1993

College of Technology, Bolton Street Prospectus 1993-94

City of Dublin Vocational Education Committee

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Location of Colleges shown:

1. College of Technology
   Bolton Street
   Dublin 1
   Telephone: 8727177

2. College of Technology
   Kevin Street
   Dublin 8
   Telephone: 4757541

3. Dublin College of Catering
   and Hotel Management
   Cathal Brugha Street
   Dublin 1
   Telephone: 8747886

4. College of Commerce
   Rathmines
   Dublin 6
   Telephone: 970666

5. College of Marketing & Design
   Mountjoy Square
   Dublin 1
   Telephone: 363000

6. College of Music
   Chatham Row
   Dublin 6
   Telephone: 6784564

7. Dublin Institute of Technology
   Admissions Office
   14 Upper Mount Street
   Dublin 2
   Telephone: 6766584
ABOUT THE CONTENTS

This Prospectus has been prepared in four sections for the convenience of its readers.

Section 1 — GENERAL INFORMATION provides general information about the college, its operations, management and staffing

Section 2 — WHOLETIME COURSES provides information about the whole-time Degree Diploma/Certificate and other courses offered by the College and the method of applying for them

Section 3 — APPRENTICE COURSES provides information about Apprenticeship and the various apprentice courses offered by the College

Section 4 — PART TIME DAY AND EVENING COURSES provides information about the Part-time Day and Evening and Continuing Education courses offered by the College

The index for each Section is located at its beginning and the different Sections are colour coded as follows:

Section 1: Purple
Section 2: Blue
Section 3: Red
Section 4: Green

ACTING DIRECTOR
MARTIN MURPHY, DipEng, MSc, CEng, MIMechE

SECRETARY/REGISTRAR
MICHAEL J. MARNANE, BComm, DPA, MACRA

The information in this Prospectus is intended as a guide for persons seeking admission to the College and shall not be deemed to constitute a contract, between the College and a student or any third party. The College reserves the right to change or modify any of the courses or information given in the Prospectus without prior notice.

Enquiries should be directed to:
THE SECRETARY/REGISTRAR.

DUBLIN INSTITUTE OF TECHNOLOGY
Head office: 30 Upper Pembroke Street, Dublin 2.
Tel. 6611688. Fax: 6611696.

ACTING PRESIDENT
Michael O'Donnell, BE, B.Comm, MEconSc, MAI(hc) EurIng, CEng, FIEI

Published July 1993
CALENDAR — SESSION 1993/94

1993

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>SEPT.</td>
<td>Wednesday 1st</td>
</tr>
<tr>
<td></td>
<td>Commencement of Session.</td>
</tr>
<tr>
<td></td>
<td>Monday 6th</td>
</tr>
<tr>
<td></td>
<td>Commencement of Day Release Apprenticeship Courses.</td>
</tr>
<tr>
<td></td>
<td>Monday 13th</td>
</tr>
<tr>
<td></td>
<td>Interviews and enrolments for part-time and evening courses commence</td>
</tr>
<tr>
<td></td>
<td>for Aeronautical Engineering, Automobile Engineering and Printing.</td>
</tr>
<tr>
<td></td>
<td>Wednesday 15th</td>
</tr>
<tr>
<td></td>
<td>Interviews and enrolments for part-time day and evening courses</td>
</tr>
<tr>
<td></td>
<td>commence in Aeronautical Engineering, Automobile Engineering and Printing.</td>
</tr>
<tr>
<td></td>
<td>Monday 20th</td>
</tr>
<tr>
<td></td>
<td>Wholetime classes commence except where otherwise arranged.</td>
</tr>
<tr>
<td></td>
<td>Monday 27th</td>
</tr>
<tr>
<td></td>
<td>Part-time day and evening classes commence except where otherwise</td>
</tr>
<tr>
<td></td>
<td>arranged.</td>
</tr>
<tr>
<td>OCT.</td>
<td>Monday 4th</td>
</tr>
<tr>
<td></td>
<td>Engineering Block Release Apprentice classes commence</td>
</tr>
<tr>
<td>DEC.</td>
<td>Friday 17th</td>
</tr>
<tr>
<td></td>
<td>Final class meetings of first term.</td>
</tr>
</tbody>
</table>

1994

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN.</td>
<td>Tuesday 4th</td>
</tr>
<tr>
<td></td>
<td>Classes resume.</td>
</tr>
<tr>
<td>FEB.</td>
<td>Tuesday 1st</td>
</tr>
<tr>
<td></td>
<td>Closing date for all Irish and other EC applications to wholetime</td>
</tr>
<tr>
<td></td>
<td>courses for 1994/95 session.</td>
</tr>
<tr>
<td>MARCH</td>
<td>Tuesday 29th</td>
</tr>
<tr>
<td></td>
<td>Final class meetings of second term except where otherwise arranged.</td>
</tr>
</tbody>
</table>

TERM 2

APRIL      | Monday 11th                                                          |
|           | All classes resume.                                                   |

JUNE       | Friday 17th                                                          |
|           | All classes terminate except where otherwise arranged.                |

Classes will close on public holidays during the session (viz. 25th October; 17th March; 6th June) and on Church Holidays (viz. 8th December; 6th January; 12th May; 2nd June) except where otherwise arranged.

NOTE: This Calendar is subject to alteration during the Session.

INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH

AN COLÁISTE TEICNEOLAÍOCHTA SRÁID BHOLTÚIN

RÉAMHRÁ

Is cuid d'Institiúid Teicneolaíochta Bhaile Átha Cliath an Coláiste seo. Cuireadh an Institiúid ar bun sa bhliain 1978 chun coláistí den triú leibhéal. San Institiúid tá breis is 1,500 foireann teagaisc agus 23,000 mac léinn.

Tá scoileanna sa Choláiste, mar a leanas:

Ailtireacht, Suirbhéireacht agus Tógálaíocht
Innealtóireacht
Clódóireacht
Cardanna

Tá cúrsaí lán-aimsire agus páirt-aimsire ar fáil ar leibhéal na teicneolaíochta, ticneoireachta agus cardanna. Tá deontas Stáit agus scoláireachtaí infocht, i gcásanna dirithe, do mhic leinn.

