1928

Arts and Artistic Crafts, Miscellaneous Trades: Prospectus of Courses 1928-29

City of Dublin Vocational Education Committee
1928-29.

ealaíona azus céinseanna ealaíona

céinseanna éagsamhla.

Clár na 5cúrsaí.

Sráid Chaoimhín azus Sráid Bolton.

Arts and Artistic Crafts,
Miscellaneous Trades.

Prospectus of Courses.

Kevin Street and Bolton Street.
City of Dublin Municipal Technical Schools.

BOLTON STREET TECHNICAL INSTITUTE.
SCHOOL OF MECHANICAL AND MOTOR CAR ENGINEERING.
SCHOOL OF ARCHITECTURE AND BUILDING TRADES.
SCHOOL OF BOOK PRODUCTION AND PRINTING TRADES.

KEVIN STREET TECHNICAL INSTITUTE.
SCHOOL OF ELECTRICAL ENGINEERING.
CHEMISTRY, PHYSICS, AND WIRELESS TELEGRAPHY.
ART, ART CRAFTS AND MISCELLANEOUS TRADES.
SCHOOL OF DOMESTIC SCIENCE.

PARNELL SQUARE TECHNICAL INSTITUTE.
SCHOOL OF COMMERCE.
SCHOOL OF DOMESTIC SCIENCE.

CHATHAM ROW.
MUNICIPAL SCHOOL OF MUSIC.

Note.—The General Prospectus of the Technical Schools is divided into eight parts, issued separately in booklet form. Each booklet is complete as regards the arrangements, Time Tables, Syllabuses, etc., of the particular Department and classes dealt with. The following is a list of the booklets:

No. 1. Mechanical and Motor Car Engineering and Allied Trades.
No. 2. Electrical Engineering, Wireless Telegraphy, Physics and Chemistry.
No. 3. Architecture and Building Trades.
No. 4. Book Production and Printing Trades.
No. 5. Commerce.
No. 6. Domestic Science.
No. 7. Art and Art Crafts and Miscellaneous Trades.
No. 8: School of Music.

Copies of any of the booklets may be had at any of the Technical Institutes, at the Public Libraries of the Corporation, or by post (2d.) from the Offices of the Technical Schools.

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CITY OF DUBLIN MUNICIPAL TECHNICAL SCHOOLS.

LOUIS ELY O'CARROLL, B.A., B.L.,
Principal Executive Officer.

EDWARD MORTON, A.R.C.S.C.I., A.I.C.,
Head Teacher of the School of Physics, Electrical Engineering and Chemistry.

JOHN C. MACGUIGAN, B. COMM.
(N.U.I.); Headmaster of the Parnell Square Technical Institute, and Head of the School of Commerce.

WILLIAM DAVIDSON, F.B.I.C.C.,
Head Teacher of the School of Architecture, Building and Furnishing Trades.

WILLIAM H. JOHNSON,
Acting Head Teacher of the School of Book Production and Printing Trades.

W. L. WHEELAN, Headmaster of Arts and Crafts.

ARTHUR DARLEY, Director, School of Music.

COUNCIL OF STUDIES.

The Council of Studies will consist of the Principal Executive Officer and the Heads of the several departments. For Examinations, representatives of the Part-time Teaching Staff, Employers' Associations and Trade Unions will be included.

All enquiries or communications should be addressed to the Principal Executive Officer, Technical Institute, Bolton Street.

SESSION 1928-29.

CALENDAR and MEMORANDA.

1928


Wed., 5th Sept. First Term, School of Music, begins.


Mon., 24th Sept. Instruction in all Technical Classes begins during this week.

Thurs., 20th Dec. Final Meeting of Classes before Christmas.

1929


Mon., 14th Jan. Second Term, School of Music, begins.

FEBRUARY Entries for Public Examinations are made about the end of this month. Exact dates will be notified to the Classes.

Wed., 27th March Final Meeting of Classes before Easter.

Mon., 8th April Classes resume.

Fri., 10th May All Evening Classes close except Special Classes preparing for Examinations.

Sat., 11th May School of Music closes.

Fri., 26th July Day Apprentice School closes.
Preface.

The City of Dublin Municipal Technical Schools were founded in October, 1887, as an outcome of the Artisans' Exhibition held in the City in 1885. The Schools were originally housed in an historic but unpretentious building in Kevin Street. From the foundation, and practically without interruption, the record of progress and expansion has been continuous, and now the Schools occupy three very large Technical Institutes at Bolton Street, Kevin Street and Parnell Square, and several classes are accommodated in other buildings throughout the City, affording in all accommodation for upwards of 5,000 students.

Curriculum.

The present curriculum of the Schools provide complete Courses of Instruction in

- Mechanical Engineering and Allied Trades.
- Electrical Engineering and Allied Trades.
- Radio Communication.
- Motor Car Engineering.
- Locomotive Engineering.
- Naval Architecture.
- Architecture, Building Trades and Furniture Trades.
- Book Production and Printing Trades.
- Applied Chemistry.
- Botany, Materia Medica, and Pharmacy.
- Art and Art Crafts.
- Music.
- Commerce.
- Domestic Science
- Catering Industries.
- and numerous Miscellaneous Trades.

Evening Courses.

Evening Courses are provided in all the subjects outlined above, and enable those engaged in the day-time to acquire an intimate knowledge of the principles that underlie the processes carried out in their daily work.

Day Courses.

Day Courses and Classes are arranged in most of the Departments of the Schools. The Day Apprentice School provides whole-time two years' Courses in selected trades for boys who have just left school. The Day Trade Dressmaking Course provides similar training for girls, and Day School of Commerce a whole-time training to boys and girls.

