in Radiotelegraphy and Radiotelephony. The instruction consists of Lectures and Practical Work in Technical Electricity, Technical Radiotelegraphy and Radiotelephony, and Direction Finding, with practice on the Marine and Aircraft Apparatus specified above, and includes training in sending and receiving in the Morse Code, operating procedure and the handling of traffic, and in the Rules and Regulations for Radio Operators including the Q-Code, and typewriting.

Enrolment and Period of Training.

Enrolment may be effected at any period within the Session: the duration of the period of training requisite for the acquirement of a State Certificate of the First Class is approximately 14-18 months.

Examinations.

The State Certificate Examinations are conducted in the School at intervals of three months by examiners appointed by the Department of Posts and Telegraphs; the syllabuses of Examination subjects are those defined by the International Telecommunication Convention, 1937. State Certificates confer eligibility for employment as Radio Officer in Mercantile Marine or Air Services (Eire and British Commonwealth).

DAY COURSES.

ADMISSION.

Students are expected to have a good general education, with special attention to handwriting, spelling, geography, arithmetic up to square root, algebra up to quadratic equations, elements of trigonometry.

There is no age-limit.

FEES.

The Fees, which cover tuition in all subjects up to obtaining the State Certificate of Proficiency, are as follows:—

14D.	Marine Operators' Certificate Course, per Term	£4	0	0
15D.	Aircraft Operators' Certificate Course do.	4	0	0
16D.	Radiotechnology (Part Course) ... do.	4	0	0

DAY COURSES FOR THE TRAINING AND CERTIFICATION OF RADIO OFFICERS FOR MERCANTILE MARINE AND AIR SERVICES

TIME TABLE—(September to July)

Day	Hour	Section	Subject
Monday	10.00—12.30	A	Aircraft Radio Theory and Practice
	3.00— 5.00	A	Practical Radio
	10.00—11.00	B	Rules and Regulations
	2.00— 4.00	B	Alternating Current
	10.00—12.30	C	Magnetism and Electricity
Tuesday	10.00—11.00	A	Radio Theory
	11.00—12.30	A	Electrotechnology
	2.00— 3.00	A	Practical Radio
	11.00—12.30	B	Radio Technology
	3.00— 5.00	B	Practical Radio
	11.30—12.30	C	Rules and Regulations
	3.30— 5.00	C	Magnetism and Electricity
	10.00—11.30	A	Radio Technology
Wednesday	11.30—12.30	A	Aircraft Rules and Regulations
	3.00— 5.00	A	Practical Radio
	11.30—12.30	B	Radio Technology
	10.00—12.30	C	Magnetism and Electricity
Thursday	10.00—12.30	A	Aircraft Radio Theory and Practice
	2.00— 3.00	A	Practical Radio
	4.00— 5.00	A	Rules and Regulations
	10.00—12.00	B	Alternating Current
	3.00— 5.00	B	Practical Radio
	11.30—12.30	C	Rules and Regulations
Friday	10.00—11.00	A	Radio Technology
	2.00— 3.30	A	Electrotechnology
	3.30— 5.00	A	Practical Radio
	11.30—12.30	B	Radio Technology
	2.00— 3.30	B	Practical Radio
Saturday	10.30—12.30		Mathematics (optional)

NOTE : At times not specified in the above Time-Table, between the hours of 10 a.m. and 12.30 p.m., and 2 p.m. and 5 p.m., all Sections engaged in Telegraphy Practice (Morse).

DAY COURSES.

17D. Full-time Course—Radio Engineering and Electronics.

(Session—October to July).

This advanced Course is designed to offer a thorough training, over a maximum period of three Sessions, in Radio Communication Principles and Engineering Practice, and meets the requirements of those who seek special qualifications in Radio Engineering or who intend to enter employment as Technicians in any branch of the Radio Industry.

The Schedule for the full Course embraces Lectures and Experimental courses in the following subjects: Technical Physics (Mechanics, Heat, Sound, Light and applications in Electrical Communications); Mathematics (Algebra, Trigonometry, Conic Sections, Differential and Integral Calculus); Electrotechnology (D.C. & A.C. theory: Machines); Radio Communication and Carrier Telephony; Radio Frequency Measurements; Engineering Electronics; Radio Installations and Plant; Radio Service Work; Workshop Practice.

The syllabuses of instruction conform in full with the examination requirements of the Institution of Electrical Engineers, British Institution of Radio Engineers, the City and Guilds of London Institute and the several recognised professional institutions associated solely with this branch of Engineering.

Intending students should have attained Matriculation or Leaving Certificate standard in Mathematics.

Applicants possessing the Certificate of Proficiency of the First Class in Radiotelegraphy or the Preliminary Grade Certificate in Radiocommunication (City and Guilds of London) or an equivalent qualification may be approved by the Principal for direct admission to the Second Year of the Course.

The Course provides approximately 33 hours of instruction per week; students of the Day Course may take related Evening Classes on two evenings per week.

FEES.

Per Term, £3; Three Terms, £9.

DAY COURSES.

TIME TABLES

Radio Engineering and Electronics

(October to July)

FIRST YEAR

Day	Hours	Subject
MONDAY	10.0—11.0	RADIO THEORY
	11.0—12.30	RADIO CONSTRUCTION
	2.0—3.30	MAGNETISM and ELECTRICITY (Lecture).
	3.30—5.0	MATHEMATICS
TUESDAY	9.30—11.0	MATHEMATICS
	11.0—12.30	PRACTICAL RADIO
	2.0—3.0	RADIO THEORY
	3.0—4.30	PHYSICS
WEDNESDAY	9.30—11.0	RADIO THEORY
	11.0—12.30	APPLIED MATHEMATICS
	2.0—3.30	MAGNETISM and ELECTRICITY (Lecture)
	3.30—5.0	Do. LABORATORY
THURSDAY	10.0—11.30	RADIO THEORY
	11.30—12.30	APPLIED MATHEMATICS
	2.0—3.30	PHYSICS
	3.30—5.0	TUTORIAL
FRIDAY	9.30—11.0	MATHEMATICS
	11.0—12.30	DRAWING
	2.0—3.0	RADIO THEORY
	3.0—4.30	MAGNETISM and ELECTRICITY (Lecture).
SATURDAY	9.30—11.0	RADIO THEORY
SATURDAY	11.0—12.30	PHYSICS LABORATORY

SECOND YEAR

Day	Hours	Subject
MONDAY	9.30—11.0	RADIO ENGINEERING
	11.0 —12.30	MATHEMATICS
	2.0 —5.0	PRACTICAL RADIO
TUESDAY	9.30—11.0	RADIO TECHNOLOGY
	11.0 —12.30	PHYSICS
	2.0 —3.0	RADIO THEORY
	3.0 —5.0	MATHEMATICS
WEDNESDAY	9.30—11.0	ELECTROTECHNOLOGY (Lecture)
	11.0 —12.30	Do. (Laboratory)
	2.0 —5.0	PRACTICAL RADIO
THURSDAY	9.30—11.0	RADIO MEASUREMENTS
	11.0 —12.30	ELECTROTECHNOLOGY
	2.0 —3.0	RADIO THEORY
	3.0 —5.0	RADIO SERVICE
FRIDAY	9.30—11.0	RADIO DESIGN
	11.0 —12.30	MATHEMATICS
	2.0 —5.0	ELECTRONICS (Laboratory)
SATURDAY	9.30—11.0	ELECTROTECHNOLOGY (Lecture)
	11.30—12.30	DRAWING

THIRD YEAR

MONDAY	10.0 —11.0	ELECTROTECHNOLOGY
	11.0 —12.30	RADIO THEORY
	2.0 —3.0	APPLIED MECHANICS
	3.0 —5.0	APPLIED HEAT
TUESDAY	10.0 —11.30	ELECTROTECHNOLOGY
	11.30—12.30	RADIO ENGINEERING
	2.0 —5.0	PRACTICAL RADIO
WEDNESDAY	10.0 —11.0	ELECTROTECHNOLOGY (Lecture)
	11.0 —12.30	ELECTROTECHNOLOGY (Laboratory)
	2.0 —3.30	TELEVISION
	3.30—5.0	DRAWING
THURSDAY	10.0 —12.30	RADIO MEASUREMENTS
	2.0 —3.30	MATHEMATICS
FRIDAY	9.30—10.30	ELECTROTECHNOLOGY
	10.30—12.30	RADIO DESIGN
	2.0 —3.30	APPLIED MECHANICS
	3.30—5.0	APPLIED HEAT
SATURDAY	10.30—12.30	TUTORIAL

DAY COURSES FOR TRADE APPRENTICES

18D. Full-time Courses—Electrical Installation Work and Electrotechnology

These Courses are conducted under a special scheme making provision for the full technical training of Electrical Apprentices during the five-year period of Apprenticeship. The scheme has the co-operation of Trade Unions and Employers.

Courses provide 33 hours of instruction per week in Electrical Theory and Experimental Work, Engineering Science, Mathematics, English (Précis and Report Writing), Technical Drawing, Electrical Installation and Fitting Work.

The syllabuses of instruction are based on those for the Department of Education Examinations in Electrical Installation Work and in Electrical Engineering Practice. By arrangement with the Department of Education, students sit for the Junior and Senior Trade Tests and for the Technological Examinations at appropriate stages in the instruction.

Under the present Scheme, each stage of full-time instruction occupies a period of 13 weeks and is associated with a further course of instruction by correspondence carried over an additional period of 26 weeks, approximately.

Fees: City Borough Area, Each Course, £1.

External Areas—Student-Apprentices from External Areas are admitted under special fees by arrangement with the Vocational Committees concerned.

TIME TABLES

ELECTRICAL INSTALLATION WORK AND ELECTROTECHNOLOGY

Autumn, Lent and Summer Term Courses: Two courses current in each term

SECTION A

Day	Time	Subject	Room
Monday	9.30—10.30	Installation Work, Lecture	6
	10.30—12.30	Installation Work, Lab.	6
	2.00— 3.30	Practical Drawing	14
	3.30— 5.00	Mathematics	14
Tuesday	9.30—10.30	Electrotechnology, Lecture	6
	10.30—12.30	Electrotechnology, Lab.	6
	2.00— 5.00	Installation Work, Pract.	33
Wednesday ...	9.30—12.30	Installation Work, Pract.	33
	2.00— 5.00	Installation Work, Pract.	33
Thursday	9.30—12.30	Workshop Practice	1
	2.00— 5.00	Workshop Practice	1
Friday	9.30—11.00	Electrical Calculations	19
	11.00—12.30	English (Precis and Report Writing)	19
	2.00— 5.00	Engineering Science	12
Saturday	9.30—10.15	Workshop Technology	12
	10.15—11.45	Practical Drawing	14

SECTION B

Monday	9.30—12.30	Installation Work, Pract.	33
	2.00— 5.00	Installation Work, Pract.	33
Tuesday	9.30—12.30	Installation Work, Pract.	33
	2.00— 3.30	Practical Drawing	14
	3.30— 5.00	English (Precis and Report)	17
Wednesday ...	9.30—12.30	Workshop Practice	1
	2.00— 5.00	Workshop Practice	1
Thursday	9.30—11.00	Electrical Calculations	14
	11.00—12.30	Practical Drawing	14
	2.00— 5.00	Engineering Science	12
Friday	9.30—12.30	Electrotechnology, Lecture and Laboratory ...	6
	2.00— 5.00	Installation Work, Lecture and Laboratory ...	6
Saturday	9.30—10.15	Workshop Technology	8
	10.15—11.45	Mathematics	8

19D. Part-time Courses—Projection Science and Technology (Cinema Apprentices)

The Courses are designed to provide for the technical training of Cinema Apprentices employed in the Dublin Area, and are organised in co-operation with the Trade Union and the Irish Cinema and Theatre Managers' Association.