San mbuneoilaire seo, tá cur síos ar na cúrsaí éagsúla, na cáillteacha iontrála agus na cáillteacha gur féidir a bhaint amach (teastas, barrántas, comhlaighchas ag gcinneanna ghairmiúla nó céim ollscoilí).

Tagann na dáltaí ó gach cuid den tír, cuid acu ón nGaeltacht, cuide abhainn iasacht. Tá súil ag lucht an gColáiste go nglachfaidh na mic léinn páirt gníomhach is saol an Choláiste.
INTRODUCTION TO THE COLLEGE

Historical Note

In 1887 the first City of Dublin Technical School was established in Kevin Street and from that initiative the present system of schools and colleges developed. The College in Bolton Street was opened in 1911 to provide education in Building, Engineering and Printing, lines of specialisation which have continued down to the present day. The first whole-time day courses commenced in 1920 with the inauguration of an apprentice Scholarship Scheme. With the establishment of an Irish Government, technical education came within the aegis of the Department of Education. A Commission which was established in 1926 made recommendations for developments which led to the Vocational Education Act of 1930. The system of schools and colleges expanded in succeeding decades under the City of Dublin Vocational Education Committee, and the Bolton Street College was enlarged with additional buildings in 1958, 1963, 1981 and 1987. The development of professional and technician courses began in the 1940s and over the years these have gained the recognition of professional and academic bodies in Ireland and other countries.

Dublin Institute of Technology

In 1978 the Dublin Institute of Technology was established by the City of Dublin Vocational Education Committee to co-ordinate the work of its six colleges. Bolton Street is the largest of the colleges; the other constituent Colleges are the College of Technology Kevin Street, the College of Commerce, the Dublin College of Catering, the College of Music and the College of Marketing and Design. Its work and awards have attained wide national and international recognition from academic and professional bodies and other appropriate employer organisations.

Over 1,500 teaching staff are primarily concerned with teaching 24,000 students attending whole-time and part-time third level and apprentice courses. The Institute is involved in research and development, and there is a growing demand for its advisory and consultative services.

The Colleges of the Institute have played a leading role in the evolution of technical and technological education in Ireland and continue to be involved with the latest developments in technology and commerce, maintaining their commitment to industrial, economic and cultural development.

The Dublin Institute of Technology Act (1992) established DIT as an autonomous Institute to provide vocational and technical education and training for the economic, technological, scientific, commercial, industrial, social and cultural development of the State.

The management and control of the affairs of the Institute is under the direction of the Governing Body.

Academic Council

The Governing Body has appointed an Academic Council to assist it in the planning, co-ordination, development and overseeing of the educational work of the Institute and to protect, maintain and develop the academic standards of its courses and activities.

College of Technology Bolton Street

The Bolton Street College provides a wide range of courses on a full-time, part-time day and evening and block release basis, as well as some short courses. It has a total teaching establishment of 350 and now caters for more than 8,000 students. The College aims to provide an integrated system of education from craft apprenticeship to degree and professional levels in the sectors for which it has special responsibility. These include the Construction, Engineering, Printing and Transport industries and the College plays an important national role in responding to their needs.

College Executive Board

The College Executive Board helps in co-ordinating the work of the College and its academic programmes. It is comprised of the Principal, Heads of Schools, and Heads of Departments.

College Academic Board

The Academic Board has responsibility for approving and monitoring course developments leading to College/DIT awards, including examinations and student admission requirements. It also has an important role in promoting research and developing College academic policy. Its membership is comprised of the Director, Heads of Schools, Heads of Departments and other nominated members.

Departmental Boards

Departmental Boards are concerned with the development of courses and facilities at Departmental level. There are Course Committees to advise on the development of major courses. There are also Advisory Committees for major disciplines which assist the College in keeping courses abreast of developments in their professional and industrial fields.
The major new extension to the College which was completed during the 1987/88 session significantly enhanced its accommodation and facilities. This included a new library with seating for 450 students; a major new restaurant with similar seating capacity; much improved student facilities including social areas, student shop, bank and first aid room; a large lecture theatre with 320 seats; and a range of drawing studios, classrooms, staff offices and other accommodation.

Further enhancements have been implemented since then including the refurbishment of parts of the College vacated following the transfer of some activities to the Extension. These includes a new staff common room, the Advanced Manufacturing, Transport and Building Science laboratories and continuing development of the College's computing facilities which are linked through high speed data circuits to a major central DIT computing facility located at the DIT offices at 14 Upper Mount Street.

ADMISSION AND ENROLMENT

Before making an application for admission to any of the College's courses applicants should note the different procedures described briefly below for:

(a) Wholetime courses
(b) Apprentice courses
(c) Part-time Day and/or Evening courses

Wholetime Courses

Applications for entry into the First Year of all wholetime courses should be made through the CAO/CAS office before the specified closing date. Full details of the procedure are set out in Section 2 of this Prospectus or in the special Information Booklet on the Colleges wholetime courses which is an extract from it.

Successful applicants for wholetime courses will be notified in writing in early September and invited to register for the course immediately. Students attending for registration and enrolment are required to present the following documentation:

(a) CAO/CAS offer notice showing bank stamp confirming that appropriate deposit or fee has been paid.

(b) Three copies of a recent passport type photograph signed on the back.

The latest date for completing enrolment for classes commencing in the first term is 31st October or such earlier date as may be prescribed. Only in exceptional circumstances will applicants be admitted after that date and a late registration fee of £37.00 may be charged in addition to the normal fee at the discretion of the College.

Apprenticeship Courses

Apprentices should write to or otherwise communicate with the appropriate Head of College Department or other officer responsible for courses relating to their trade specialisation and seek information as to enrolment dates and procedures.

Part-time Day and Evening Courses

With the exception of courses in Computing it is not necessary to make written application for admission to part-time and evening courses in advance of the enrolment date for the courses. Enrolment is scheduled to commence on 13th September 1993, and intending applicants should report in person to the college during the scheduled enrolment hours from 6.30 p.m. to 8.00 p.m. during that week.
Student Identity Card
All students in the College are required to have a current College Identity Card which is issued when enrolment is completed. Students who were enrolled in the College in a previous session must surrender their outdated Identity Card before a new one is issued to them. The Identity Card is the property of the College and may be demanded by the College or its Officers at any time. A charge of £5 will be made for the replacement of a College Identity Card during the session and new photographs will be required.