Special Day Courses are provided for those actually engaged in trades—arrangements being made with employers whereby their apprentices can attend the Schools during part of several days each week. At present it has only been possible to arrange such Courses in a few cases—notably Painters and Decorators and the Printing Trades—but it is hoped, with the co-operation of the employers, to gradually extend this system to all trades.

Arrangement of Courses.

The Courses in all Departments, both Evening and Day, are arranged progressively to cover from two to five Sessions, according to the nature of the subject. The Courses in general include two or more subjects bearing on the main subject, and the instruction is given in such a manner as to illustrate the application of the principles of Science and Art to the daily work of the students.

Advanced Work.

The Laboratories and Workshops of the Schools are very completely equipped with the best and latest apparatus and machinery, and senior students are given every facility for advanced or research work.

New Classes.

If it can be shown that there is a demand for a new class, the teacher and requisite equipment will be provided.

Lectures.

Special lectures of a popular nature will be given during the Session.

Cinema.

A complete cinema installation has been provided in the Technical Institute, Bolton Street, and films of an educational nature will be shown from time to time. These displays will be duly notified to students in their classes.

Debating Society.

Students of the Technical Schools are eligible for membership of the Debating Society. Annual subscription, one shilling.
ENTRANCE EXAMINATIONS.

In the present year Entrance Examinations will be held at the Bolton Street, Kevin Street, and Parnell Square Technical Institutes, every evening during the week commencing 17th September, and on as many evenings afterwards as may be necessary. All new Students are advised to attend at 7.00 p.m. Those who can produce the Junior or any Higher Grade Certificate of the Intermediate Education Board, or the Higher Grade Certificate of the National Board, or some equivalent Certificate, need not sit for the Entrance Examination, and should make application for admission early in the Session.

The Entrance Examination consists of any papers in English, Arithmetic, and Elementary Drawing, and First and Second Class Passes will be awarded. Those who pass in the First Class are eligible to take any Specialised Course.

These Examinations are not obligatory for trades’ students.

SPECIALISED COURSES.

The Official Specialised Technical Courses are open to all Students who pass the Entrance Examination in the First Class, or are otherwise qualified. Each one is to take up, under advice or approval, the particular Course which most nearly meets his requirements, and is to adhere to this definite programme without any subsequent variation. If he ceases to attend any component subject of this Course he is liable to forfeit his entire Ticket.

No Student may attend for more than two Sessions in any one stage of the same subject.

Teachers, Pupil Teachers, and Monitors may enter for Special Courses that suit their needs, apart from the Official Courses. Such a Course will be regarded as an Official Technical Course. The same privileges will apply to Students whose needs are not met by the Official Courses. In their case the Course Subjects must be arranged and sanctioned by the Head Teacher.

The stage of any subsidiary subject may be changed to fit the Student’s particular grade of knowledge, the special evening allotted to Laboratory or other work may be altered, and a Student may be drafted from one class to an equivalent one. Any such changes must be sanctioned by the Head Teacher.

PREPARATORY COURSES.

Those who pass the Entrance Examination in the Second Class, or who have spent one year in the Sixth Standard of a National or Secondary School, may enter one of the “Introductory” Courses. Those who pass in the Third Class, or have not passed the Sixth Standard or have spent one year in a National School, are only at liberty to join one of the “Preliminary” Courses.

The Introductory Course Classes are of such a nature as to fit students to take up a Specialised Course of Technical Instruction in the following School Session. The subjects of instruction are:

(a) English.
(b) Elementary Mathematics and Arithmetic.
(c) Drawing or Elementary Science or Elementary Domestic Economy.

The Preliminary Courses are similar to the Introductory, but of a more elementary character.

Any Trade Student who is taking an Introductory Course may attend the First Year Practical Class in his particular trade. A class in Irish may be added to the Introductory or Preliminary Courses if desired, without extra fee.

FEES.

The fee for a full course or for a single class in Technological or Science subjects is usually 7s. 6d., Commercial or Domestic Economy subjects 10s. Special fees are: Wireless Telegraphy, £3 for Day Course; £2 for Evening Course; Day Commercial Course, £2; Motor Car Driving, £2; Practical Chemistry, 10s.; Practical Pharmacy, 10s.; Pharmaceutical Chemistry, £1 10s.; Materia Medica, 7s. 6d.; Botany, 7s. 6d.; Day Classes in Domestic Science, £1.

Holders of the Higher Grade Certificate will be admitted free on production of the Certificate.

If a student wishes to take up a class in addition to those of the Course, an extra fee must be paid except in the case of Irish.

All fees are payable in advance and cover the full Session or Term. Fees are not returnable.

GENERAL NOTICES.

The general enrolment of Students commences on Monday, 17th September, 1928.

Applicants for admission to Courses or Classes must be at least fourteen years of age.

Pupils actually in attendance at a Day National School or Day Secondary School are not eligible for admission to Evening Courses or Classes.

Teachers may be consulted on their class nights as shown in the Time Tables.

If any Student is absent from three consecutive meetings of any Class, unless for valid cause shown before the third meeting, his Ticket for the Class, or for the whole Course of which it is part, is liable to be cancelled without further warning.

The Trade classes are intended for those engaged in the several trades. Others will not be admitted before November 7th, and then only if there be room, and on payment of a quadruple fee.

A laboratory or workshop class can only be taken in conjunction with an approved lecture or drawing class. No Student will be allowed to remain in a laboratory or workshop class if his attendance at the lecture or drawing class proves unsatisfactory.

A class may be discontinued in the event of an insufficient number of Students joining or attending; and the number of evenings allotted weekly to any class may be reduced if there be a falling off in the attendance of Students. The right is reserved to close classes for any other reason whatever.

Students are to make good any damage done by them.

Strict order must be observed at all times within the precincts of the Schools.
Day Apprentice School.