The Courses extend over three Sessions and provide a minimum of four hours of instruction per week in Mathematics, Elementary Science, Light and Sound, Technical Electricity, Electrical Reproduction of Sound, and Sound Head Amplifier Equipment.

The Session extends from October to mid-June in each year.

Fee for each Course, 10/-.

20D. Part-time Courses—Practical Pharmacy

The Courses are intended for Pharmaceutical students preparing for the Final Examinations of the Pharmaceutical Society of Ireland.

Three Courses are conducted in each Session, *viz.*, one Course in each of the three School terms, *viz.*, Autumn, Lent and Summer terms.

There are approximately twelve class meetings to each Course. Classes meet on Wednesday and Thursday afternoons from 3 to 6 p.m.

Course Fee, £1.

SINGLE SUBJECTS: SCIENCE AND TECHNOLOGY

(Session: October to July)

Accommodation permitting, Classes of established Courses in one or more of the specialised subjects listed hereunder may be taken, if approved by the Principal, on payment of the appropriate fees.

	Subject	Day	Hour	Fee
S. 1	Pure Mathematics (tutorial)	M.W.F.	3.30— 5.00	£1 per Term
S. 2	Applied Mathematics (tutorial)	Tu., Th.	3.30— 5.00	£1 per Term
S. 3	Physics II (Lecture and Lab.)	M., Th.	9.30—12.30	£1 per Term
S. 4	Chemistry II (Lecture and Lab.)	W. F.	9.30—12.30	£1 per Term
S. 5	Chemical Analysis (Practice)...	Tu.	9.30—12.30	£1 per Term
S. 6	Dietetics Science	Sat.	9.30—12.30	£1 per Term
S. 7	Botany and Biology	Tu., Th.	5.00— 6.30	£1 per Term
S. 8	Industrial Bacteriology	W.	5.00— 7.00	£1 per Session
S. 9	Botany, Advanced	F.	5.00— 7.00	£1 per Session
S.10	Bio-Chemistry	M.	3.00— 6.00	£1 per Session
S.11	X-ray Physics and Apparatus	As	Arranged	£1 per Term
S.12	Electrical Technology	F.	9.30—12.30	£1 per Term
S.13	Electrical Installation Technology	F.	2.00— 5.00	£1 per Term
S.14	Technical Drawing	Tu.	2.00— 3.30	£1 per Term
		Sat.	10.15—11.45	
S.15	Workshop Practice	Th.	9.30— 5.00	£1 per Term
S.16	Welding Practice	As	arranged	£1 per Term
S.17	Telegraphy (Morse)	As	arranged	£1 per Term

SCHOOLS OF ELECTRICAL ENGINEERING, RADIO TECHNOLOGY, PHYSICS AND APPLIED CHEMISTRY

EVENING COURSES.

CERTIFICATE AND DIPLOMA COURSES : EXTERNAL EXAMINATIONS.

The attention of Students is directed to the Examinations in Art, Engineering and Chemical Technology, and Craft subjects conducted under the auspices of the Department of Education, the City and Guilds of London Institute, and Professional Institutions, such as the Institution of Electrical Engineers, the Institute of Gas Engineers, etc.

When deciding on a Course of Study the intending student should consult the Principal or a Lecturer. It is important that the Course prescribed should meet the educational requirements of the student, and lead also to his or her acquirement of a Technical Qualification of recognised standing in Industry. *Such qualifications are of definite value to the holders when seeking employment or betterment of position.*

The Established Courses listed hereunder are conducted in relation to the examination requirements of the several authorities named.

COURSE	EXAMINATION SYLLABUSES
Air Navigation	Department of Industry and Commerce (Provisional International Civil Aviation Organisation).
Art Subjects	Department of Education.
Breadmaking and Flour Confectionery	City and Guilds (Lond.).
Brewing	City and Guilds (Lond.).
Electrical Engineering Practice...	City and Guilds (Lond.).
Electrical Installation Work ...	Department of Education. Institution of Electrical Engineers

Course	Examination Syllabuses
Flour Milling	Department of Education.
Flour Testing	City and Guilds (Lond.).
Gas Engineering and Supply ...	City and Guilds (Lond.).
	Institute of Gas Engineers.
Instrument Making : Glass Blowing	Institute of Physics.
Illuminating Engineering ...	City and Guilds (Lond.).
	Illuminating Engineering Society.
Line Telegraphy, Telephony ...	Department of Education.
	Institution of Electrical Engineers.
	City and Guilds (Lond.).
Milk Processing	City and Guilds (Lond.).
Oils, Fats and Waxes	City and Guilds (Lond.).
Ophthalmic Optics	Assoc. Ophth. Opticians, Ireland. Worshipful Comp. Spectacle Makers, etc.
Paper Manufacture	City and Guilds (Lond.).
Paints and Varnishes	City and Guilds (Lond.).
Petroleum Products	City and Guilds (Lond.).
Physics; Applied Chemistry : Botany; Biology; Mathematics	Department of Education.
	University of London.
	Institute of Chemistry.
Pharmaceutical Chemistry and Allied Subjects	Pharmaceutical Society of Ireland.
Radio-Communication ...	City and Guilds (Lond.).
	Institution of Electrical Engineers, etc .
	B. Inst. of Radio Engineers.
Radio Service Work	City and Guilds (Lond.).
	Radio Trades Examination Board, London.
Radio-Telegraphy, -Telephony (Aircraft and Marine Radio Officers)	Department of Posts and Telegraphs.

Further information in regard to Schemes of External Examinations may be had on request to the Principal.

SCHOOL OF APPLIED PHYSICS AND MATHEMATICS.

Principal: E. MORTON, B.SC., A.R.C.SC.I.

Chief Lecturer: F. NOLAN, M.SC.

TIME-TABLE OF EVENING COURSES:

Pure and Applied Physics: All Stages.

Technical Physics: Special Advanced Courses.

Pure and Applied Mathematics: All Stages.

Applied Optics (Diploma in Optometry).

Illuminating Engineering and Photometry.

Laboratory Arts.

APPLIED PHYSICS AND MATHEMATICS.

The Curriculum in this section offers fundamental Courses in Physics and in Mathematics, which, in general, are linked with the requirements of Technological Courses in Engineering and Chemical Technology.

A number of the Courses are specific in character and are planned to meet the needs for training and certification of students of Ophthalmic Optics and of Illuminating Engineering. A further Course aims to give adequate training to Laboratory Technicians.

EXTERNAL EXAMINING BODIES. It should be noted that the syllabuses of instruction are based, for the most part, on the requirements of external Examining Bodies, of Professional Institutions, and of the University of London. A list of these is set forth on page 44 and detailed information in regard to the Examinations of any of the bodies named may be had on application to the Principal.

ADMISSION OF STUDENTS. In general, students applying for admission to Intermediate Courses must have attained a standard of general education approximating to Matriculation, or have completed satisfactorily attendance at an approved Preliminary Science Course, including General Physics, Mechanics and Mathematics.

CLASS REGISTRATION. Registration on Class Rolls and entry on the Course of Study provided by any Class may be made only on presentation to the Lecturer or Instructor of the appropriate Official Receipt and Class Ticket.

SESSIONAL EXAMINATIONS AND CLASS PROMOTION REGULATIONS.

Examinations are held at end of Session in respect of each class-subject; no student shall be admitted to the Examinations who has not made at least three-fourths of the possible attendance, except in very special circumstances and at the discretion of the Principal.

Promotion to a Higher Stage of instruction in any subject is contingent on passing the Sessional Examinations in the Lower Stage.

An Experimental Record Book is required to be maintained by each student of a Laboratory Class; an assessment shall be made at end of Session of each student's progress in laboratory technique and experimental ability.

EVENING COURSES.

School of Applied Physics and Mathematics

No. of Course	Subject	Day	Hour	Room	Teacher
	PHYSICS AND MATHEMATICS				
PHYSICS.	**PRELIMINARY STAGES.**				
3K	Elementary Science (Physics and Chemistry)	Friday ...	7.0–9.30	4	E. Moynihan, H. Flood
4K	Physics IA (Maths., Mech., Heat)	Monday ...	7.0–9.30	8–8b	H. Flood, M. Henderson
5K	Physics IB (Maths., Mech., Heat)	Tuesday ...	7.0–9.30	12–8b	H. Flood, M. Henderson.
6K	Magnetism & Electricity, IA	Thursday ...	7.0–9.30	12–8b	E. Moynihan, H. Flood
7K	Magnetism & Electricity, IB	Wednesday	7.0–9.30	12–8b	E. Moynihan, H. Flood
	*** INTERMEDIATE STAGES.**				
8K	General Physics and Heat II	Monday ...	7.0–9.30	12–10	P. J. O'Callaghan, R. W. Ryder P. Whelan, P. J. Byrne
9K	Heat, Light, Sound II (Tutorial)	Monday ...	7.0–9.30	13	F. Nolan; E. Hanly
10K	Light II	Wednesday	7.0–9.30	8–10	P. J. O'Callaghan, P. Whelan
11K	Magnetism & Electricity, II	Friday ...	7.0–9.30	12–10 8	P. J. O'Callaghan, B. Dixon P. Whelan, M. Henderson E. V. Cleary
12K	Mechanics (Applied Maths.) II	Thursday ...	7.15–9.15		J. M. Forde
	*** ADVANCED STAGES.**				
13K	Heat & Thermodynamics, III	To be arranged			R. W. Ryder
14K	Wave Motion, Sound, Light, III	Monday ...	7.15–9.15	9	F. Nolan
15K	Magnetism & Electricity, III	Tuesday ...	7.0–9.30	16–10	H. Barriscale, P. O'Callaghan
16K	Mechanics (including Strength of Materials) III	Tuesday ...	7.0–9.30	28	J. M. Forde
17K	Ionisation and Electronics, I	Tuesday ...	7.15–9.15	9	P. J. Byrne
	TECHNICAL PHYSICS: SPECIAL ADVANCED COURSES.				
	SUMMER TERM.				
18K	Engineering Electronics and Oscillographs ..	To be arranged	7.0–9.0	6–9–11	H. de Lacy
19K	Electro – Acoustics ..	do.	,,	,,	P. J. Byrne
20K	Television Reception and Transmission ..	do.	,,	,,	P. J. Byrne
21K	Refrigeration and Air Conditioning Principles	do.	,,	,,	
MATHEMATICS.	**(Preliminary Stages).**				
22K	Mathematics, IA	Wednesday	7.15–9.15	17	A. D. Whelan
23K	Do. IB	Thursday ...	7.15–9.15	19	A. D. Whelan
24K	Do. II	Friday ...	7.15–9.15	19	A. D. Whelan
25K	Do. III	Friday ...	7.15–9.15	4	P. J. Byrne
26K	Do. (Tutorial) ...	Tuesday ...	7.15–9.15		
	Intermediate Stages.				
27K	Mathematics, IV	Monday ...	7.15–9.15	17	J. M. Forde
28K	Do. V.	Tuesday ...	7.15–9.15	6–4	J. C. Costello
29K	Do. (tutorial) ...	Friday ...	7.15–9.15	14	H. Clifton

EVENING COURSES

No. of Course	Subject	Day	Hour	Room	Teacher
	Advanced Stages.				
30K	Mathematics, VI	Wednesday	7.15–9.15	14	J. C. Costello
31K	Do. (tutorial) ...	Friday ...	7.15–9.15	14	H. Clifton
	MATHEMATICAL PHYSICS				
32K	Mathematical Physics—I ..	Thurs. ..	7.15–9.15	28	J. M. Forde
33K	Do. —II ..	Tues. ..	7.0–9.30	28	J. M. Forde

CERTIFICATION COURSES FOR OPHTHALMIC OPTICIANS— DIPLOMA COURSE IN OPTOMETRY

The Courses are organised in conjunction with the Examinations of the Association of Ophthalmic Opticians, Ireland. Applicants for admission to the Courses should have attained a standard of general education equivalent to that connoted by the Matriculation or Leaving Certificates.