Change of Classes
Change of classes or courses may be made only through the College Registration Office with the consent and approval of the Head of Department.

Change of Address or Employment
All students enrolled in the College are required to inform the College Registrations Office (Room 315) of any change in their address or employment.

COURSE TUITION FEES
All students, other than apprentices, are required to pay the specified tuition and other fees on enrolment. Fees are payable before commencing attendance at classes and are not refundable except where a class or course does not form. An enrolment is not transferable from one student to another. The sole proof of enrolment in any class or course in the College is the official receipt for the class or course fee paid. The official receipt must be presented on first attendance at each class.

Hardship Cases
In cases of hardship it may be possible to obtain remission of fees. Applications in this context should be made directly in confidence to the Director stating the circumstances and if possible should be accompanied by a letter of support from someone familiar with the applicant (e.g. Clergyman).

FEES FOR ACADEMIC YEAR 1993/94

(a) Irish and European Community Students

<table>
<thead>
<tr>
<th>Wholetime</th>
<th>Diploma/ Degree Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT101, FT121, FT122, FT123, FT124, FT125</td>
<td>£1,127</td>
</tr>
<tr>
<td>FT110, FT111</td>
<td>£907</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wholetime Technician Certificate Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT114, DT115, DT116, DT120, DT126, DT127, DT128, DT130, DT130, DT171</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wholetime Technician Diploma Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT102, DT114, DT115, DT116, DT126, DT127, DT128, DT130, DT131, DT150</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part-time and Evening Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>D128, D41, D43C, D43M, D43V, D47, D120, D132, D174, D200</td>
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<table>
<thead>
<tr>
<th>Evening Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>E48, E71, E72, E81, E82, E197</td>
</tr>
<tr>
<td>Other Evening Courses</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Postgraduate and Other Courses</th>
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</thead>
<tbody>
<tr>
<td>D4A</td>
</tr>
<tr>
<td>D8</td>
</tr>
<tr>
<td>E5</td>
</tr>
<tr>
<td>E7</td>
</tr>
<tr>
<td>A154</td>
</tr>
</tbody>
</table>

(b) Overseas Students from Non-European Community Countries

All Wholetime courses | £3,537

*Includes College examination fees — NCEA examination fees are extra where applicable. All Course and Examination Fees quoted are subject to revision.
EXAMINATIONS AND AWARDS

Examinations

All wholetime third-level courses conducted by the College (except the Preliminary Engineering Course DT120) lead to Dublin Institute of Technology (DIT) Diploma or Certificate awards as appropriate. The majority of these awards are of long standing and are widely recognised by employers, professional bodies and academic institutions in Ireland and abroad. The courses are reviewed and assessed regularly and their standards are vouched for each year by a distinguished panel of external examiners, some of whom are drawn from other countries to ensure the international recognition of the awards.

The College attaches high priority to ensure that its graduates meet the academic requirements of the appropriate professional bodies and periodically who, by visitation, assess and monitor the College courses from time to time.

Examination Entry Regulations

An examination entry fee of £37.00 is payable in respect of College Sessional examinations and in the case of College Supplemental examinations a further fee of £37.00 is payable. Where examinations lead to an NCEA Certificate or Diploma, an additional fee is payable (for details see under National Council for Educational Awards).

Students should note that those not achieving a minimum average attendance of 75% in each subject of their course, without a satisfactory explanation, may be refused permission to sit College examinations.

Closing Dates

The closing dates each year for receipt of College examination entry forms and fees are 31st January for the Summer or Sessional examinations and 15th July for the Autumn examinations. Applications for entry to examinations received after these closing dates will be considered only in exceptional circumstances and at the discretion of the College Examinations Executive Board. Such applications are subject to a late entry fee of £37.00. No applications will be considered if received later than 1st March for Summer examinations or 15th July for Autumn examinations.

Promotion Requirements

Promotion to a higher year or stage in any subject is contingent on reaching the required standard in the Sessional examination in the lower grade. A candidate unsuccessful in a Sessional examination may be permitted to sit a Supplemental examination in the same session, where such is offered in accordance with the regulations established for the course. Candidates, who do not complete an examination in all subjects of the year or stage, or who are required to submit additional work (e.g. project or thesis) for assessment before graduation or promotion to the next year of the course, must re-enter for the next examination before 31st January and pay the appropriate fees.

Students are required to submit regularly such project work and course work as may be prescribed by members of the academic staff and this will be taken into account in the assessments at the end of the session.

A laboratory notebook must be maintained by each student for laboratory classes. An assessment will be made at the end of the session of each student's progress in laboratory and experimental work which may form part of the Sessional examination in that subject.

General Examination Information

Candidates will be admitted to the Examination Room only on production of the Identity Card issued by the College in addition to the appropriate admission letter which is issued when and if an application to sit the examination is approved by the College.

Students should note carefully Examination Rules and Regulations which are printed on the Examination Entry forms and Examination Timetables.

Examination Rechecks

Students seeking a re-check of a College examination result should submit a written request, within one week of the posting of provisional results, specifying the grounds on which the request is made. A charge of £10.00 per subject is payable.

Examination Appeals

Students wishing to appeal against a College examination result must submit a formal written application on the standard form, available from the College Examinations Office, within two weeks of the publication of provisional results. Formal appeals must be accompanied by a fee of £37.00 and be submitted to the Principal or Examinations Secretary. The College accepts requests for rechecks and appeals on the understanding that it may not be in a position to inform the student of the outcome prior to the date for entry or for sitting a Supplemental Examination.

National Council for Educational Awards

The NCEA was established by the Government in 1972 and awards appropriate qualifications to students who successfully complete courses of study which it has approved. Students pursuing a number of College Certificate and Diploma courses receive NCEA awards in addition to College Awards. Additional examination entry fees are payable in respect of these awards as follows:— First Stage £46.00, Certificate stage £46.00 and Diploma Stage £58.00. These fees are subject to revision.
By agreement degree awards of the University of Dublin are available to graduates of the College who successfully complete certain courses in Architecture, Engineering and Surveying. Graduates apply to the University by completing appropriate documentation and paying the specified commencement fees. Details relating to the awards are given under the individual course entries.