The Scheme for a Day Apprentice School was adopted by the Conference on the Industrial Training of Apprentices, by the Technical Education Committee, by the Department of Agriculture and Technical Instruction, and by the Corporation of Dublin.

The object of the Scheme is to link technical education closely with industry by giving a specialised training from the outset of a boy's industrial career.

Apprenticeship Scholarships—approximately one hundred—may be awarded annually, on the results of examinations, to boys between the ages of fourteen and sixteen years. The Scholarships entitle the holders to a free training for two years in the Apprentice School, together with a payment of six shillings weekly for the first year, and eight shillings weekly for the second year; books and instruments will be supplied.

The Scholarships and Free Places are strictly confined to boys whose parents or guardians are resident in rate-paying houses within the boundaries either of the City of Dublin or the Urban Districts of Rathmines and Rathgar.

The course of instruction is altogether in the daytime; it covers 30 hours weekly for 46 weeks in each year; approximately one-third of the time in first year and two-thirds in the second year are devoted to a thoroughly practical and theoretical training in the trade for which the boy is preparing.

Pupils are allowed to select as far as possible the trades they desire to follow, and on the conclusion of the two years' course the Employers' and Trades Associations will allocate the boys to existing vacancies for apprentices.

An attendance of not less than eight hours weekly at the Technical School will be required during the terms of apprenticeship (i.e., after the boy has left the Apprentice School).

The courses at present in operation are:—(1) Plumbers; (2) Carpenters; (3) Printers; (4) Mechanical Engineering; (5) Electrical Engineering; (6) Sheet Metal Plate Work; (7) Cabinetmaking; and (8) Painting and Decorating, Brass-finishing, Motor Car Engineering, Brick-laying, Quantity Surveying. The date and full particulars of Entrance Examinations will be duly announced in the Schools and in the Dublin Press from time to time.

Shorter Courses varying slightly from the above terms are conducted for the Catering Industry (training of Chefs, Waiters, and Waitresses).

SCHOLARSHIPS.

UNIVERSITY SCHOLARSHIPS.

The Corporation of Dublin provide Sixteen Scholarships and reserve four of these "for Students who have attended the City of Dublin Technical Schools," each of the annual value of £60, tenable for three years. Candidates must have attended the City of Dublin Technical Schools during at least one Session as a condition of eligibility for admission to the Scholarship Examination, and such candidates must have been in (bona fide) regular daily employment.

SPECIAL TRAINING FOR DIPLOMAS.

1. Courses of training will be instituted in the autumn session with a special view to the requirements of students preparing for admission to the recognised engineering institutions.

2. For the present the course will be confined to candidates for the Institution of Electrical Engineers and the Institution of Automobile Engineers.

3. The courses will be open to students between the ages of 17 and 25 selected on the results of an entrance examination which will be a test of general educational and of elementary technical attainments.

4. The courses may comprise both day-time and evening classes; they will be of a progressive nature covering a total period of approximately three years.

SCHOLARSHIPS.

1. The Technical Education Authority offers seven Scholarships each in Electrical Engineering and Automobile Engineering. Four of these Scholarships in each subject will be reserved for students of the Day Apprentice School; three in each subject will be open for competition to other students of the Schools or to applicants from elsewhere.

2. The award of the Scholarships will be made on the results of an examination.

3. The value of each Scholarship will be:

   1st Year ... £5
   2nd Year ... £7
   3rd Year ... £10

4. The Technical Education Authority reserves the right to cancel a Scholarship in the case of faulty attendance, want of progress, indiscipline, or other unsatisfactory conduct.

Note.—For the current year the number of Scholarships in Electrical Engineering will be five, two of which will be reserved for students of the Electrical Engineering Section in the Day Apprentice School.
THE FOY SCHOLARSHIP.

A former student of the City of Dublin Municipal Technical Schools, 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.

THE DUBLIN MECHANICS' INSTITUTE SCHOLARSHIPS.

The above Scholarships are provided for by the Dublin Mechanics' Institute Residuary Fund, which has been made available for Industrial Scholarships.

Three Scholarships will be awarded annually—one in the Mechanical Engineering Group, one in the Electrical Engineering and Physics Group, and one in the Building Trades Group. The Scholarships are tenable for three years, and are value about £3 each 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.

THE MULLIGAN SCHOLARSHIPS.

As a result of a bequest, Sixteen Scholarships of £1 each will be awarded on the results of the second year examination of the Department of Education.

DAY APPRENTICE SCHOOL SCHOLARSHIPS.

(See page 10.)

PRIZES.

SCHOOL PRIZES.

First and Second Prizes are awarded in each year of each subject on the results of the Sessional Examination to Students who have obtained not less than 70 per cent. marks and have at least 60 per cent. attendance of the actual class meetings.

SPECIAL PRIZES.

Numerous prizes are offered by Employers and Trade Unions; chiefly the Dublin Building Trade Employers' Association, the Irish Quantity Surveyors' Association, the Dublin Guild of Building Workers' Union, the United Operative Plumbers' Association, Dublin Brick and Stonemasons' Trade Union, Operative Plasterers' Society, Master Drapers' Association, Armstrong Siddeley Motors, Ltd., etc.
## STAFF.