Intending students are advised, in the first instance, to apply to the Association for full particulars relating to Syllabuses, Registration and conditions of admission to the professional examinations for the Diploma in Optometry.

The Diploma examinations are conducted on syllabuses in three sections and, to facilitate students, the Diploma Course of studies is correspondingly arranged in three sections or parts and conducted over three Sessions; other conditions being satisfied, the course student has the choice of sitting for the Diploma examinations at the conclusion of three Sessions of study covering Parts I, II and III or of sitting for each Part of the Examination at the conclusion of the course of study relating to that Part.

It should be noted that a condition of admission to any Part of the Diploma Examination is the attainment of a Certificate signed by the Principal certifying an attendance of at least 75% at each class in an obligatory Course subject.

DIPLOMA COURSE IN OPTOMETRY

	PART I				
34K	Physical Optics	Monday ..	7.0–8.0	15	P. J. O'Callaghan
	do. (Lab.) ..	Monday ..	8.0–9.30		do.
	Anatomy and Physiology ..	Wednesday..	7.15–8.15	28	Dr. McNally
	Optical Calculations ..	Wednesday..	8.15–9.15	8a	P. J. O'Callaghan
	(Optional)				
	PART II				
35K	Visual Optics	Tues., Thurs.	8.15–10.15	15	J. G. Coleman
	Anatomy and Recognition of Abnormal Conditions ..	Wednesday..	8.15–9.15	28	Dr. McNally
	PART III				
36K	Subjective and objective Sight Testing	Wednesday..	7.15–9.15	15	T. S. Mason
	Workshop Practice and Dispensing	Friday ..	7.15–9.15	15	do.

SHORT FULL-TIME SUMMER COURSES IN PARTS I, II AND III

In order to facilitate registered students who are not resident within the City Borough Area and who are following approved theoretical courses of instruction, short full-time intensive courses are provided, each affording approximately 60 hours of *practical* instruction in Physical Optics, in Anatomy and Recognition of Abnormal Conditions, and in Practical Sight Testing and Dispensing.

The Course for Part I and that for Parts II and III will be conducted in the month of May in each Session over a full-time period of two weeks.

The normal regulations in regard to attendance at these Courses will apply.

EVENING COURSES.

ILLUMINATING ENGINEERING AND PHOTOMETRY.

Students will be admitted to the First Year of the Intermediate Course who hold

(i) A Pass Certificate in Mathematics, Stage IV
or (ii) Intermediate Certificates in Electrical Engineering (D.C. & A.C.)
or (iii) Ordinary Grade Certificate in Gas Engineering
or (iv) Matriculation or Leaving Certificates or equivalent.

(Examination Syllabuses: City and Guilds of London Institute).

ILLUMINATING ENGINEERING AND PHOTOMETRY.

INTERMEDIATE COURSES.

FIRST YEAR

37K Light Production and Control ... ... 2 hrs. per week as may be arranged

Photometry: Practical Light Sources ... 2 hrs. per week as may be arranged

Light II (Optional) ... | Wednesday.. | 7.0–9.30 | 8 | P. J. O'Callaghan
Mathematics (Optional)—Any Stage.
Engineering Drawing (Optional)—Any Stage.

SECOND YEAR

38K Illumination: Distribution and Control ... 2 hrs. per week
Photometry ... ... 2 hrs. per week
Optional Subjects as for First Year.

FINAL COURSES.

THIRD YEAR

39K Radiation: Spectroscopy ... ... at times to be arranged
Heterochromatic Photometry ... ... at times to be arranged
Technical Calculations ... ... at times to be arranged

FOURTH YEAR

40K Artificial Light Sources and Equipment ... ... at times to be arranged
Lighting Installations ... ... at times to be arranged
Physiological Optics: Colour Vision ... ... at times to be arranged

LABORATORY ARTS' CERTIFICATE COURSE.

INSTRUMENT MAKING AND GLASS BLOWING.

PRELIMINARY STAGES.

FIRST YEAR

41K	Instrument Making—I	Tuesday ...	7.0 -9.30	2	H. Howard
	Elementary Science	Friday ...	7.0 -9.30	4	E. Moynihan
	Mathematics—I	Thursday ...	7.15-9.15	17	A. D. Whelan

SECOND YEAR.

42K	Instrument Making—II	Tuesday ...	7.0 -9.30	2	H. Howard
	Physics—IA	Monday ...	7.0 -9.30	8	H. Flood
	Mathematics—II	Friday ...	7.15-9.15	19	A. D. Whelan

EVENING COURSES

No. of Course	Subject	Day	Hour	Room	Teacher
	FINAL STAGES.				
	THIRD YEAR				
43K	Glass Blowing—I	Mon., Fri. ...	6.0 -8.0	27	W. G. Brady
	Magnetism and Electricity—Ia ...	Thursday ...	7.0 -9.30	12	E. Moynihan
	FOURTH YEAR				
44K	Glass Blowing—II	Mon., Wed.	6.0 -8.0	27	W. G. Brady
	Magnetism and Electricity—II (D.C. and A.C.)	Friday ...	7.0 -9.30	12--10	P. J. O'Callaghan
	Electrical Installation (Lec.) ...	Tuesday ...	7.30-9.0	4	W. Trundle

MATRICULATION AND PRELIMINARY PROFESSIONAL COURSE.

This Course is suitable for the Matriculation Examination of the University of London and other qualifying examinations of similar standard.

For Matriculation, a candidate must sit for English, Mathematics and French with two of the undermentioned subjects. A candidate may select a paper of lower standard in French, in which case three of the selective subjects must be offered.

Suitable classes are:—

Obligatory Subjects:				
English	To be arranged			
French	to be arranged			
Mathematics (Tutorial)	Tuesday ...	7.15-9.15	13	I. Lyons
Selective Subjects:				
Electricity and Magnetism	Friday ...	7.0 -9.30	12 10 8	P. J. O'Callaghan
Drawing	Mon., Thur.	7.15-9.15	14	W. Whelan
				E. Hanley
Mechanics	Thursday ...	7.15-9.15		J. M. Forde
				F. Nolan
Heat, Light and Sound	Mon., Wed....	7.0 -9.30	12 8 13	P. J. O'Callaghan
Chemistry—I	Tues., Wed.	7.0 -9.30	25 21	D. W. Morrissey
Additional Mathematics	Friday ...	7.15-9.15	14	H. C. Clifton

INTERMEDIATE AND DEGREE EXAMINATIONS.

Students requiring instruction in subjects for the Intermediate and Degree Examinations of the University of London should consult the Principal, who will advise on suitable courses of study.

SCHOOL OF APPLIED CHEMISTRY AND BIOLOGY.

Principal: E. MORTON, B.SC., A.R.C.SC.I.

Chief Lecturer: W. LOOBY, B.SC., A.R.C.SC.I.

TIME-TABLE OF EVENING COURSES:

Pure and Applied Chemistry.

Physical Chemistry.

Technical Chemical Analysis.

Bio-Chemistry and Biology.

Pharmacy and Allied Subjects.

Botany.

Industrial Bacteriology.

Technology of Manufactures.

Languages.

EVENING COURSES

APPLIED CHEMISTRY AND BIOLOGY.

The Curriculum includes basic Courses in the Chemical and Biological Sciences and, also, specialised Courses in Technical Analysis and in the Technology of Manufactures, adapted to the needs of local and national industry and to the training and qualification of industrial technical personnel and of scientific workers generally.

EXTERNAL EXAMINING BODIES. It should be noted that the syllabuses of instruction are based, for the most part, on the requirements of external Examining Bodies, of Professional Institutions, and of the University of London. A list of these is set forth on page 44 and detailed information in regard to the Examinations of any of the bodies named may be had on application to the Principal.

ADMISSION OF STUDENTS. In general, students applying for admission to Intermediate Courses must have attained a standard of general education approximating to Matriculation, or have completed satisfactorily attendance at an approved Preliminary Science Course, including General Physics, Mechanics and Mathematics.

CLASS REGISTRATION. Registration on Class Rolls and entry on the Course of Study provided by any Class may be made only on presentation to the Lecturer or Instructor of the appropriate Official Receipt and Class Ticket.

SESSIONAL EXAMINATIONS AND CLASS PROMOTION REGULATIONS.

Examinations are held at end of Session in respect of each class-subject; no student shall be admitted to the Examinations who has not made at least three-fourths of the possible attendance, except in very special circumstances and at the discretion of the Principal.

Promotion to a Higher Stage of instruction in any subject is contingent on passing the Sessional Examinations in the Lower Stage.

An Experimental Record Book is required to be maintained by each student of a Laboratory Class; an assessment shall be made at end of Session of each student's progress in laboratory technique and experimental ability.

EVENING COURSES

SCHOOL OF APPLIED CHEMISTRY AND BIOLOGY.