The College is a centre for a number of external examinations including those of the Department of Education and the City and Guilds of London Institute. Application for entry to these examinations must be made through the College Office in accordance with the closing dates as indicated on College Notice Boards.

In relation to the examinations of professional and other external bodies, students are advised to note the following:

1. Admission to a course in the College may not of itself entitle students to sit for examinations of these bodies. Students are themselves responsible for ensuring that they satisfy all the requirements of the examining body concerned.
2. Students are expected to acquaint themselves with the current regulations for the examinations which they propose to take.
3. Students must make the necessary applications and supply all appropriate documentation that may be required.
4. The College staff will give advice and assistance in the above matters where requested.

COLLEGE REGULATIONS AND INFORMATION

1. General regulations for the College are displayed in the Entrance Hall. All students are subject to these regulations and also to the regulations of Dublin Institute of Technology which are reproduced later in this prospectus.

2. All college staff are authorised to enforce immediate disciplinary measures in respect of students whom they find violating the regulations of the College or otherwise misconducting themselves. The full co-operation of each student is required in order to maintain the dignity and discipline of the College.

3. In compliance with governmental regulations students are not permitted to smoke in the College except in an area designated for this purpose in the College restaurant.

4. Parking of pedal and motor cycles in the space provided in the College grounds is normally permitted. Students are not permitted to bring cars into the College parking area.

5. Students may use the facilities of the College, including the Gymnasium, on the understanding that they do so at their own risk.

6. Any personal property brought by a student into the Institute's premises is done so at the student's own risk and neither the Institute nor the College accept any liability for any loss or damage howsoever arising. Each student is required to have and read a copy of the General Regulations of the Institute which are available from the Registrations Office — Room 315.

7. Locker accommodation is available for a number of students on payment of a fee of £10.00 per session. This includes a deposit of £5.00 returnable only if the locker is vacated within seven days of the expiry of the period for which the locker has been allocated and in any event before the end of the academic session.
COLLEGE OPENING HOURS & FACILITIES

The College is normally open from 8am to 10pm Monday-Thursday, 8am-5.30 pm on Fridays and 8 am-1 pm on Saturdays during the academic session. These hours may be extended during examination or other periods. It is normally closed on Bank holidays and closes at 5.30 pm when classes are not in session.

Office Open

Hours: 9.00 a.m. to 12.45 p.m., 2.15 p.m. to 5.00 p.m. Monday to Friday, and in the evenings at special periods of the year at times which will be posted on the Notice Board. Except during enrolment periods, members of the academic staff will not be available for interviews or consultations except by prior appointment.

The Accounts and Registrations Offices will deal with enrolments and examination entries at the following times:
- 9.00 a.m.-12.30 p.m.
- 2.15 p.m.-5.00 p.m.

Class Schedules

Day classes will normally be held during the period 9.00 a.m. to 1.00 p.m. and 2.00 p.m. to 5.00 p.m. each week-day. Evening classes will normally be held from 7.00 p.m. to 10.00 p.m. except where otherwise arranged.

Formation and Continuance of Classes

The College reserves the right to change any or all the syllabus, the day and time of meeting of any class and may cancel classes where the enrolment or attendance is considered inadequate. If for some reason a teacher is unable to attend, classes may be cancelled without notice.

STUDENT ACTIVITIES, FACILITIES AND SERVICE

DIT Student Accommodation Service

The DIT Student Services Office compiles a list of accommodation which is available to DIT students. The selection of the accommodation and the terms of agreement or contract is entirely a matter between the individual student and the house-holder or landlord. Enquiries about this service should be directed to the Registrations Office in the College or to the:

Student Services Office
D.I.T.
30, Upper Pembroke Street,
Dublin 2.
Tel. 66111688.

Restaurant Facilities

The College Restaurant is open throughout the session for lunches and teas as well as morning and afternoon snacks.

First Aid

A First Aid service is provided during the session in co-operation with the Order of Malta.

Medical Service

Arrangements are made with a medical doctor to visit the college at appointed times each week.

Physically Disabled

Physically disabled applicants are welcome to apply to the College and most areas in it should be readily accessible to them. Students who may require special attention or have an unfavourable medical history are asked to provide details in writing to the College Secretary/Registrar in advance of enrolment.

Banking Facilities

The College has a part-time banking facility on campus in co-operation with Bank of Ireland.

The College Library

The College Library has seats for more than 400 readers, and is open for about 60 hours per week over six days a week during term time. Most of the collection is on open access to readers. The Library while a single unit, has four main areas, namely, the lending collection; the reference section; the journals area and the reserve collection. The latter comprises of key texts, reports, theses, examination papers and other special materials, all of which are for use on site only. All students of the College may use the Library, and may borrow books once they have become members.

Collections of slides, videos and sound tapes are available for use in the Library. Library equipment available includes photocopiers, microfiche readers and information services, a microfiche printer, a microfilm printer, VCRs and monitors, tape slide viewers and a CD-ROM drive. A book security system is also in operation.
The book and journal collections support the courses taught in the College and relevant indexes, abstracts and services facilitate study and research in the relevant areas. Close links are maintained with other academic libraries. Through these links and other co-operative arrangements, photocopy materials and interlibrary loans may be obtained. Access to staff and senior students to other libraries for the purposes of research can also be arranged through the Librarian. Introductory talks on the use of the Library and its resources will be provided for any interested group by appointment.

**Hours of Opening**

Term Time — Monday—Thursday 9.30 am—9.30 pm
Friday 9.30 am—5.30 pm
Saturday* 9.30 am—1.00 pm
*During exam periods open to 5.00 pm on Saturday.
Vacation periods Monday—Friday 9.30 am—5.30 pm.

**College Computing Facilities**

The College has an extensive computer network. Over 250 personal computers and terminals are connected to the network. The facilities are based around high powered Novell Servers. There is an extensive UNIX systems based upon a DEC System 5500 and DEC Station 5000 workstations. It has a wide range of complementary software and ancillary equipment available. The College is connected to DITNET through high speed leased lines. Electronic communications to DIT and to worldwide internet are available through the computer centre in DIT Mount Street.