### ART AND ART CRAFTS.

<table>
<thead>
<tr>
<th>Name</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>William L. Whelan, Art Master's Certificates, Board of Education, London, Silver and Bronze Medalist, National Competition, South Kensington</td>
<td>Head of the Art Department.</td>
</tr>
<tr>
<td>James J. Burke, Certified Art Teacher, London Medallist</td>
<td>General Art Work, Enamelling on Metal, and Drawing for Furniture Trades, etc.</td>
</tr>
<tr>
<td>Miss Margaret Whelan, Certified Art Teacher, Medallist</td>
<td>Assistant, General Art Work, Introductory Drawing, etc.</td>
</tr>
<tr>
<td>W. H. Megahy</td>
<td>Drawing for Trades.</td>
</tr>
<tr>
<td>John Milligan</td>
<td>Wood Carving.</td>
</tr>
<tr>
<td>Henry W. Taylor</td>
<td>Art Ironwork.</td>
</tr>
</tbody>
</table>

### MISCELLANEOUS TRADES.

<table>
<thead>
<tr>
<th>Name</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>William Kelly</td>
<td>Tailors' Cutting and Ladies' Tailoring</td>
</tr>
<tr>
<td>Michael Noonan</td>
<td>Hairdressers' Work.</td>
</tr>
<tr>
<td>John D'Arcy</td>
<td></td>
</tr>
<tr>
<td>Patrick J. Casey</td>
<td>Boot and Shoe Manufacture.</td>
</tr>
</tbody>
</table>
ART AND ART CRAFTS.

EXPLANATORY STATEMENT.

The instruction in Art is intended to give a thorough and practical knowledge of drawing, design and modelling, more especially in their application to the technical processes of trade, manufacture and handicrafts, and will aim to assist those who wish to follow up design in its bearing upon pictorial composition, such as book decoration, book illustration, posters, etc.

It is also intended for those who desire to make Art their profession or part of their general education.

The principal Art classes are located in the Kevin Street Technical Institute, and the equipment includes a very varied collection of casts, antique and modern figures, busts, architectural ornaments of different periods, diagrams, photographs, books, specimens of birds and fishes, etc., which are available for study and reference. Special classes are also conducted in the Bolton Street Technical Institute to meet the Art requirements of the students attending courses in printing, lithography, book production, cabinetmaking, art ironwork, painting and decorating, etc.

Students of the design classes will have every opportunity of working out their own designs in the workshops, which are fully equipped for carrying on practical work in the several branches of the trades and crafts.

In addition to the instruction in drawing, design and practical craftwork, lectures will be given throughout the session bearing upon the artistic and technical characteristics of the various subjects.

The lectures will be fully illustrated by lantern slides, diagrams, sketches and objects dealing with the subjects treated.

COURSES AND TIME TABLES.

GENERAL ART COURSE—Fee, 7s. 6d. for each Year of Course.

Note — This Course must be taken in the Kevin Street Technical Institute.

<table>
<thead>
<tr>
<th>No. of Course</th>
<th>Subject</th>
<th>Day</th>
<th>Hour</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>45K</td>
<td>Obj. and Mem. Drawing—I. ...</td>
<td>Thurs.</td>
<td>7.30-9.30</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Mechanical Drawing and Design—I.</td>
<td>Tues.</td>
<td>7.30-9.30</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Extra Class in any Art subject.</td>
<td></td>
<td>7.30-9.30</td>
<td>11</td>
</tr>
</tbody>
</table>

SECOND YEAR.

| 46K           | Obj. and Mem. Drawing—II. ... | Thurs. | 7.30-9.30 | 14 |
|               | Design—II. | Tues. | 7.30-9.30 | 14 |
|               | Drawing from Natural Forms—II. | Tues. | 7.30-9.30 | 14 |
|               | Drawing from Casts—II. ... | Thurs. | 7.30-9.30 | 14 |
|               | Design II., III., IV. | | 7.30-9.30 | 14 |

THIRD YEAR.

| 47K           | Obj. and Mem. Drawing—III. | Mon. | 7.30-9.30 | 14 |
|               | Industrial Design—III. ... | Thurs. | 7.30-9.30 | 14 |
|               | Drawing from Natural Forms—III. | Thurs. | 7.30-9.30 | 14 |
|               | Drawing from Casts—III. ... | Thurs. | 7.30-9.30 | 14 |
|               | Pictorial Composition ... | Thurs. | 7.30-9.30 | 14 |

FOURTH YEAR.

| 48K           | Obj. and Mem. Drawing—IV. ... | Mon. | 7.30-9.30 | 14 |
|               | Industrial Design—IV. ... | Thurs. | 7.30-9.30 | 14 |
|               | Pictorial Composition ... | Thurs. | 7.30-9.30 | 14 |

APPLIED ART AND CRAFT COURSE—Fee, 7s. 6d. for each Year of Course.

FIRST YEAR.

| 50K           | Mechanical Drawing, Geometrical Design, etc. | Tues. | 7.30-9.30 | 14 or C2 |
|               | Freehand and Elementary Drawing from Casts, etc. | Thurs. | 7.30-9.30 | 14 or C2 |
|               | Extra Class in Art. | | | |

SECOND YEAR.

| 51K           | Elementary Designs and General Handicrafts ... | Mon. | 7.30-9.30 | 14 |
|               | Model Drawing, Drawing of Common Objects, etc. | Thurs. | 7.30-9.30 | 14 |

THIRD YEAR.

| 52K           | Industrial Design ... | Thurs. | 7.30-9.30 | 14 or C2 |
|               | Drawing in Light and Shade from Casts, etc. | Tues. | 7.30-9.30 | 14 |
|               | Craftwork | | | |

FOURTH YEAR.

| 53K           | Industrial Design and Historic Development of Styles | Thurs. | 7.30-9.30 | 14 |

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.
### GENERAL ART SYLLABUSES.

The Syllabuses given in the following pages cover the work of the courses prescribed on pages 16 and 17.

The Art Department is open on every evening in the week, except on a Saturday, and Art students in courses above First Year Grade may work on any evening in the week when there happens to be room. Students will work under the guidance of the Art Master, who may change the night of work, or otherwise vary the courses to meet particular needs.