No. of Course	Subject	Day	Hour	Room	Teacher
	PURE AND APPLIED CHEMISTRY.				
	INORGANIC CHEMISTRY				
	INTERMEDIATE COURSES				
	FIRST YEAR.				
50K	Inorganic Chemistry, Lecture IA	Tues. ..	7.0-8.0	25	D. W Morrissey.
	Do. Do. Lab.—IA.	Tues. ..	8.0-10.0	21	D. W. Morrissey.
	Do. Do. Lecture—IB.	Wed. ..	7.0-8.0	25	D. W. Morrissey.
	Do. Do. Lab.—IB.	Wed. ..	8.0-10.0	21	D. W. Morrissey.
	Physics—II. (Heat) A & B ..	Mon. ..	7.0-9.30		P. J. O'Callaghan; P. Whelan
	SECOND YEAR.				
51K	Inorganic Chemistry, Lecture ..	Tues. ..	7.0-8.0	16	Miss W. Brophy
	Chemical Analysis—II.	Tues. ..	8.0-9.30	16	Miss W. Brophy
	Do.	Thurs. ..	7.0-9.30	16	Miss W. Brophy
	Physics (Heat)	Wed. ..	7.0-9.30	8a & 10	P. J. O'Callaghan; P. Whelan; P. J. Lyons.
	ADVANCED COURSE				
	THIRD YEAR.				
52K	Inorganic Chemistry, Lecture ..	Mon. ..	7.0-8.0	22	H. D. Thornton
	Chemical Analysis—III. ..	Mon. ..	8.0-9.30	22	H. D. Thornton
	Do.	Tues. ..	7.0-9.30	22	H. D. Thornton
	Physics II. (Mag. & Elec.) ..	Fri. ..	7.0-9.30	12 & 10	P. J. O'Callaghan; B. Dixon; P. Whelan.
	ORGANIC CHEMISTRY				
	INTERMEDIATE COURSE				
	FOURTH YEAR.				
53K	Organic Chemistry Lecture	Thurs. ..	7.0-8.0	25	H. Thornton
	Organic Analysis—IV.	Fri. ..	7.0-10.0	22	H. Thornton; B. G. Fagan
	Do.	Thurs. ..	8.0-10.0	22	H. Thornton; B. G. Fagan
	ADVANCED COURSE				
	FIFTH YEAR				
54K	Organic Chemistry, Lecture ..	Fri. ..	8.0-9.0	25	Miss W. Brophy
	Organic Analysis—V. ..	Fri. ..	7.0-8.0 9.0-10.0	22	B. G. Fagan; Miss W. Brophy
	Do.	Thurs. ..	7.0-10.0	22	B. G. Fagan; Miss W. Brophy
	PHYSICAL CHEMISTRY				
	(Summer Term)				
55K	Physical Chemistry—Lecture ..	Thurs. ..	7.0-8.0	16	P. O'Callaghan; Miss Brophy
	Physical Chemistry—Laboratory	Thurs. ..	8.0-9.30	16	P. O'Callaghan; Miss Brophy
	BIO-CHEMISTRY.				
56K	Basic Biology and Bio-Chemistry	Friday ...	7.0 -9.30	23	Dr. B. J. Senior.
	GENERAL BOTANY.				
57K	Botany	Tuesday ...	7.0 -9.30	28	W. Looby
	TECHNICAL ENTOMOLOGY				
	(Summer Term)				
58K	Entomolo y and Limnology ...	Thursday..		23	

EVENING COURSES

No. of Course	Subject	Day	Hour	Room	Teacher

INDUSTRIAL CHEMISTRY.

Specialised Advanced Courses in Technical Analysis.

***FOOD AND DRUGS.**

59K	Technical Analysis	Thurs. & Fri.	7.0 -10.0	22	B.G. Fagan; H. Thornton

***OILS AND FATS.**

60K	Technical Analysis	Thurs. & Fri.	7.0 -10.0	22	B.G. Fagan; H. Thornton

***GAS MANUFACTURE.**

61K	Technical Analysis	Thurs. & Fri.	7.0 -10.0	22	B.G. Fagan; H. Thornton

TECHNOLOGY OF FUELS.

62K	Technical Analysis	Thurs. & Fri.	7.0 -10.0	22	B.G. Fagan; H. Thornton

***TESTING OF PETROLEUM PRODUCTS (FUEL OILS AND LUBRICANTS).**

63K	Technical Analysis	Thurs. & Fri.	7.0 -10.0	22	B.G. Fagan; H. Thornton

TECHNOLOGY OF MANUFACTURES.

* Admission to the following advanced and specialised Courses is conditional on the applicant satisfying the Principal or appropriate Lecturer of ability to follow the instruction; in general, a student should have passed the Intermediate Stages of the Applied Chemistry Course or hold equivalent or superior qualifications prior to enrolment.

***INDUSTRIAL BACTERIOLOGY AND ENZYME CHEMISTRY.**

Bacteriology.

	STAGE I.				
64K	Lecture and Laboratory ...	Tues. ...	7.0 -9.30	23	W. J. Looby, D. Slattery
	„ „	Thurs. ...	7.0 -9.30	28	M. J. Gorman.
	STAGE II.				
65K	Lecture and Laboratory ...	Wed. ...	7.0 -9.30	23	W. J. Looby, M. J. Gorman
	„ „ ...	Mon. ...	7.0 -9.30	28	Do.

CERTIFICATE COURSE IN TECHNOLOGY OF FOODS.

Director of Course: Mr. B. G. FAGAN, Public Analyst.

	PART I: Autumn and Lent Terms:—				
66K	Bacteriology—I	Tues., Thurs.	7.0 -9.30	23	D. Slattery
	Biology and Biochemistry ...	Fri. ...	7.0 -10.0	28	Dr. B. J. Senior
	Summer Term:				
67K	Dairy Products:				
	Microscopy of Starches	Thurs., Fri....	7.0 -10.0	22	B. G. Fagan, H. Thornton

EVENING COURSES

No. of Course	Subject	Day	Hour	Room	Teacher
	CERTIFICATE COURSE IN TECHNOLOGY OF FOODS.				
	PART II: Autumn and Lent Terms:				
68K	Bacteriology—II	Mon. Wed.	7.0 -9.30	23	M. J. Gorman
	Foods and Water Analysis ...	Thurs., Fri....	7.0 -10.0	22	B. G. Fagan, H. Thornton
	SUMMER TERM:				
69K	Technical Entomology	Mon. ...	7.0 9.30	28	
	Food Industrial Technology ...	Wed. ...	7.0 -9.30	28	M. J. Gorman
	BREWING AND CHEMISTRY OF FERMENTATION.				
	INTERMEDIATE STAGES.				
	FIRST YEAR.				
70K	Cereal Science	Mon. ...	7.0 -9.30	28	W. J. Looby; Miss M. T. Lucey.
	Organic Chemistry—I	Fri. ...	7.0 -9.30	22	Miss W. Brophy; Miss M. T. Lucey.
	SECOND YEAR.				
71K	Brewing Science—I	Fri. ...	6.0 -8.0	23	W. J. Looby
	Organic Chemistry—II	Thurs. ...	7.0 -9.30	22	Miss W. Brophy
	ADVANCED STAGES.				
	THIRD YEAR.				
72K	Brewing—II	to be arranged			W. J. Looby
	Physical Chemistry—I	Thurs. ...	7.0 -9.30	16-22	Miss W. Brophy
	FOURTH YEAR.				
73K	Brewing—III	to be arranged			W. J. Looby
	Bacteriology—I	Tues., Thur.	7.0 -9.30	23	D. Slattery
	FLOUR MILLING TECHNOLOGY.				
	INTERMEDIATE COURSE—STAGES I and II.				
74K	Flour Milling Principles	Mon. ...	7.0 -9.30	13	W. de Lacy
	Milling Science	Thurs. ...	7.0 -9.30	10	W. de Lacy.
	FINAL COURSE—STAGES III and IV.				
75K	Milling Technology	Wed. ...	7.0 -9.30	24	W. de Lacy
	Cereal Science	Mon. ...	7.0 -9.30	23	W. J. Looby, Miss M. Lucey
	FLOUR TESTING				
76K	Flour Testing	Mon. ...	7.0 -9.30	23	W. J. Looby

EVENING COURSES.

No. of Course	Subject	Day	Hour	Room	Teacher

MILK PROCESSING AND MILK PRODUCTS.

INTERMEDIATE STAGE.

77K	Bacteriology—I	Tues., Thurs.	7.0 -9.30	23	D. Slattery; M. J. Gorman

FINAL STAGES: THREE SESSIONS.

78K	Milk Processing	Wed., Thurs.	6.0 -8.0	23 28	W. J. Looby M. Gorman D. Slattery

TUTORIAL AND LABORATORY COURSES.

Applicants for admission to the following tutorial and laboratory Courses should consult the Principal, who will advise students in regard to preliminary and ancillary Courses and to the examination requirements of the City and Guilds of London Institute, the Institution of Gas Engineers and other professional and examining bodies.

79K Technology of Paint and Varnish Manufacture.
80K Town Gas Manufacture and Supply.
81K Paper Manufacture.
82K Textile Technology, Microscopy and Analysis.
83K Electro-Deposition of Metals.
84K Dyeing and Cleaning.

CHEMISTRY FOR PHOTOGRAPHY, PHOTO-MECHANICAL PROCESS WORK, LITHOGRAPHY, ETC.

85K	Lecture and Laboratory ..	Thurs. ..	7.30–9.30	22	F. Nolan

CHEMISTRY AND BOTANY FOR SEEDSMEN.

86K	Lecture and Laboratory ..	Thurs. ..	7.30–9.30	23	W. J. Looby

MEDICAL CHEMISTRY

87K	Medical Chemistry—Lect.	Wed., Fri. ..	7.0–9.30	16	D. W. Morrissey; Miss M. Lucey
	Do. Lab.	Mon. ..	7.0–8.0	16	D. W. Morrissey; Miss M. Lucey
	Do. Lab.	Fri. ..	8.0–9.30	16	D. W. Morrissey; Miss M. Lucey

COURSES FOR PHARMACEUTICAL CHEMISTS

* LECTURE CERTIFICATE COURSE IN PHARMACEUTICAL CHEMISTRY.

(September to May).

88K	Chemistry & Physics, Lect. A	Mon. & Fri.	7.0–8.0	25	P. J. Hurley
	,, ,, Lab. A	Mon. & Fri.	8.0–10.0	21	P. J. Hurley
	,, ,, Lect. B	Mon. & Fri.	7.0 -8.0	16	D. W. Morrissey
	,, ,, Lab. B	Mon. & Fri.	8.0 -10.0	16	D. W. Morrissey

* POST-LECTURE CERTIFICATE COURSES IN PRACTICAL CHEMISTRY.

(September to February; February to May; May to August).

89K	Chemical Laboratory .. (120 hours).	Mon., Wed. Thurs.	7.0–10.0	21, 22, 16	P. J. Hurley; D. W. Morrissey Miss W. Brophy

EVENING COURSES.

No. of Course	Subject	Day	Hour	Room	Teacher
	PRACTICE COURSES IN PHARMACEUTICAL AND MEDICAL CHEMISTRY. (September to January; January to April; May to August).				
*90K	Chemical Laboratory ..	Wed. & Thurs.	7.0–10.0	21–16	P. J. Hurley; D. W. Morrissey Miss M. Lucey
	* Afternoon Courses may be arranged in respect of Practice Courses.				
	*** BOTANY.** (September to May).				
91K	Botany	Thurs.	8.0–9.30	23	W. J Looby; M. J. Gorman
	*** MATERIA MEDICA.** (September to May).				
92K	Materia Medica	Thurs. ..	7.0–8.0	23	Dr. J. Shiel
	* Courses recognised by the Pharmaceutical Society of Ireland.				
	PRACTICAL PHARMACY. (September to January; January to May; May to August).				
93K	Lecture and Practical ..	Mon., Tues. Thurs., Fri.	7.0–9.30	24	F. J. Barragry
	LANGUAGE COURSES				
	IRISH FOR STUDENTS OF SCIENCE AND TECHNOLOGY.				
94K	Irish	Wed.	7.30–9.30	24	W. Looby
	GERMAN FOR STUDENTS OF SCIENCE AND TECHNOLOGY.				
95K	German—I	Wed. ..	7.30–9.30	11	P. J. Hogan
	German—II	Thurs. ..	7.30–9.30	28	P. J. Hogan
	EXAMINATIONS OF THE UNIVERSITY OF LONDON. Courses for Matriculation; Preliminary Professional; Intermediate Science and B.Sc. Examinations, University of London, see page 51.				