**Counselling Service**

The DIT Student Counsellor offers students professional advice relating to academic, personal and vocational matters on a confidential basis.

**Chaplaincy**

The Chaplains form an integral part of life in the College as a Community. Their work is primarily one of pastoral care. The chaplaincy, which is ecumenical, is directed to all who work in the College.

One of their principal aims is to encourage the integration of personal, social and spiritual development with academic effort and achievement. The Chaplains are also a useful source of information, and regularly refer people to the specialist caring services both within and without the DIT system.

There are many opportunities for those who are interested to become involved in various groups and activities in the College. For example, there are possibilities for participation in liturgical functions, folk groups, social action, ecumenical gatherings, retreats, lectures, etc.

The chaplains are easily contacted at their office room. You are welcome to call at any time.

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**Student Services Council**

DIT student services are co-ordinated by a Student Services Council comprised of representatives of the Colleges, Students Unions, the Student Services Officer and other designated or nominated members.

The Student Services Council has two main sub-committees:
(i) A DIT Sports Council
(ii) A DIT Cultural and Social Council

Each of these sub-committees has Governing Body, College and Student Union nominees and have responsibility for the general development and co-ordination of relevant activities in each College and between Colleges. They are responsible for the disbursement of funds to designated clubs and societies as well as for the preparation of annual budgets and accounts.

**STUDENTS UNION**

The Students' Union is the student's representative body in the College. It promotes the Social and Organisational side of student life and sees after the interest of students in the College. Every student becomes a member of the union on enrolment. The union is democratically based and it is dependent for its effectiveness on student participation. It is affiliated to the Union of Students in Ireland.

It is administered by an executive which is elected annually by the student body and is headed by two sabbatical fulltime officers — a President and a Deputy President who are responsible for the overall co-ordination of union policy in addition to the day to day running of the Union. The Deputy President has specific responsibility for welfare, sports clubs and course related matters. Each class elects its own representative who acts as spokesperson to their Department and Student Union Executive. The ultimate decision making body of the Union is the general meeting which is open to all members of the student body. It holds a number of general meetings during the year.

**Full time Officers for 1993/1994 session**

Convenor: John O'Connor
Deputy Convenor: Ronan Haughey

**Functions of the Students Union**

1. To represent and defend the rights of its members on all matters concerning their academic, political and cultural welfare. At College Level the Union represents students on the Library, Restaurant Committee and other bodies. At national level the Union represents students through the Union of Students in Ireland (USI).
2. The Students Union organises recreational and social events for students which include lunchtime gigs, concerts and dances. The Union also invites in guest speakers.

3. The Students Union organises societies and sports clubs. The Union's activities centre around the social area and a common room where students may meet for discussions or just to relax.

The Union provides a number of commercial services including a student shop selling stationery, drawing equipment, sweets and newspapers and it also provides photocopying services. It issues the International Students Identity Card (USIT Card) and provides information on student welfare and travel.

The general financial and administrative affairs of the DIT students' unions are managed and co-ordinated by a limited company specially established for that purpose and having members of staff who are employees of that company.

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**CLUBS AND SOCIETIES**

There are some 40 clubs and societies in the College and all are anxious to recruit new members. Most of them are very active and cater for a wide range of interests.

**Clubs**

Badminton, Basketball, Canoeing, GAA, Cycling, Equestrian, Golf, Mixed Hockey, Karate, Mountaineering, Orienteering, Rugby, Sailing, Soccer, Squash, Ski, Swimming/Polo, Table Tennis, Walking, Weights and Wind Surfing.

**Societies**

Architectural Students Association, Auctioneers and Valuers, Business, Cahirdeas, Construction Technician, Christian, Engineering Technician, Film, Geo Surveying, Green Society, Motor Industry Management, Photographic, Printing, Property Economics, Quantity Surveyors, Students Against Destruction of Dublin (SADD), Student Engineers (SSE), Engineering Technicians (SETS), Third World, St. Vincent de Paul and Romanian Response.

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*The Bolton Street Quiz team finalists in 1993 RTÉ/Irish Times “Challenging Times” Competition*

*Bolton Street College students who represented Ireland at the World Student Games in Sheffield with Mr. Michael Whelan, College Sports Officer.*
EXPANDING THE COLLEGE'S RESEARCH AND CONSULTANCY ACTIVITIES AND ITS LINKS WITH INDUSTRY

The College has a total enrolment of over 8,000 students including more than 2,350 fulltime students, 2,100 part-time students and 3,600 craft apprentices who attend through either a day release or block release arrangement. At least 5,000 of these students are already in employment and this helps to maintain close links between industries which sponsor or employ them and the College.

The work of the College is focused in three main disciplines relating to the Construction, Engineering and Printing sectors and almost all of it is technologically based.

The College has developed a number of specialised units or activities in response to identified needs. These include:

(a) An Advanced Manufacturing Technology (AMT) Centre which was partially funded by the office of the Minister for Science and Technology and Eolas to provide specialised training and consultancy services for industry with a particular emphasis on Flexible Manufacturing Systems (FMS). Further information is available from Mr. Oliver McNulty, Director of the Centre.

(b) The College offers a number of "Training for Trainers" courses under the EC Eurotechnet programme in areas such as Advanced Manufacturing, Computer Aided Design (CAD) and Quality Control. Further information is available from Mr. Michael Murphy, (Acting Director).

(c) With the aid of the EC STAR programme the College has developed a Building Information Centre to provide better information services on appropriate products and services to the Irish Construction Industry and its associated professions. This has a computerised database and is accessed by enquirers using the telephone network and Minitel. It helps to establish and maintain closer links between the College and the Construction Industry. The Manager of the Centre is Mr Eamon Buckley and he may be contacted in Room 133 in the College.

(d) The College in association with the other DIT Colleges operates a Product/Project Development Centre which supports young graduates while they are developing their project work towards commercial exploitation. Where considered appropriate they may use College facilities and draw on the expertise of its staff. They are provided with formal instruction on relevant aspects of entrepreneurship including the preparation of business plans, patent law, marketing and other relevant topics. Enquiries should be directed to Mr. Rea O'Neill, DIT Industrial Liaison Officer, 14 Upper Mount Street, Dublin 2.