**MECHANICAL DRAWING, PATTERN CONSTRUCTION AND GEOMETRICAL DESIGN.**

The course is arranged so that students may become acquainted with the use of instruments, T square, set squares, compass, scales, etc., and the principles of construction of ordinary geometrical figures—special reference will continually be made to the application of geometry to the different branches of industrial art, such as designing, etc. The exercises worked in class will include the drawing of geometrical patterns—spacings of wall and other surfaces for decorative purposes—bands and borders—units of pattern—the construction of arch-forms—tracery and mouldings. In addition exercises will be given in the projection of simple solids.

**FREEHAND DRAWING, ELEMENTARY DRAWING FROM CASTS AND NATURAL FORMS.**

Materials and aim of study—methods of using pencil, pen, charcoal, and brush—their suitability to express form in line or mass—blackboard demonstrations to show methods of construction, structural planning, guide, leading and controlling lines—proportion of masses, spaces, boundaries and details—drawing from large diagrams of construction of ornamental floral, foliated and animal forms, carefully selected and graduated to train the hand and lead the eye to appreciate beauty of form and proportion, and to show in an elementary way the development of architecture and ornament—the principles of ornamentation—free-arm drawing on paper and blackboard—exercises to test the students' ability to apply the principles which have been already taught—exercises in the representation of form with flat washes of colour—direct drawing in silhouette—drawing from casts of simple ornament and simple sprays of natural foliage in high and low relief—drawing from shells, butterflies and birds—drawing from photographs of simple sprays of natural foliage, flowers and fruit—drawing from natural foliage, flowers and fruit—drawing from photographs, casts and large diagrams, of typical examples of historic styles, patterns, and schemes of decoration, including heraldry and lettering in use at different periods, furniture, utensils, costume, armour, etc.—typical ornamental treatments of borders, medallions, panels, friezes, and pilasters—provision will be made during the lessons for practice in time-drawing—simple memory drawing.

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>Day</th>
<th>Hour</th>
<th>Room</th>
<th>TEACHER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPECIAL ART AND CRAFT CLASSES</strong>—Fee, 7s. 6d. each, unless included in a Course.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Kevin Street Technical Schools.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art Metalwork</td>
<td>Tue.-Thurs. 7:30-9:30</td>
<td></td>
<td>J. J. Burke.</td>
<td></td>
</tr>
<tr>
<td>Enamelling on Metal</td>
<td>Tue.-Thurs. 7:30-9:30</td>
<td></td>
<td>J. J. Burke.</td>
<td></td>
</tr>
<tr>
<td>Leatherwork, Stencilling, etc.</td>
<td>Mon.-Thurs. 7:30-9:30</td>
<td></td>
<td>W. L. Whelan; Miss M. Wheelan</td>
<td></td>
</tr>
</tbody>
</table>

**Bolton Street Technical Institute.**

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>Day</th>
<th>Hour</th>
<th>Room</th>
<th>TEACHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modelling in Clay</td>
<td>Wed. 7:30-9:30</td>
<td></td>
<td>J. Saunders.</td>
<td></td>
</tr>
<tr>
<td>Woodcarving</td>
<td>Mon.-Tu. 7:30-9:30</td>
<td></td>
<td>J. Milligan.</td>
<td></td>
</tr>
<tr>
<td>Design for Woodcarving</td>
<td>Thurs. 7:30-9:30</td>
<td></td>
<td>J. J. Burke.</td>
<td></td>
</tr>
<tr>
<td>Art Ironwork</td>
<td>Mon.-Wed 7:30-9:30</td>
<td></td>
<td>H. W. Taylor.</td>
<td></td>
</tr>
<tr>
<td>Design for Art Ironwork</td>
<td>Mon.-Thurs 7:30-9:30</td>
<td></td>
<td>W. L. Whelan.</td>
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<tr>
<td>Mural and Ecclesiastical Design</td>
<td>Fri. 7:30-9:30</td>
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<tr>
<td>Drawing and Design for Cabinetmakers</td>
<td>Wed. 7:30-9:30</td>
<td></td>
<td>J. J. Burke.</td>
<td></td>
</tr>
<tr>
<td>Drawing and Design for Plasterers</td>
<td>Tues. 7:30-9:30</td>
<td></td>
<td>W. L. Whelan.</td>
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<tr>
<td>Drawing and Design for Composers</td>
<td>Wed. 7:30-9:30</td>
<td></td>
<td>W. L. Whelan.</td>
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</tr>
<tr>
<td>Drawing and Design for Bookbinders</td>
<td>Wed. 7:30-9:30</td>
<td></td>
<td>W. L. Whelan.</td>
<td></td>
</tr>
<tr>
<td>Drawing and Design for Lithographers</td>
<td>Wed. 7:30-9:30</td>
<td></td>
<td>W. L. Whelan.</td>
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</tbody>
</table>

N.B.—Work done in class cannot be removed until end of Session.
ELEMENTARY DESIGN AND GENERAL HANDICRAFTS.

Materials used in designing, paper, tinted grounds, blackboard, chalk, charcoal, colours, stains and inks—methods of work—transferring, pouncing and stencilling, bilateral and radial patterns, working drawings—methods of delineation; outline, surface, massing or spacing, relief, modelling and carving—elements of ornament—geometry as the basis of ornament—geometric design—floral and natural forms, their adaptation to decoration—designing to fill given spaces: square, triangle, border, spandril, lunette, pilaster, panel—the designs may consist of: ornament composed of straight lines only, geometric ornament, interlacing ornament, scroll-work, and foliated or floral ornament—surface design and repeating patterns, composed of straight lines, geometric, interlacing, scroll-work, and floral ornament—diapers and “all-over” patterns—“drop,” “sprig,” and “trellis” patterns—simple designs in the Celtic style—practice in minor handicrafts not requiring special plant or apparatus will be carried on in the design rooms—the section includes: making of stencil plates, gesso-work, paper work, embroidery, leather work, wood-block making and printing, tile painting, lithographic drawing, book-decoration, etc.