SCHOOL OF ELECTRICAL ENGINEERING.

Principal: E. MORTON, B.SC., A.R.C.SC.I.

Chief Lecturer: W. FEGAN, A.M.I.E.E.

TIME-TABLE OF EVENING COURSES:

Electrical Engineering, Technology and Practice.

Electrical Installation Work and Technology.

Electrotechnical Draughtsmanship.

Drawing Office Tracers' Course (Women).

Institution of Electrical Engineers Associate Membership.

Trades and Crafts.

ELECTRICAL ENGINEERING TECHNOLOGY.

COURSES : ADMISSION : SESSIONAL EXAMINATIONS.

The Curriculum in this section includes : (i) a Course for Trade Apprentices in Electrical Installation Work which is associated with the Department of Education Trade Certificate Examination syllabuses for this subject; (ii) a Higher Course for Journeymen and Foremen in Electrical Installation Technology associated with the syllabuses of the Course C, City and Guilds (Lond.); (iii) an Advanced Course in Electrical Engineering Practice associated with the examination syllabuses of the Department of Education, the City and Guilds of London Institute and the Institution of Electrical Engineers; (iv) a Course in Draughtsmanship for students of Electrical Engineering; (v) a Course for women students in Drawing Office Tracing; (vi) Courses of a tutorial type to meet the needs of students preparing for Part I and Part II of the Graduateship Examination of the Institution of Electrical Engineers.

ADMISSION OF STUDENTS. The Courses in Electrical Installation Work are reserved to Trade Apprentices and Journeymen who satisfy the entrance educational standard.

Intending students of Technological Courses must not be less than sixteen years of age and shall be required to show evidence of ability to profit by the instruction before being admitted to any stage of a Course.

CLASS REGISTRATION. Registration on Class Rolls and entry on the Course of Study provided by any Class may be made only on presentation to the Lecturer or Instructor of the appropriate Official Receipt and Class Ticket.

SESSIONAL EXAMINATIONS AND CLASS PROMOTION REGULATIONS.

Examinations are held at end of Session in respect of each class-subject; no student shall be admitted to the Examinations who has not made at least three-fourths of the possible attendance, except in very special circumstances and at the discretion of the Principal.

Promotion to a Higher Stage of instruction in any subject is contingent on passing the Sessional Examinations in the Lower Stage.

An Experimental Record Book is required to be maintained by each student of a Laboratory Class; an assessment shall be made at end of Session of each student's progress in laboratory technique and experimental ability.

School of Electrical Engineering

EVENING COURSES.

TECHNOLOGICAL.

No. of Course	Subject	Day	Hour	Room	Teacher
ELECTROTECHNOLOGY—ELECTRICAL ENGINEERING PRACTICE					
	PRELIMINARY COURSES				
	FIRST YEAR.				
96K	Electrical Engineering—I.A. ..	Thurs. ..	7.0-9.30	12,10,8	H. Flood, E. Moynihan
	Physics for Electricians—I.A. ..	Mon. ..	7.0-9.30	8	H. Flood, M. Henderson
97K	Electrical Engineering—I.B. ..	Wed. ..	7.0-9.30	12,10,8	E. Moynihan, H. Flood
	Physics for Electricians—I.B. ..	Tues. ..	7.0-9.30	8	H. Flood, M. Henderson
	INTERMEDIATE COURSES				
	DIRECT CURRENT AND MACHINES				
	GRADE I				
98K	Electrical Engineering—II. ..	Mon. ..	7.0-9.30	11-4-6	E. Hynes, E. V. Cleary
	Mathematics—II. or higher stage	Fri. ..	7.0-9.30	19	A. D. Whelan.
	Technical Drawing—II. ..	Wed. ..	7.0-9.30	14	H. J. Barriscale.
	GRADE II.				
99K	Electrical Engineering—III. ..	Wed. ..	7.0-9.30	4-6	G. Ring, W. Fegan.
	Applied Mechanics—I.	Thurs. ..	7.15-9.15	28	J. M. Forde.
	Mathematics III.	Fri. ..	7.0-9.30	4	J. Cronin
	ALTERNATE CURRENT AND MACHINES				
	GRADE I				
100K	Electrical Engineering—IV. ..	Tues. ..	7.0-9.30	4-6	G. Ring, W. Fegan.
	Mathematics—III (or higher stage).	Fri. ..	7.0-9.30	19	J. Cronin
	Applied Mechanics—I. ..	Thurs. ..	7.15-9.15	28	J. M. Forde.
	ALTERNATE CURRENT AND MACHINES				
	GRADE II.				
101K	Electrical Engineering—V. ..	Thurs. .. / Fri. ..	7.0-9.30	4-6	G. Ring, W. Fegan.
	Mathematics III. or IV. ..	Fri. ..	7.15-9.15	4	J. Cronin
		Mon. ..	7.15-9.15	17	J. M. Forde.
	Mechanics—II.	Tues. ..	7.0-9.30	28	J. M. Forde.
	FINAL COURSE				
	ELECTRICAL ENGINEERING PRACTICE				
	GRADE III.				
102K	Generation and Transmission ..	Tues. ..	7.15-9.15	17	J. J. O'Doherty.
		Fri. ..	7.15-9.15	17	J. J. O'Doherty.
	Distribution and Utilisation of Electrical Energy	Tues & Thurs.	7.15-9.15		J. C. Costelloe
	Mathematics IV (or higher stage)	Mon. ..	7.15-9.15	17	J. M. Forde.
		Wed. ..	7.15-9.15		J. C. Costelloe

EVENING COURSES

No. of Course	Subject	Day	Hour	Room	Teacher
	INSTITUTION OF ELECTRICAL ENGINEERS ASSOCIATE MEMBERSHIP COURSE				
	Part I.				
103K	Mathematics IV	Monday ..	7.15–9.15	17	J. M. Forde
	do. V	Thursday ..	to be arranged		E. Hanly
	do. VI	Wednesday	7.15–9.15	14	J. C. Costelloe
	do. (Tutorial) ..	Friday ..	7.15–9.15	17	H. C. Clifton
	Applied Mechanics ...	Tuesday ..	7.15–9.15	19	J. M. Forde
	Heat and Thermodynamics III	Wednesday	7.15–9.15	17	R. W. Ryder.
	Electricity and Magnetism III	Tuesday ..	7–9.30	15	H. J. Barriscale
	Part II.				
104K	Generation and Transmission	Tuesday	7.15–9.15	17	J. N. O'Doherty
	Distribution and Utilisation of Electrical Energy	Thursday	7.15–9.15	—	J. C. Costello
		Friday		2	
	or ..				
	Radio Communication ..	Mon., Fri. ...	7.15–9.15		H. de Lacy
	or				
	Technical Telephony Transmission and Lines	Tuesday	7.15–9.15		B. Mangan
		Friday			

Students should consult the Principal or a Lecturer before enrolling. It should be noted that exemption from Part II of the Associate Membership Examination is accorded to holders of the following qualification of the City and Guilds of London Institute:

(i) Final Certificate in Electrical Engineering Practice, in either Section A or B or C or D or E.

ELECTRICAL INSTALLATION TECHNOLOGY.

(Course C, City and Guilds of London Institute).

Intending students must hold the Department of Education Junior Trade Certificate in Electrical Installation Work or equivalent qualification prior to admission to the Intermediate Stage, Course C.

INTERMEDIATE STAGES.

105K	Electrical Engineering—III ...	Wed. ...	7.0-9.30	4-6	G. Ring, W. Fegan
	Applied Mechanics—I	Thurs. ...	7.15-9.15	8A	J. M. Forde, E. Hanly
	Mathematics—III	Fri. ...	7.15-9.15	17	J. Cronin
106K	Electrical Engineering—IV ...	Tues. ...	7.0 -9.30	4-6	G. Ring, W. Fegan
	Mathematics—III (or higher stage)	Fri. or Mon.	7.15-9.15	17-19	J. Cronin, J. M. Forde
	Technical Drawing—II ...	Wed. ...	7.0 -9.30	14	J. G. Moore

FINAL STAGE.

107K	Electrical Installation Technology...	Wed. ... Thurs. ...	7.0 -9.30	6-4	W. Fegan, W. Trundle

Mathematics or Technical Drawing III (optional) as may be arranged.

EVENING COURSES.

ELECTROTECHNICAL DRAUGHTSMANSHIP.

Certificate Course.

No. of Course	Subject	Day	Hour	Room	Teacher
	PRELIMINARY STAGES.				
	FIRST YEAR.				
108K	Introductory Course	Mon., Thurs.	7.15-9.15	14	W. Whelan, E. Hanly
	SECOND YEAR.				
109K	Electrotechnical	Wed. ...	7.0 -9.30	14	J. Williams
	Drawing—I	Fri. ...			J. G. Moore
	INTERMEDIATE STAGES.				
	THIRD YEAR.				
110K	Electrotechnical	Mon. ...	7.0 -9.30	14	J. Williams
	Drawing—II	Wed. ...			J. G. Moore
	FOURTH YEAR.				
111K	Electrotechnical	Mon. ...	7.0 -9.30	14	J. Williams
	Drawing—III	Wed. ...			J. G. Moore
	FINAL STAGE.				
	FIFTH YEAR.				
112K	Electrotechnical	Tues. ...	7.0 -9.30	14	J. Williams
	Drawing—IV	Thurs. ...			J. G. Moore

* COURSE IN DRAWING OFFICE TRACING (Women).

	FIRST YEAR				
113K	Drawing Office Tracing	Mon., Tues., Thurs.		14	W. Whelan; J. Williams; J. G. Moore.

Second and Higher Years as may be arranged.

* Entrance Standard of Education : Intermediate or Leaving Certificate or Equivalent.

Courses for Trade Apprentices

ELECTRICAL INSTALLATION WORK.

Junior Trade Certificate Course. (Department of Education).

	FIRST YEAR				
114K	Electrical Wiring—I, Pract. ...	Mon. or Fri.	7.0 -9.30	1	E. J. McNamara, A. Mulvaney.
	Electrical Engineering—I ...	Wed. ...	7.0 -9.30	12	E. Moynihan, H. Flood
	Physics for Electricians	Tues. ...	7.0 -9.30	8	H. Flood, M. Henderson
	SECOND YEAR				
115K	Electrical Wiring—II, Pract. ...	Thurs. ...	7.0 -9.30	1	E. J. McNamara
	Electrical Installation—II, Lec. ...	Tues. ...	7.30-9.0	4	W. Trundle
	Electrical Engineering—II ...	Mon. ...	7.0 -9.30	6	E. Hynes, E. V. Cleary

Senior Trade Certificate Course. (Department of Education).

	THIRD YEAR.				
116K	Electrical Installation—III, Pract.	Wed. ...	7.0 -9.30	1	E. J. McNamara
	Electrical Engineering (D.C. & A.C.)	Thurs. ...	7.0 -9.30	6	W. Fegan, W. Trundle
	Technical Drawing	Fri. ...	7.0 -9.30	14	J. Williams

EVENING COURSES.