(e) The College has been working closely with the Irish Timber Council in promoting the greater use of Irish timber. This involved conducting a number of surveys amongst potential users with a view to identifying the main issues that have to be addressed. The next phase of this work is to undertake R & D into some of the key aspects and to develop a series of special training programmes for staff employed in the industry. To facilitate this a Timber Technology Centre has recently been established in the College under the direction of Mr. Martin Carragher. The Centre is located in the School of Trades, Linen Hall and enquiries should be directed to Mr. Carragher.

APPLIED RESEARCH AND CONSULTANCY ACTIVITIES

Through its many industry linked and professionally based programmes the College has a long tradition of interaction with Irish Industry and Commerce. The importance of such interaction has been recognised in a recent initiative of the Minister for Science and Technology whereby funding has been provided to support a full-time industrial liaison and research management function in the College. Impending legislation will give a statutory basis for future collaborative ventures between the College and Irish companies. Such industrial and commercial links take a number of forms:

* Collaborative R&D supported under National or E.C. funding programmes.
* Short Training Programmes for personnel in Industry and Commerce.
* Consultancy Projects.
* Exchange of personnel including staff, graduate and student placement.

These activities can be pursued using the wide range of technological and business expertise in the College's Construction, Engineering and Printing Sectors.
Areas of specialist expertise include:
* Architecture, Design and Technology
* Construction
* Timber Technology
* Mechanical, Manufacturing, Civil, Structural and Building Services Engineering
* Transport Engineering including Aeronautics
* Advanced Manufacturing Technology
* Computer Aided Design (CAD)
* Engineering and Buildings Maintenance
* Energy Technology
* Property and Land Use Economics
* The Built Environment
* Surveying including Geo-Surveying
* Printing and Graphic Communications

The College has established a number of links with other European countries through its participation in EC funded programmes. These links are mainly with EC institutions of higher education but they may also involve European industry and commerce. An example of the latter is the College’s participation in an EC-funded COMETT funded programme involving a partnership between colleges and the Forest sector industries and professions across Europe.

Further information on the College’s Industrial, Research and European activities can be obtained from:

Dr. Pat McCormack
Industrial Liaison Office
College of Technology
Bolton Street
Dublin 1.
Telephone: +353 1 8727177
Telefax: +353 1 8727879

GENERAL REGULATIONS OF THE DUBLIN INSTITUTE OF TECHNOLOGY

Students are admitted subject to the regulations of the Institute and its Colleges as amended from time to time.

ENROLMENT AND REGISTRATION

1. The applications and enrolment dates for courses offered in the Institute shall be as published annually by the Institute.

2. Fees must be paid in full on enrolment and before admission to class by bank giro, cash, bankers draft, money order or guarantee from a granting body.

3. Intending students should note the Entry Requirements for admission to the various courses before making an application for admission to classes or courses. The applicant may be required to attend for interview and the College must be satisfied as to his/her ability to benefit from the proposed classes or course. Approval in this respect must be endorsed on the enrolment form by the designated College authority. A College may require an applicant to pass an entrance test and/or a suitability test before admitting him/her to any class or course.

4. Only in exceptional circumstances and subject to the additional payment of a late fee of £37 will applicants be admitted after the enrolment date as referred to in 1.

5. The sole proof of enrolment in any class or course in the College is the Official Receipt for the class or course fees paid. The Official Receipt must be shown to the Lecturer on first attendance at each class of the course. Lecturers are authorised to refuse admission to classes of students who do not show their Official Receipts.

6. Fees are not refundable except where a class or course does not form.

7. New students will be issued with an Identity Card. For this purpose and for the College records students must provide, at their own expense, four identical copies of a recent photograph (not returnable) of passport type and size. The Identity Card is the Property of the College and may be demanded by the College or its officers or agents at any time. Where Identity Cards have been lost or are no longer usable the College should be informed as soon as possible and four copies of a recent photograph must again be provided in the case of first enrolment. Students should note that an appropriate charge will be made for replacement of Identity Cards.

8. The onus is on the student to notify change of address or place of employment to the Secretary/Registrar immediately.
9. The Academic Council may change any course and any or all of the examination regulations. The relevant students shall be given due notice of any such change.

10. The Director may change the day and time of any class and may cancel any class where the enrolment or attendance is considered inadequate. If for some reason a lecturer cannot attend, classes may be cancelled without notice.

11. No exchange of classes may be made after enrolment without the written consent of the Director.

12. Overseas Students

Overseas students are required to hold the Leaving Certificate of the Department of Education or the General Certificate of Education Ordinary Level in six subjects including English and Mathematics or equivalent qualification. Applicants for professional or degree level courses are also required to have a minimum of two GCE Advanced Level Subjects or equivalent.

Where requested applications must be accompanied by a letter of recommendation from the Diplomatic Representative of the Country of origin in Ireland, or, where there is no such representative, from the Ministry of Education in the country of origin. No applications will be accepted from overseas applicants for admission to part-time day or evening courses unless they are already resident in the country.

STUDENT DISCIPLINE

1. Students are expected to participate in College activities in the manner suitable to establishing a sound educational atmosphere.

2. All students are required to observe the published regulations laid down by the College.

3. Any student disrupting or causing disruption of any College activity may be suspended from College.

4. Students must at all times obey the lawful instruction of lecturers and other members of the college staff who are responsible for the maintenance of good order.

5. Misconduct in any of the Colleges comprising the Institute may lead to suspension by the Director of the student or students concerned.

6. Students are liable for the cost of repair or replacement of Institute property maliciously or negligently damaged by them.

7. Students are not allowed to smoke in the College except in areas designated for smoking.

8. Students are required to carry their Identity Card with them while in College or wherever they may be required to identify themselves as students of the College.

9. The Institute reserves the right to expel at any time any student whose conduct is in serious breach of the regulations.

10. Only College or Institute societies and clubs may advertise in the College. Students may only display posters and notices on the designated notice boards with the permission of the College Secretary/Registrar in the College concerned.