MODEL DRAWING, DRAWING OF COMMON OBJECTS, MEMORY DRAWING.

Experiments to show by actual observation the effect of perspective in modifying the appearance of objects—position of points, meaning and illustration of vanishing—laws governing the appearance of objects, and how they should be drawn—drawing the circle in different positions, at the eye level, above and below the eye level—application to the drawing of familiar objects of circular section, such as cylinders, jars, and cans—drawing of regular solids, with application to common objects: the cube, rectangular prism, triangular prism, hexagonal prism, cone and pyramid.

DRAWING IN LIGHT AND SHADE, FROM CASTS, COMMON OBJECTS, AND NATURAL FORMS.

Materials and how to use them—simple exercises in rendering flat tones—graded and flat tones by means of chalk, pencil, pen, and brush—meaning of terms: light, half-tone, shade, cast-shadow, and their modifications—natural and artificial lighting of objects—plane surfaces and surfaces inclined to the source of light—the cube, prism, and box—shadows from straight lines and simple surfaces on plane and curved surfaces: the cylinder, cone, and sphere—exercises on these to show the effect of different backgrounds—rings with concave and convex sections—vase forms—distribution of light and shade on vase forms—true tone and relative tone—exercises in rendering geometric solids—relief ornament on flat grounds and on curved surfaces—more advanced exercises from the cast, and from groups of objects—application of the principles of light and shade to the drawing of architectural and natural forms—details from the antique—details from life—drawing in light and shade from memory, and time drawings—finished studies.

PLANT DRAWING. MEMORY DRAWING OF PLANT FORM.

Exercises to illustrate treatment—difference between pictorial and decorative treatment—colouring and drawing—the structural point of view and its bearing upon design—plants used in ornament: the lotus, acanthus, vine, and honeysuckle—essential characteristics for preserving the identity of the plant—conventional and naturalistic treatments—systems: erect, climbing, twisting, etc.—branches and leaf arrangements—stages of development; stipules, bracts, and other small details—leaves; simple and compound—flowers: the calyx, corolla, and stamens—fruits: seed vessels, seeds, winged seeds—roots and bulbs—these exercises give a simple analysis, from an artistic rather than a botanical point of view, of the chief structural characteristics—sketches to indicate the general character and growth of the plant, the various shapes which a leaf takes in its growth, the arrangement of the leaves on the stem, the plan and profile of a flower, the arrangement of its petals, the form of its calyx, of its pistil and of its stamens—the exercises will be worked from actual plants, flowers and natural specimens, and will be executed with pencil, pen, chalk, and brush, in outline and in mass, in monochrome, and in naturalistic colour.

BRUSHWORK AND PAINTING ORNAMENT.

Brush forms resulting from single brush impressions—combined brush marks of different tones—rendering of ornamental forms by means of brush strokes—drawing with the brush in silhouette, simple architectural and natural forms, leaves, flowers—direct expression of plant and animal life by means of brushwork—the mixing and grounds—painting ornament in oil and tempera from the cast, from photographs, and from examples of decorative painting to be found on vases or tiles—copying from stained glass and other examples of historic art—the importance and influence of the situation and surroundings on the painting of ornament.

THE PRINCIPLES OF ORNAMENT AND DESIGN: HISTORIC DEVELOPMENT OF STYLES.

Lectures for craftsmen and students of design—the use of form and colour for decorative purposes in various periods—architectural elements, general proportions of architectural forms—principles and elements of ornament—structure and growth of plants, trees and shells; analysis of form and design—characteristics in typical ornaments, metal work, bronzes, porcelain, costume, textiles and embroidery—furniture and woodwork—book illustration—animal forms in nature and their adaptation as ornaments—human figure, griffins, dolphins, birds, etc.—nomenclature of ornament—symbolic ornament—lettering—architectural details as ornaments—Egyptian, Assyrian and Greek art—Persian, Japanese, and other Oriental styles—Renaissance—modern art.
ADVANCED DESIGN APPLIED TO CRAFTS.

In this class 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 to full sizes, or to as large a scale as the limits will allow—designs for important competitions to full size or to a large scale, with sketches to show the position the design is meant to occupy.

ARTISTIC METAL WORK.


ARTISTIC ENAMELLING ON METAL.

Enamel: its nature and qualities—the practical application of enamel—metals to which it is applied—methods of enamelling—cloisonné—plaque à jour—champlevé—basse taille—painted or limoges—the selection and treatment of the enamels employed—firing, finishing, polishing and mounting. Students attending the class will design the work they are to carry out, and arrangements will be made to enable them to study design and prepare the necessary drawings.

Specimen of Students’ Work.
Casket executed in Silver and Enamels.

Specimens of Students’ Work.
1. Mirror Frame in Repoussé Copper.
2. Lady’s Handbag, in Natural Calf Skin, Modelled Ornament.
WOOD CARVING.

The course of instruction in Woodcarving includes a lecture and drawing class on one evening, practical work on one or two evenings, and a suitable Art class in drawing and design on another evening. The practical work will be of a progressive nature and selected in each case to suit the skill of the individual student.

**FIRST YEAR.**

The use and names of tools in wood-carving—sharpening of tools—stones employed—various woods made use of—treatment of the different classes of wood—the influence and effect of grain—setting out and starting a piece of work—first stage in the working of a pattern—second stage in the working of a pattern—modelling the work—finishing the work—simple patterns of carving with one or two tools—ornamental forms in soft and hard timber—carving in flat and broad treatment in yellow pine—carving in hard timber and how to treat same—simple panels from casts—conventional foliage in different styles from cast—natural forms of foliage—how to treat practically in wood—geometrical patterns and freehand ornament contrasted in their application to furniture and architectural work.