No. of Course	Subject	Day	Hour	Room	Teacher
	FOURTH YEAR				
117K	Electrical Maintenance	Tues. ...	7.0 -9.30	1	E. J. McNamara
	Fitting and Testing				W. Trundle
	Electrical Installation	as may be arran	ged		W. Fegan
	Technology (Tutorial)				W. Trundle

ELECTRICAL FITTING AND MAINTENANCE WORK.

Associated Courses in Practical Subjects.

* CABLE JOINTING.

118K	Cable Jointing—I	Mon., Wed.	7.0 -9.30	1	P. O'Keeffe, A. Mulvaney
119K	Cable Jointing—II.	Tues., Thurs.	7.0 -9.30	1	P. O'Keeffe, A. Mulvaney
120K	Cable Jointing—III	Tues, Thurs.	7.0 -9.30	1	P. O'Keeffe, A. Mulvaney

* ELECTRIC WELDING.

121K	Welding—IA	Mon., Wed....	6.30-8.0	5	J. O'Toole
	Welding—IB	Mon., Wed....	8.0 -9.30	5	
122K	Welding—IIA	Tues., Thurs.	6.30-8.0	5	J. O'Toole
	Welding—IIB	Tues., Thurs.	8.0 -9.30	5	
123K	Welding—IIIA	Friday ...	6.30-9.30	5	J. O'Toole

* INSTRUMENT MAKING.

124K	Instrument Workshop—I ...	Tues. ...	7.0 -9.30	2	H. Howard
125K	Instrument Workshop—II ...	Tues. ...	7.0 -9.30	2	H. Howard

* Ancillary Courses in Elementary Science and Welding Science and in Mathematics may be taken in addition, subject to approval by the Principal.

SCHOOL OF RADIO TECHNOLOGY AND TELECOMMUNICATIONS.

(incorporating Air Navigation Section)

Principal: E. MORTON, B.SC., A.R.C.SC.I.
Chief Lecturer: H. HODGENS, GRAD.I.E.E.

TIME-TABLE OF EVENING COURSES:

Post Office Engineering.

Technical Telegraphy and Telephony.

Radio Communication and Engineering.

Testing, Maintenance and Servicing of Radio Equipment.

Graduateship Examination, B.I.R.E.

Associate Membership Examination, I.E.E.

State Certificates of Proficiency—Radio Officers (Marine and Aircraft).

Air Navigation—Courses for Civil Aviation Navigators' Licence Examinations.

RADIO TECHNOLOGY AND TELECOMMUNICATIONS.

The Courses offered in this section of the Evening School Curriculum fully cover the requirements of all external Examining Bodies associated with this branch of Engineering Technology, including the Institution of Electrical Engineers, the British Institution of Radio Engineering, the Radio Trades' Examination Board, the City and Guilds of London Institute, the Department of Posts and Telegraphs and the Department of Education.

The Courses include theoretical and practical instruction in all grades, and are intimately associated with practical trade and occupational interests, as well as with general professional and proficiency standards and certification for employment.

ADMISSION OF STUDENTS. Intending students must not be less than sixteen years of age and shall be required to show evidence of ability to profit by the instruction before being admitted to any stage of a Course.

CLASS REGISTRATION. Registration on Class Rolls and entry on the Course of Study provided by any Class may be made only on presentation to the Lecturer or Instructor of the appropriate Official Receipt and Class Ticket.

SESSIONAL EXAMINATIONS AND CLASS PROMOTION REGULATIONS.

Examinations are held at end of Session in respect of each class-subject; no student shall be admitted to the Examinations who has not made at least three-fourths of the possible attendance, except in very special circumstances and at the discretion of the Principal.

Promotion to a Higher Stage of instruction in any subject is contingent on passing the Sessional Examinations in the Lower Stage.

An Experimental Record Book is required to be maintained by each student of a Laboratory Class; an assessment shall be made at end of Session of each student's progress in laboratory technique and experimental ability.

SCHOOL OF RADIO TECHNOLOGY AND TELECOMMUNICATIONS.

EVENING COURSES.

No. of Course	Subject	Day	Hour	Room	Teacher
	P.O. ENGINEERING AND TECHNOLOGY				
	PRELIMINARY COURSES				
	POST OFFICE ENGINEERING				
126K	Post Office Engineering—I. ..	Mon. ..	7.15-9.15	5	H. J. Barriscale.
	Instrument and Wiring (Pr) ..	Fri. ..	7.15-9.15	33	H. J. Barriscale.
	TECHNICAL TELEGRAPHY				
	* INTERMEDIATE COURSES				
	STAGE I				
127K	Technical Telegraphy—I. ..	Thurs. ..	7.15-9.15	15	P. J. Sullivan.
	Magnetism and Electricity II ..	Fri. ..	7.0-9.30	12,10,8	P. J. O'Callaghan.
	STAGE II				
128K	Technical Telegraphy—II. ..	Mon. ..	7.15-9.15	15	O. Jones
	TECHNICAL TELEPHONY				
	INTERMEDIATE COURSES				
	STAGE I				
129K	Technical Telephony—I. ..	Wed. ..	7.15-9.15	8	P. J. Sullivan.
	Magnetism and Electricity—II	Fri. ..	7-9.30	12-10 8	P. J. O'Callaghan.
	STAGE II				
130K	Technical Telephony—IIA ...	Wed. ...	7.15-9.15	13	J. W. Devon
	Magnetism and Electricity—III ...	Tues. ...	7.0 -9.30	15-10	H. Barriscale
	STAGE III				
131K	Tech. Teleph.—IIB	Fri. ...	7.15-9.15	19	B. Mangan
	Mag. and Elect.—III	Fri. ...	7.15-9.15	19	H. Barriscale
	* FINAL COURSE				
	FINAL GRADE				
132K	Transmission and Lines ..	Tues. ..	7.15-9.15	13	B. Mangan

*A Class in Mathematics may be taken in addition.

RADIO COMMUNICATION AND ENGINEERING

PRELIMINARY COURSE

133K	Magnetism and Electricity—I.	Fri. ..	7.0-9.30	12-10-8	P. J. O'Callaghan.
	Mathematics I (or Higher Stage)	Thurs. ..	7.15-9.15	19	A. D. Whelan
	Radio Communication Elements	Mon. ..	7.15-9.15	8A	T. J. Carroll

EVENING COURSES

No. of Course	Subject	Day	Hour	Room	Teacher
	INTERMEDIATE COURSES				
134K	GRADE I				H. de Lacy; T. J. Carroll
	Radio Communication—I	Wed.	7.15-9.15	15	
	Magnetism and Electricity II	Tues	7.0-9.30	16 & 10	H. J. Barriscale
	Mathematics II or III	Fri.	7.15-9.15	19-4	A. Whelan; J. Cronin
	Wave Motion and Sound	Mon.	7.15-9.15	13	F. Nolan.
135K	GRADE II				
	Radio Communication—II	Mon. Thurs.	7.15-9.15	11	H. de Lacy
	Electronics—I	Tues.	7.15-9.15	9	P. J. O'Callaghan
	Mathematics - III or IV	Fri	7.15-9.15	4-14	J. Cronin; H. C. Clifton
	FINAL COURSE				
136K	GRADE III				
	Radio Communication III	Fri.	7.15-9.15	11	H. de Lacy
	do. (Lab.)	Mon.	7.15-8.15	11	H. de Lacy
	Mathematics IV or V	Tues.	7.15-9.15	19	E. J. Hynes

TESTING, MAINTENANCE AND SERVICING OF RADIO EQUIPMENT.

	PRELIMINARY COURSE				
137K	Electrical Engineering—I	Wed.	7.0-9.30	12-10-8	H. Flood; E. Moynihan
	Mathematics I (or higher stage)	Thurs.	7.15-9.15	19	A. D. Whelan
	Workshop Practice	Mon.	7.0-9.30	1 & 2	R. Howard
	INTERMEDIATE COURSES				
138K	GRADE I				
	Radio Service—I	Tues.	7.15-9.15	19	J. Carroll
	Electrical Engineering—II	Mon.	7.0-9.30	4	E Hynes; E. V. Cleary
	Mathematics—II	Fri.	7.15-9.15	19	A. D. Whelan
139K	GRADE II				
	Radio Service—II.	Thurs.	7.15-9.15	9	J. V. Honan
	Alternate Current I	Tues.	7.0-9.30	4-6	G. K. Ring
	Mathematics—III	Fri.	7.15-9.15	4	D. W. Morrissey
	FINAL COURSE				
140K	Radio Service—III	Thurs.	7.15-9.15	9	J. V. Honan
	Wave Motion and Sound	Mon.	7.15 9.15	9	F. Nolan
	Electronics—I	Tues.	7.15-9.15	12	P. J. O'Callaghan

EVENING COURSES

No. of Course	Subject	Day	Hour	Room	Teacher
	BRITISH INSTITUTION OF RADIO ENGINEERS.				
	Course for Graduateship Examination.				
	PART I				
141K	Heat, Light, Sound	Mon.,	7.0 -9.30	13	F. Nolan
		Wed. ...	7.0 -9.30	8a-10	P. J. O'Callaghan
	Magnetism and Electricity—II	Fri., ...	7.0 -9.30	12-10	P. J. O'Callaghan
		Tues. ...	7.0 -9.30	15-10	H. Barriscale
	PART II.				
142K	Radio Technology	Thurs. ...	7.30-9.30	11	H. de Lacy
		Mon. ...	7.0 -9.30	9	H. de Lacy
	PART III.				
143K	Radio Engineering (Sept.-May) ...	Fri. ...	7.0 -9.30	9	H. de Lacy
	Radio Measurements (Sept.-July)	Mon. ...	7.0 -9.30	9	H. de Lacy

Students should consult the Principal or a Lecturer before enrolling.

The following qualifications, conferring full or partial exemption in relation to the Graduateship Examination, should be noted:

FULL EXEMPTION.

City and Guilds of London Institute, Grade II and Final Examination in Radio Communication with first class passes, together with a pass in Technical Electricity, Grade II.

EXEMPTION FROM PARTS I AND II ONLY.

The Examination of the Institution of Electrical Engineers for Associate Membership, provided Electrical Communications has been taken as an optional subject.

EXEMPTION FROM PART I ONLY.

First Science or Intermediate Examination of any approved University, with passes in "Mathematics," "Physics" and "Electricity."

INSTITUTION OF ELECTRICAL ENGINEERS.

Associate Membership Course.

ELECTRICAL COMMUNICATIONS.