11. Student groups wishing to hold meetings in the College should make application in advance and receive the permission of the Secretary/Registrar before such meetings take place.

12. Alcoholic drink may not be brought into the building or grounds of the College without the prior permission of the Director

Students are forbidden to park cars/bicycles/motor cycles except in such places as they are authorised to do so from time to time.

13. The College Secretary/Registrar must be consulted in advance if College organisations or Students Unions propose to arrange parades, collections, demonstrations or any other activities of this kind, using the name of the Dublin Institute of Technology, or the name of any of the Colleges comprising the Institute. Approval is given on the understanding that relevant bye-laws and such conditions as are set down by the College will be observed. Notice to the appropriate public authorities where required, should be arranged well in advance. Individual students participating in the name of the College in any activity outside College remain subject to the general regulation that students conduct shall not bring the College into disrepute.

14. An appeal by a student against a decision on disciplinary matters may be made by the student through the College concerned to the Disciplinary Appeals Board of the Institute. The Board shall comprise a membership as follows:

(i) Chairman of the Institute or a member of the Governing Body nominated by the Chairman;

(ii) The President or his nominee;

(iii) A Director of another DIT College;

(iv) A Student Representative.

No member of a disciplinary committee may be a member of the Appeals board.
ATTENDANCE

1. A Student is expected to attend all subjects classes in all unless specifically exempted from doing so and a minimum attendance of 75% in all subjects of the course is required.

2. Students who fail to comply with this requirement without satisfactory explanation to the College Secretary/Registrar may be refused permission to sit college examinations, and endorsement of their entries for external examination may similarly be refused.

3. The Institute may expel any student without refund of fees, for irregular or unpunctual attendance. Three successive absences or unsatisfactory attendance from any class may lead to suspension from the entire course, unless a satisfactory written explanation is submitted to the Director.

4. Students must provide themselves with such books, instruments and equipment (including special clothing) as their classes may, in the opinion of the College, require. Safety precautions, and such other regulations as the work of the College may require, must be observed as prescribed.

5. Students are required to keep such notebooks and record books, and to undertake and submit by the dates specified such course work and assignments as specified by members of the teaching staff. Failure in this respect may lead to suspension or expulsion.

6. Apprentices should note that details of employment and the attendance of all apprentices enrolled in release courses are made available to the relevant authority and employer.

EXAMINING BODIES

The College offers courses relating to the Examinations of the following bodies:

1. Department of Education
   - (a) Technological Certificate Examination in:
     (i) Building
     (ii) Mechanical Engineering
     (iii) Motor Car Engineering
     (iv) Mathematics
   - (b) Trade Certificate Examination in:
     (i) Bricklaying and Masonry
     (ii) Cabinetmaking
     (iii) Carpentry and Joinery
     (iv) Compositors' Work
     (v) Lithography
     (vi) Bookbinding
     (vii) Motor Car Engineering
     (viii) Plasterers' Work
     (ix) Plumbing
     (x) Fitters' & Turners Work
     (xi) Toolmaking
     (xii) Metal Fabrication
     (xiii) Sheet Metalwork
     (xiv) Welding
     (xv) Painting & Decorating
     (xvi) Wood Machining

2. Professional Institutions
   - (i) Architect's and Surveyor's Institute
   - (ii) The Engineering Council
   - (iii) Institution of Engineers of Ireland
   - (iv) Institution of Mechanical Engineers
   - (v) Institution of Electrical Engineers
   - (vi) Institution of Structural Engineers
   - (vii) Chartered Institute of Building Services
   - (viii) Institution of Industrial Managers
   - (ix) Chartered Institute of Building
   - (x) Royal Institution of Chartered Surveyors
   - (xi) Royal Institute of the Architects of Ireland
   - (xii) Institution of Road Transport Engineers

3. Other Bodies
   - (i) British Federation of Master Printers
   - (ii) City & Guilds of London Institute
   - (iii) Department of Tourism & Transport (Licences in Aeronautical Engineering)
   - (iv) Institute of Motor Industry
   - (v) The Institute of Paper
DUBLIN INSTITUTE OF TECHNOLOGY GOVERNING BODY

The College operates under a Governing Body of the Dublin Institute of Technology, a joint Academic Council and an Apprentice Education Board.

MEMBERS OF DIT GOVERNING BODY
Prof. Ray Kinsella (Chairman)
Mr. Charles McManus (Vice-Chairman)
Mr. Michael O’Donnell (Acting President)
Ms. Marie Batty
Mr. Peter Burke
Ald. Pat Carey
Dr. Tony Fahey
Dr. Tom Hardiman
Ms. Phil Kenna
Mr. Niall Meghen
Ms. Deirdre Moran
Mr. Deirdre O’Brien
Mr. Michael O’Halloran
Dr. Patrick O’Meara
Mr. Frank O’Reilly
Mr. Thomas Simpson
Mr. Wolfgang Treutenschler
Ms. Joan Whelan
Mr. James Wynn

MEMBERS OF ACADEMIC COUNCIL
Mr. M. O’Donnell, MEngSc, BE, BComm, BEng, FEI, MA(hc) Euring
Mr. F. M. Brennan DipEE CEng FIEI FIERCE
Mr. A. Brown BD MA
Ms. A. Bruton BArch MRIAI RIBA MSDI ACIAHO
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Mr. D. K. Clarke BMus MusDip FTCL LTCL LRSM LMus TLC
Mr. K. Corcoran BA MA
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Mr. Chris Cowley DipEE MIEI MIEE
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Mr. James Horan DipArchMRIAI
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Mr. E. Kelly BA (MOD) MSc Manag Sc