**SECOND AND HIGHER YEARS.**

The work of the Italian Renaissance explained and examples given—the French Renaissance explained—natural foliage and geometrical treatment—the Gothic periods—Norman periods—early English period—decorated period—perpendicular styles—examples of architectural treatment—carvings as applied to furniture—individuality of style explained and examples given.

**MODELLING IN CLAY.**

A graduated course of instruction in Clay Modelling and the application of Modelling to Industrial Design.

**NOTE:** This Class will not start until a sufficient number of applications for the subject are received.

Instruction will be given in the modelling of styles of architectural and decorative ornament. Marble, stone and wood-carvers, plasterers, architects, designers, and decorators will have opportunities of acquiring a practical knowledge of relief ornament, applicable to the particular work in which they may be engaged.

Modelling ornament from casts of simple forms and from photographs of architectural details—modelling flowers, fruit and foliage, from nature, and adapting natural forms for architectural and decorative purposes—making of models in plasticine, clay, and wax for reproduction in bronze, silver, and gold—designing and modelling for reproduction in solid and fibrous plaster for ceilings, cornices, friezes, enriched mouldings, capitals and wall decoration—modelling from casts of ornaments or animal forms—modelling from natural forms and drapery; masks and heads; human figures or parts from casts—the mechanical process employed in casting and the making of moulds—casting of models.

During the session lectures and demonstrations will be given on the application of designs to various materials, according to the technical wants of the individual students. For advanced students, instruction in the history of sculpture.

**STONE AND MARBLE CARVING.**

**NOTE:** This Class will not start until a sufficient number of applications for the subject are received.

A knowledge of drawing and modelling being essential to those who wish to benefit by the teaching, students will be required to give some time each week to attain this.

The nature of the material—tools used in carving—decorative treatment of stone and marble; mouldings and enrichments; ornaments—methods of pointing—processes of reproduction in stone or marble from plaster models—monumental work—architectural work.
ART WORK FOR PRINTING TRADES.

The work will consist of graduated lessons in Drawing and Art suitable for all students of the book-producing trades, including printing, bookbinding, and photo-mechanical processes. In the First Year attention will be paid to elementary drawing, such as freehand, geometrical drawing and model drawing. In the Second Year, design will be taught, and special attention given to the needs of each particular trade. In the Third Year, more advanced practice in design and higher art. Each student attends on one night only.

DRAWING AND DESIGNING FOR COMPOSITORS.

FIRST YEAR.
Freehand drill exercises in drawing the vertical and horizontal in conjunction with the curved line—training the hand and eye to measure proportion and space without mechanical means—letting—symmetry—proportion—simple designs.

SECOND YEAR.
Freehand and model drawing—letting, ancient and modern—memory drawing—principles of light and shade—designing display to suit various styles of type and classes of work, such as programmes, advertisements, title pages, posters, etc.

DESIGN AND COMPOSITION FOR BOOKBINDERS.
Freehand drawing—use of instruments—geometrical patterns and designs—designing to fill given spaces, triangle, border, spandril, lunette, pilaster, panel—surface design and repeating patterns, composed of straight lines, geometric, interlacing, scroll work and floral ornament—designs in the Celtic style—designing simple arrangements of tools for backs of half-bound books—designing backs, sides and lettering panels for hand tooling.

DRAWING FOR LITHOGRAPHERS, LITHOGRAPHIC ARTISTS AND DESIGNERS.

The instruction given is suitable for both lithographic artists and designers, improvers and apprentices. It covers everything necessary for the trade, and gives opportunities for trade workers to extend their practical knowledge or to learn branches of their trade for which opportunity cannot be found in the workshop.

The instruction covers a three years' course, and is in two divisions:

The Reproductive side, which includes drawing and writing on stone, zinc and aluminium; drawing on grained and transfer papers; copper plate writing, map and plan drawing with suitable titles and other lettering; preparation of gelatine and other keys; chromolithography by chalk, stump, stipple, splashing, or medium, and

The Artistic side, which includes the study of lettering and ornament, drawing of figure details in light and shade, drawing the human figure in black and white and colour, drapery and costume, the preparation of designs for posters, showcards, catalogue covers, calendars, labels, etc., and the study of colour harmonies from the point of view of their effectiveness for advertisements.

ETCHING AND MEZZOTINT ENGRAVING.

Drawing on copper and zinc—the process of etching—the process of printing etchings—sand ground etchings—linoleum block cutting—dry point—line work—laying grounds—scraping, polishing and burnishing—sharpening tools, etc.
ART WORK FOR TRADES CLASSES.

DESIGN FOR PAINTERS AND DECORATORS (MURAL AND ECCLESIASTICAL ART).

Drawing simple designs for friezes, dado borders, string courses, pilasters, panels, corner pieces, breaks, centres and diapers—simple heraldic devices—ornamental lettering, short texts to scale—making suitable drawings for imitation of inlaid woods and marbles—rough sketches for schemes of decoration—making scales and working drawings for schemes of decoration—working out sketches with measurements previously taken from existing buildings, and setting to given scale—drawing of historic ornament—sketches of lunette, cartouche.

DRAWING AND DESIGN FOR ART IRONWORKERS.

Drawing simple designs for panels, grilles, balustrades, gates, hinges, hanging signs, brackets, chandeliers, electroliers, lanterns, stands and other objects in iron—study and drawing of husks, flowers, rosettes, leaves and sprays, garlands, festoons, cartouches and shields for incorporation in designs—making scales and working drawings—working out sketches with measurements previously taken from existing samples of artistic ironwork.