	PART I				
103K	English	Monday ..	7.15–9.15	28	E. Moynihan
	Mathematics IV	Monday ..	7.15–9.15	17	J. M. Forde
	do. V	Thursday ..	to be arranged		E. Hanly
	do. VI	Wednesday	7.15–9.15	14	J. C. Costelloe
	do. (Tutorial).. ..	Friday ..	7.15–9.15	17	H. C. Clifton
	Applied Mechanics ..	Tuesday ..	7.15–9.15	19	J. M. Forde
	Heat and Thermodynamics III..	Wednesday	7.15–9.15	17	R. W. Ryder.
	Electricity and Magnetism III..	Tuesday ..	7–9.30	15	H. Barriscale
	Heat, Light, Sound.. ..	Monday ..	7–9.30	13	F. Nolan
	PART II				
144K	Radio Communication ..	Mon., Fri. ..	7.15–9.15		H. de Lacy
	or				
	Technical Telephony Transmission and Lines	Tuesday / Friday	7.15–9.15		B. Mangan

Students should consult the Principal or a Lecturer before enrolling. It should be noted that exemption from Part II of the Associate Membership Examination is accorded to holders of one of the following qualifications of the City and Guilds of London Institute:

(i) Grade II Certificate in Technical Electricity, plus the Grade II Certificate in Telegraphy.
(ii) Grade III Certificate in Radio-Communication.
(iii) Grade II Certificate in Transmission and Lines.

EVENING COURSES.

COURSES FOR THE CERTIFICATION (FIRST AND SECOND CLASS) OF RADIO OFFICERS FOR THE MERCANTILE MARINE AND AIR SERVICES.

For additional information in regard to the Courses, see pages 34 and 35. [Day Courses].

COURSES.

145K Proficiency Certificate (Marine).
146K Proficiency Certificate (Aircraft).
147K Combined Course (Marine and Aircraft).

JOINT TIME-TABLE (MARINE AND AIRCRAFT).

SEPTEMBER TO JULY.

Subject	Year	Day	Room	Hour
Magnetism and Electricity	I	Friday ...	12-10-8	7.0 -9.30
Alternate Current—Summer Term	I	Friday ...	12-10	7.0 -9.30
Electrical Machines—Summer Term	I	Thursday ...	6	7.0 -9.30
Morse Code Practice, including Marine and Aircraft Operating Procedure ...	I	Mon., Tues., Wed., Thurs.	8c-13	7.30-9.30
Morse Code Practice, etc.	II	Mon., Wed., Thurs., Fri.	8c-13	7.30-9.30
Radio Technology (Marine Aircraft and Direction Finding)	II	Tuesday ...	11	7.30-9.30
Radiotechnology, Practical	II	Mon., Wed. Fri. ...	11	7.30-9.30
Rules: Regulations (Marine)	II	Thursday ...	8c	8.30-9.30
Rules: Regulations (Aircraft)	II	Friday ...	13	8.30-9.30

No. of Course	Subject	Day	Hour	Room	Teacher
	MORSE CODE PRACTICE.				
148K	Telegraphy Practice	Tues., Wed or Wed., Fri. ...	7.30-9.30	8c	M. J. O'Rorke B. Brennan
	RADIOTECHNOLOGY.				
149K	Radiotechnology (Lec.) ... ... (Radio Officers)	Tues. ...	7.30-9.30	11	H. Hodgens

Air Navigation—Civil Aviation

Courses in AIR NAVIGATION subjects in preparation for the State Examinations for Air Navigators' Licences; First and Second Class.

The Courses offer facilities for specialised instruction based on the Syllabuses for the First and Second Class Licence Examinations conducted by the Department of Industry and Commerce.

Applicants for admission to the Courses for the Second Class Licence must have attained proficiency in Plane Trigonometry up to the general solution of triangles and in the use of six-figure logarithms; applicants for admission to the Courses for the First Class Licence must have acquired, in addition, an elementary knowledge of spherical trigonometry.

Suitable tutorial classes in Mathematics, including elements of Vector Algebra, Plane and Spherical Trigonometry are ordinarily available.

NOTE *re* GRANT OF LICENCES

The granting of Licences to successful examinees is contingent on submitting acceptable evidence of actual flying experience as Pilot or Navigator to the minimum extent of 300 " flying " hours in respect of the Second Class Licence, and of 600 " flying " hours in respect of the First Class Licence.

SYLLABUSES OF INSTRUCTION

The Examination Syllabuses are those approved by the Provisional International Civil Aviation Organisation (P.I.C.A.O.); these are subject to revision and amendment from time to time.

EVENING COURSES

COURSES OF INSTRUCTION

(September to May)

150K Section A: (i) Air Navigation, including D.R. and Radio D.F. Navigation.
(ii) International and Air Legislation.
Instructor: Lieut. B. M. Flanagan.

151K Section B: (iii) Form of the Earth, Maps and Charts.
(iv) Earth's Magnetism and the Compass.
Instructor: Capt. M. Higgins.

152K Section C: (v) Meteorology.
Instructor: Capt. P. Swan.

153K Section D: (vi) Astronomical Navigation.
Instructor: Capt. T. C. Walsh.

Signalling: Common to all Sections and optional. Instructor: M. J. O'Rorke.

154K Full Course: Second Class Licence Air Navigation, Sections A, B, C.

155K Full Course: First Class Licence Air Navigation, Sections A, B, C, D.

SUMMER TERM REVISION COURSE

(May to July)

156K Air Navigation—All Sections.

JOINT TIME TABLE

(subject to amendment)

Subject	Day	Room	Hour
Section A	Thursday ...	10	7.30–10. 0
Section B	Friday ...	15	7.30–10. 0
Section C	Tuesday ...	15	7.30– 9.30
Section D	Wednesday ...	2	7.30 - 9.30
Signalling	Monday ...	8c	7.30– 9.30

CIVIL AIRPORT CONTROL OFFICERS

It should be noted that the Courses in Air Navigation for the Second Class Licence are open to Aircraft Radio Officers anxious to qualify for positions as Airport Control Officers. For the time being, a PASS in the Second Class Licence Examination is requisite as a qualification for such appointments.

STAFF

ART AND ART CRAFTS.

WILLIAM L. WHELAN, Art Master's Certificates, Board of Education, London, Silver and Bronze Medalist, National Competition, South Kensington; Medalist, Irish National Art Competition—*Head of the Arts and Crafts Department.*

MISS MARGARET WHELAN, Certificated Art Teacher, Medalist.

Evening Courses and Time Table

GENERAL ART COURSES

No. of Course	SUBJECT	Day	Hour	Room	TEACHER
	FIRST YEAR.				
157 K	Obj. and Mem. Drawing—I. ..	Thurs.	7.30-9.30	14	W. L. Whelan; Miss M. Whelan.
	Mechanical Drawing and Design —I.	Tues.	7.30-9.30	14	Miss M. Whelan.
	Extra Class in any Art subject	,,	7.30-9.30	11	W. L. Whelan.
	SECOND YEAR.				
158 K	Obj. and Mem. Drawing—II. ..	Thurs.	7.30-9.30	14	W. L. Whelan.
	Design—II.	Tues.	7.30-9.30	14	W. L. Whelan ; J. J. Burke.
	Drawing from Natural Forms —II.	Mon.	7.30-9.30	14	W. L. Whelan.
	Drawing from Casts—II ..	—	—	—	— —
	THIRD YEAR.				
159 K	Obj. and Mem. Drawing—III.	Mon.	7.30-9.30	14	W. L. Whelan; Miss M. Whelan
	Industrial Design—III. ..	Thurs.	7.30-9.30	14	W. L. Whelan ; J. J. Burke.
	Drawing from Natural Forms —III.	Thurs.	7.30-9.30	14	W. L. Whelan.
	Drawing from Casts—III. ..	Thurs.	7.30-9.30	14	W. L. Whelan.
	Pictorial Composition	Mon.	7.30-9.30	14	W. L. Whelan.
	FOURTH YEAR.				
160 K	Obj. and Mem. Drawing—IV.	Mon.	7.30-9.30	14	W. L. Whelan.
	Industrial Design—IV. ..	Thurs.	7.30-9.30	14	W. L. Whelan.
	Pictorial Composition	Mon.	7.30-9.30	14	W. L. Whelan.
	Drawing and Painting from Natural Forms	Mon.	7.30-9.30	14	W. L. Whelan.

EVENING COURSES.

APPLIED ART AND CRAFT COURSE

No. of Course	Subject	Day	Hour	Room	Teacher
	FIRST YEAR.				
161 K	Mechanical Drawing, Geometrical Design, etc.	Tues.	7.30–9.30	14	Miss M. Whelan.
	Freehand and Elementary Drawing from Casts, etc. ..	Thurs.	7.30–9.30	14	W. L. Whelan.
	Craftwork	Mon.	7.30–9.30	14	W. L. Whelan; Miss M. Whelan.
	SECOND YEAR.				
162 K	Elementary Designs and General Handicrafts	Mon.	7.30–9.30	14	W. L. Whelan.
	Drawing of Common Objects, etc.	Thurs.	7.30–9.30	14	W. L. Whelan.
	Craftwork	—	—	—	—
	THIRD YEAR.				
163 K	Industrial Design	Thurs.	7.30–9.30	14	W. L. Whelan, J. J. Burke.
	Drawing in Light and Shade from Casts, etc.	Tues.	7.30–9.30	—	—
	Craftwork	—	—	—	—
	FOURTH YEAR.				
164 K	Industrial Design and Historic Development of Styles ..	Thurs.	7 30–9.30	14	W. L. Whelan.
	Craftwork	—	—	—	—

In the Third and Fourth Years a Class in Craftwork should be taken, and in the First and Second Years an appropriate Class in Art added.

SPECIAL ART AND CRAFT CLASSES

Subject	Day	Hour	Room	Teacher
165 K				
Drawing & Design for Leatherwork and Leathercraft ..	Mon.-Thrs.	7.30–9.30	14	W. L. Whelan; Miss M. Whelan.
Leatherwork, Stencilling, etc. ..	Mon.-Thrs.	7.30–9.30	14	W. L. Whelan; Miss M. Whelan.
Design for Art Ironwork ..	Mon.-Thrs.	7.30–9.30	11	W. L. Whelan.
Commercial Art	Mon.-Thrs.	7.30–9.30	11	W. L. Whelan
Decorative Art for Confectioners	Mon.-Thrs.	7.30–9.30	14	W. L. Whelan; Miss M. Whelan.

ADVANCE DESIGN APPLIED TO CRAFTS.

In these classes exercises will be arranged bearing upon the particular branch of design or handicraft the student desires to follow up.

Advanced designs adapted to special processes of execution: wood-carving, goldsmiths' work, enamelling, metal work, embossing, casting and ironwork; book illustration; process work; wood-engraving; colour printing; furniture and plaster work; designs for schemes of decoration with some important feature carried out in full sizes, or to as large a scale as the limits will allow; designs for important competition to full size or to a large scale, with sketches to show the position the design is meant to occupy.

School of Bakery

BAKERY PRACTICE AND TECHNOLOGY

The Courses are organised to provide for the full technical training of Bakehouse Apprentices in the theory and practice of Breadmaking and Flour Confectionery, during the period of apprenticeship.

The work of the classes is under the supervision of an Advisory Committee representative of the Irish Bakers', Confectioners' and Allied Workers' Union and of the Association of Master Bakers.

The practical classes are conducted on each afternoon excepting Saturday, from 12.30 to 6.30 p.m. The ancillary instruction in Bakery Science and Calculations and in Art is given in Evening Classes.