DRAWING AND DESIGN FOR CABINETMAKERS.

Freehand drawing—sketching specimens of furniture and furniture details—geometry applied to cabinetmaking, orthographic, oblique and isometric projection—making working drawings form pictorial sketches—working drawings and diagrams—setting out panels and templates—design of furniture; principles and proportions in relation to use intended and materials employed—styles of furniture; their characteristic features and the period to which they belong.

Lectures for those engaged in the various Art Industries and Crafts.

A short course of Lectures will probably be given by the Art Master, Mr. W. L. Whelan, the dates of which will be posted on the School Notice-board.

Reference will be made in the lectures to styles of ornamental and decorative work by artists such as Ghiberti, Donatello, Michel Angelo, Raphael, Benvenuto Cellini, Bernard Palissy, Adam, the brothers Sheraton, Chippendale, Wedgwood, Owen Jones and Alfred Stevens.

Illustrations of the foregoing will be given for letterpress printing and book decoration; also for furniture work, carving and inlaying.

These lectures, whilst primarily intended for students who are taking up the study of industrial design, and for those engaged in the various Art Industries and Crafts, are open to other students.

MISCELLANEOUS TRADE CLASSES.

KEVIN STREET TECHNICAL INSTITUTE.

NOTE.—Technical Courses may be formed by the addition of suitable Art, Mathematics, or other Classes to any of the following subjects. For qualified Students the fee for each Course of two or three subjects is 7s. 6d.

Fee, 7s. 6d. per Session for each Class, unless otherwise stated.

TAILORS' CUTTING.

First and Second Years.

THIRD YEAR.

General: Materials as affecting fit and cutting—Influence of nature of material on the allowance for making up—trying on, how to prepare the garment, the process of fitting on—making up—shaping and making collars—block patterns, their use and adaption—defects, causes and remedies. Breeches Cutting: Riding and walking breeches, laced and buttoned at knees—livery, cycling and clerical breeches—gaitors, leggings and spat—Vest Cutting: Clerical and livery vests—dress and cassock vests. Coat Cutting: Frock and dress coats—hunting and livery coats—military tunic—motor lounges, single and double-breasted. Clerical Garment Cutting: Single-breasted frock—walking Chesterfield plain soutane—slip-on soutane—full Roman soutane.

Celtic Costume Cutting: Correct designs—coats, showing proper length and make—kilts, correct method of measurement and material required—pleats, arrangement and waist measurement—vest length taken with the proper position of holes and buttons.

LADIES' TAILORING.

First and Second Years.

TIME TABLE.

Subject. Day Hour. Room. Teacher.
Tailors' Cutting—I. M. Th. 7.30-9.30 15 W. Kelly.
Tailors' Cutting—II. & III. Wed. 7.30-9.30 15 W. Kelly.
Ladies' Tailoring—I. & II. Tues. 7.30-9.30 15 W. Kelly.

HAIRDRESSERS' WORK.

Students are advised to qualify for certificates at the end of each year's course, as their admission to higher grades depends on their examination results.

The Institute's Diploma of Proficiency will be awarded to students who complete a four years' course and pass the final examination. Students should provide their own waving tongs, combs, scissors, razors and strops.

LADIES' HAIRDRESSING.

The course covers a period of four years.

First Year.
Boardwork: Preparation and turning of combings; making switches, martbeaux, frissure forcee, mixing, knotting and mounting, etc.

Second Year.
Boardwork: Advanced exercises in mixing hair, knotting, etc.
Water-waving: Its methods and requirements.

Modern Hair-dressing with use of postiche and ornaments.

Third Year.
Face and Scalp Massage with use of high frequency apparatus, etc.
Permanent waving.

Fourth Year.
Hair-dyeing in liquid dyes of one or more solutions; henna applications, bleaching, etc. Historical and Poudre hair-dressing; purpose of each design; studies of various periods, the postiche, ornaments.

GENTLEMEN'S HAIRDRESSING.

To Cover a Period of Two Years.

Department in saloon, shaving, hair brushing, the care of tools, etc., hair-cutting, singeing, hand-vibro, hot-towel work, etc., razor hair cutting, hair waving, hair tinting and dyeing, high frequency face treatment, etc.

TIME TABLE.

Ladies' Hairdressing.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Room</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>A</td>
<td>M. Noonan.</td>
</tr>
<tr>
<td>do.</td>
<td>B</td>
<td>J. D'Arcy.</td>
</tr>
<tr>
<td>2nd Year</td>
<td>A</td>
<td>M. Noonan.</td>
</tr>
<tr>
<td>do.</td>
<td>B</td>
<td>J. D'Arcy.</td>
</tr>
<tr>
<td>3rd &amp; 4th Years</td>
<td>W. 10-10</td>
<td>M. Noonan, J. D'Arcy.</td>
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Gentlemen's Hairdressing.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Room</th>
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<tbody>
<tr>
<td>Wed.</td>
<td>8.30-10</td>
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</table>

BOOT AND SHOE MANUFACTURE.

The aim of this class 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.
**TIME TABLE.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Days</th>
<th>Time</th>
<th>Room</th>
<th>Instructor</th>
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</thead>
<tbody>
<tr>
<td>Boot and Shoe Making—I.</td>
<td>M., W.</td>
<td>8.0-10.0</td>
<td>3</td>
<td>P. J. Casey.</td>
</tr>
<tr>
<td>Boot and Shoe Making—II.</td>
<td>Tu., W.</td>
<td>8.0-10.0</td>
<td>3</td>
<td>P. J. Casey.</td>
</tr>
<tr>
<td>Boot and Shoe Making—III.</td>
<td>Tu., W.</td>
<td>8.0-10.0</td>
<td>3</td>
<td>P. J. Casey.</td>
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