DAY COURSES

Time Table

BAKERY PRACTICE AND TECHNOLOGY

FIRST YEAR.				
Bakery Practice I	Wed.	12.30—3.30	Room 20	S. Anthony
SECOND YEAR.				
Bakery Practice II	Fri.	3.30—6.30	Room 20	S. Anthony
Bakery Practice IIb	Thurs.	3.30—6.30	Room 20	S. Anthony
THIRD YEAR.				
Bakery Practice III	Mon.	3.30—6.30	Room 20	S. Anthony
FOURTH YEAR.				
Bakery Practice IV	Tues.	3.30—6.30	Room 20	S. Anthony
JOURNEYMEN CLASSES.				
Section A	Wed.	3.30—6.30	Room 20	S. Anthony
Section B	Thurs.	3.30—6.30	Room 20	S. Anthony

CERTIFICATE COURSES IN BREADMAKING AND FLOUR CONFECTIONERY

The Certificate Courses in both subjects follow the Syllabuses of the Examinations of the City and Guilds of London Institute. The requisite ancillary subjects to Bakery Practice include Physics, Chemistry, Cereal Science, Microbiology and Decorative Art.

The classes in ancillary subjects to be taken by the student in each year of a Course will be determined in consultation with the Principal.

166K EVENING COURSES IN CONFECTIONERY.

(ADVANCED GRADES ONLY).

A limited number of Journeymen-Students may be admitted to advanced classes in Confectionery, should accommodation facilities permit of their organisation in the present Session; ancillary subjects may be taken in addition.

Inclusive Sessional Fee for the Course, £1.

BOOT AND SHOE MANUFACTURE

HANDICRAFT AND FACTORY OPERATIVE COURSES.

The aim of these classes is to give a knowledge of the various branches of the trade to apprentices and improvers, who, owing to the increased use of machinery, are usually confined to one of the many branches of the Boot Trade.

Several machines have been added to the equipment.

DAY APPRENTICE SCHOLARSHIP COURSE

BOOTMAKING

This Full-time Day Course extends over two Sessions and is conducted under the terms of the Day Apprentice Scholarship Scheme. The Course provides 30 hours of instruction per week, of which approximately 20 hours are devoted to practical instruction in Bootmaking.

EVENING COURSES AND TIME TABLE.

HANDICRAFT.

				Room		
167K	Boot and Shoe Making—I.	M., W.	8.0-10.0	3	P. J. Casey; K. English	
168K	Boot and Shoe Making—II.	Tu., W.	8.0-10.0	3	P. J. Casey; K. English	
169K	Boot and Shoe Making—III.	Tu., Th.	8.0-10.0	3	P. J. Casey; K. English	

***BOOT FACTORY OPERATIVES' COURSE.**

Clicking and Pattern Cutting—I.	...	...	...	...	M.	8.0-10.0
Factory Methods and Operations—I.		...	...	...	W.	8.0-10.0

* Will not be held in Session 1946-47.

EVENING COURSES.

IRISH LANGUAGE : GENERAL COURSES

Registered students may take Irish as an additional subject on payment of a fee of 2/6. Graded classes in Irish are organised in several institutes, and students are advised to consult the General Time-table of Irish Classes as displayed on the Notice Board, in order to ascertain the most convenient centre.

LANGUAGES FOR STUDENTS OF TECHNOLOGY

Technical Irish.
Technical German.
Technical French.

Classes will be organised for students of Applied Science in Irish, German, and French. It is the general aim of the instruction to impart a sufficient grasp of the usage of each language in scientific and technical literature; also, the instruction is generally suitable as a preparation for Preliminary, Professional and University of London B.Sc. Degree examinations.

A class will be formed only on condition of a minimum enrolment of eight students.

INTRODUCTORY COURSES

Intending students who have failed the entrance examinations or whose educational standard is deemed to be below the minimum required for entrance on a course of Theoretical Instruction are required to enrol in an Introductory Course and subsequently to make satisfactory attendance and progress during the period of the Course, before being admitted to preliminary classes in Science or Technology in the following Session.

No. of Course	SUBJECT	DAY	HOUR	ROOM	TEACHER
	FOR NON-APPRENTICE STUDENTS—FEE 2/6				
	*English	Tues. or Thurs.	7.30–8.30		S. E. MacCormaic.
	*Elementary Mathematics ..	do.	8.30–9.30		S. E. MacCormaic.
	*Held at Capel Street Branch School				
	FOR TRADE APPRENTICES ONLY—FEE 7/6				
	*English—F	Tues. or Thurs.	7.30–8.30		S. E. MacCormaic.
	*Elementary Mathematics ..	do.	8.30–9.30		S. E. MacCormaic.
	Practical Trade Subjects–as may	be arranged.			

SCHOLARSHIPS AND PRIZES.

THE FOY SCHOLARSHIP IN APPLIED CHEMISTRY

A former student of the Institute, Mr. W. P. Armstrong, has established a Scholarship in Chemistry to be called the "Foy Scholarship." The annual value of the Scholarship is about £20, being the proceeds of an investment of £500 in Dublin Corporation Stock.

The Scholarship is awarded each Session on the result of an Examination in Chemistry, usually held in May. All students who have attended regularly during two Sessions in the Chemistry Department are eligible to compete, and the student to whom the Scholarship is awarded must pursue his studies in the Chemistry Department during the following Session.

IRISH PROFICIENCY SCHOLARSHIPS entitle the holders to free entry to Day Junior Technical Course in Electrotechnology and Science and to an annual payment of £3 to cover the cost of books and equipment. The Scholarships are awarded on the results of an oral examination in Irish. Candidates are first required to pass qualifying examinations in Irish, Mathematics, and English. These examinations are held in the month of June.

GAEDHEALTACHT SCHOLARSHIPS, entitling the holders to a Summer course in the Gaedhealtacht, free of all expense. These Scholarships are open to competition amongst the students of the Whole-time Day Courses.

DAY APPRENTICE SCHOLARSHIPS IN BOOTMAKING, entitling the holders to free training for two years in Whole-time Day Apprentice Course, together with payment of 6/- per week during the first year and 8/- per week during the second year of the Course. On the completion of the Course, students are accepted as third year apprentices to the trade. Particulars are published in the Dublin daily press, in the month of March.

THE DUBLIN MECHANICS' INSTITUTE SCHOLARSHIPS

The Residuary Fund of the Dublin Mechanics' Institute has been made available for Industrial Scholarships under the management of the Vocational Education Committee.

One Scholarship will be awarded annually in the Electrical Engineering and Physics Group. The Scholarship is tenable for three years, and its value about £3 per year.

Candidates must be engaged in an Operative Trade as Apprentices or Learners. They must be between the ages of 16 and 19, and must have attended a Technical Course during the preceding School Session and made 80 per cent. of the possible attendances in two of the subjects of the Course in which they are entered.

DEPARTMENT OF EDUCATION (TECHNICAL INSTRUCTION BRANCH)

The Department of Education offers, from time to time, Scholarships in certain selected Trades to apprentices who have completed the second year of apprenticeship. These Scholarships are announced in the public press.

PRIZES.

BREADMAKING AND FLOUR CONFECTIONERY

Annual Awards are made by the Irish Bakers', Confectioners' and Allied Workers' Union of a Silver Medal and a Bronze Medal to each of the classes of the Course for Bakery Apprentices, *viz.*, First, Second, Third and Fourth Year Classes, in respect of First and Second Places in the Sessional Examinations held in the month of June in each Session.

Flour Milling Technology Prizes. The Irish Flour Millers' Association offers, annually, prizes to the value of £37 10s. for award to students attending the Courses who have attained successes in the Department of Education Examinations.

RADIO SERVICE WORK

Awards of Prizes in the form of Advanced Text Books on Radio Service Work or Radio Engineering are made each year by the Irish Radio Manufacturers' and Wholesalers' Association to successful students of the Day and Evening Courses.

GENERAL CURRICULUM OF THE SCHOOLS

UNDER THE CONTROL OF

THE CITY OF DUBLIN VOCATIONAL EDUCATION COMMITTEE

BOLTON STREET TECHNICAL SCHOOL.

Mechanical Engineering.
Motor Car Engineering.
Marine Engineering.
Mechanical Engineering Trades.
Motor Car Engineering Trade.
Smithwork and Art Ironwork.
Brassfinishing.
Gasfitting.
Watchmaking.
Printing and Book Production.
Architecture.
Civil Engineering.
Quantity and Building Surveying.
Heating and Ventilating Engineering.
Valuation and Estate Agency.
Building Science.
Surveying and Levelling.
Building Trades.
Furniture Trades.
Coachbuilding, Coachtrimming and Coachpainting.
Shipconstruction.

Day Junior Technical Courses.

CAPEL STREET BRANCH SCHOOL.

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

CABRA TECHNICAL INSTITUTE.

General Commercial Subjects.
Languages.
Domestic Science and Housecraft.
Metalwork.
Woodwork.
Physical Training.

Day Junior Technical School (Boys and Girls).
Day School of Commerce.

INSTITUTE OF SCIENCE AND TECHNOLOGY, KEVIN STREET.

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.
Ophthalmic Optics.
Electrical Engineering and Allied Trades.
P.O. Engineering Technology.
Instrument Making.
Radio Engineering.
Radio-Telegraphy.
Air Navigation.
Art and Art Crafts.
Bakery Science and Practice.
Bootmaking.

DAY AND EVENING COURSES.

PARNELL SQUARE TECHNICAL INSTITUTE.

General Commercial Subjects.
Accountancy and Allied Subjects.
Languages.
Retail Distribution.
Physical Training.
Transport.
Day Trade Classes:—
Shirtmaking (Power).
Clothing Manufacture (Power).

Day School of Commerce.

GENERAL CURRICULUM OF THE SCHOOLS

UNDER THE CONTROL OF

THE CITY OF DUBLIN VOCATIONAL EDUCATION COMMITTEE

PEMBROKE TECHNICAL INSTITUTE (Ringsend and Ballsbridge).

General Commercial Subjects.
Retail Distribution.
Languages.
Domestic Science and Housecraft.
Art and Art Crafts.
Mechanical Engineering.
Motor Car Engineering.
Oxy-Acetylene and Electric Welding.
Woodworking Trades.

Day School of Commerce.
Day Junior Technical School (Boys).
Day Technical Course (Girls).
Special Apprentice Training Centres.

RATHMINES TECHNICAL INSTITUTE.

General Commercial Subjects.
Accountancy, Auditing and Allied Subjects.
Insurance.
Advertising and Publicity.
Physical Training.
Domestic Science and Housecraft.
Banking Finance and Foreign Exchange.
Company Secretaries.
Government Accountancy and Finance.
Languages.

Day School of Commerce.
Day Technical Course (Girls).

MARINO TECHNICAL INSTITUTE.

General Commercial Subjects.
Languages.
Domestic Science and Housecraft.
Metalwork.
Woodwork.
Physical Training.

Day Junior Technical School (Boys and Girls).
Day School of Commerce.

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

Pianoforte.
Violoncello.
Uileann and Irish War Pipes.
Chamber Music.
Violin.
Singing and Choir.
Irish Solo Singing.
Wind Instruments (Wood and Brass).
Fifes.
Viola.
Orchestra.
Drums and Flute.
Traditional Music.
Professional Ensembles.

Offices—TECHNICAL INSTITUTE, BOLTON STREET, DUBLIN.

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

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