Dr. M. Keating BA(Mod) PhD FICI FIMLS HDipEd
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Mr. R. J. Lawlor BA MBA MIHCII
Dr. D. McGuinness BFA MSDI
Mr. F. McMahon BComm MBA MIHCII
Mr. O. McNulty CEng FIEI ARTCS MStrucE
Mr. R. Mahony BE, MEng MStrucE MIIE
Mr. M. Murphy DipEng MSc CEng MI MechE
Mr. C.J. Nutty BA MPA FMS
Mr. D. O’Brien (Student Representative)
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Mr. Paul O’Sullivan MA BA
Dr. M. Proctor MSc PhD MISTI MIHCII
Mr. E.J. Rothery BSc CChem FRIC FICI MI Biol
Ms. B.A. Ryan BSc MSc CBiol DiplInd Microb
Mr. J.F. Ryan MA BComm DPA
Mr. J.K. Taffe BSc MSc CPhys MInstP MBA HDipEd DipProd Barrister-at-Law
Ms. K.M. Tierney MA
Mr. G. Walker BA HDipEd MRP MIPI
Mr. J. Bernie TEng(CEI) MInstG TechE (Apprentice Education Board Observer)
Mr. T. Duff (Academic Registrar) BSc CEng MIProdE

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Mr. K. O’Farrell
Mr. P. O’Neill
Mr. D. Tutte IEng MIMI MIRTE SIMI
ACADEMIC STAFF

SCHOOL OF ARCHITECTURE, SURVEYING AND BUILDING

Head of School: Gerald Walker BA HDip Ed MRP MIP"I

Department of Architecture and Town Planning

Head of Department: James Horan Dip Arch MRlAI
Assistant Head: Sean Gaynor Dip Arch MRlAI

Staff Lecturers
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Niall Downes BArch MRlAI
Michael Fewer Dip Arch MRlAI
Francis Ford BArch and UD Dip Arch MRlAI
Robert Fowler Dip Arch MRlAI
William Gilligan BArch FRIA
Dermot Healy Dip Arch MRlAI
Fergus A Hogan Dip Arch MRlAI
John Lauder BE DipEng (MGT) Dip Eng Comp
Peter S Manning BArch MRlAI
Valerie Mulvin BArch MRlAI
Eamonn O'Doherty BArch MRlAI
Desmond O'Dwyer DipArch
Edmund O'Shea Dip Arch MRlAI
Martin Ridge DipArch MRlAI
Duncan Stewart BArch MRlAI

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Liam Carlin MArch MRlAI, ARIBA
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Barbara O'Doherty
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Neil Sollohd Dip Arch MRlAI
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Department of Surveying and Building Technology

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Robert Fowler Dip Arch MRlAI
Dermot Healy Dip Arch MRlAI
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Eamonn O’Doherty BArch MRlAI
Desmond O’Dwyer DipArch
Edmund O’Shea Dip Arch MRlAI
Martin Ridge DipArch MRlAI
Duncan Stewart BArch MRlAI

School of Engineering

Head of School: Michael Murphy Dip Eng MSc CEng MMeche
Department of Engineering Technology

Head of Department: Oliver McNulty Eur Ing CEng FIEE ARICS

Assistants:
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Neil Gillespie CEng MMeche MIEI
Joseph Kidangan BE CEng MStructE MIEI
Matthew Russell MSc CEng FIEE MProteCcert Ed U of London

Staff Lecturers
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Donal Cooper MCIOB
Frank Corcoran BCL
Eamon Donnelly Dip Geo-Surv MInst CES
Brendan Dunne MCIOB FIAS
Timothy Enright ARICS
Martin Hanatty Dip Com Econ ARICS
Frank W. Harte Dip Arch MRlAI
John McCarthy BArch
Sean McCarthy BE
Eugene McGovern Dip Geo-Surv MInst CES
Declan McKewon Dip Eng Econ MSc ARCS, AIB Arc
Audrey Martin Dip GeoSurv
John Molloy ARICS Dip E Econ
Kevin Mooney MSc Dip Geo-Surv Inst CES
John O' Donohoe FCA, ATII
Cornelius O'Shea BSc Dip Arch BArch Sc MRlAI
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Rory Walsh ARICS
Mary McLaughlin MSc
Tabitha Walshbe MIE CEng MIEI

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Yvonne Kilkenny Dip Geo-Surv
Tom Conney
Joe O'Byrne FCIOB
Timothy O'Halloran FRICS
Niamh O'Reilly DipGeoSurv

Examiners
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Michael Coyle
Paul Cross
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Michael Patchett MCIOB
Clive Scott
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Adrian Wood ARICS

School of Science, Mathematics & General Studies

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Apprenticeship Area: Philip Murray BE MAI MPA MIEI
Head of Computing: John Turner BE MEngSc

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John J. Doherty BA
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Brendan Duff BSc
Margaret Duignan BSc HDip Ed
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Assistant Head: John M. Foley BA (Econ) MIOP FTC (C&G) LCG

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Terrance Farrelly-Smith (Temp Post)
Edward Horan ACC (C&G)
Padraig O'Dalagh BA FTC & CCG TTD
Vincent O'Leary ACC (C&G)
Kenneth Richards Final C&G

Part-time Staff
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James Davidson FTC (C&G)
Linda Dempsey Cert. Pint Tech
Eileen Farmer TD Dip
John Greene Dip Graphic Repro.
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Joseph Lynch
Terence McCormack
Stanley McDonnell FTC (C&G)
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Joseph Reddin FTC & CCG LCG
Edward Ryan BA
Derek Simon AIT
Frederick Snowe ACC (C&G)
Brendan Somers
Anthony Thursby ACC (C&G)

External Examiners
Raymond Bannon MA GradOP CertEd HND
Walter Bunadini MCSD MSlD
John Coughlan
Michael Seaton NDD AA (Mana) MSTC

 Department of Metal Fabrication and Plumbing

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Edward Donovan Final C&G Eng MIET

Whole-time Staff
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Patrick Carpenter FTC (C&G)
Thomas Colley Final C&G Tech MIP
Derek Cummins C&G Tech
Daniel Gahan Final C&G
Brian Gilbert Final C&G
J. William Jackson Final C&G Tech
Denis Lynch Adv C&G MBF EngTech
Gabriel McGreer Final C&G
Michael McKeough Final C&G Tech MIP
Paul McMullen Final C&G
James McSweeney Final C&G Eng
Michael Nicholson C&G Tech
Seanus O'Connell Final C&G
Paul Sherlock Final C&G Tech
John Smartt Eng Tech MIP LCG

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Jeremiah Bradley
Martin Carroll
John Donohoe
Seamus Dowling
Ray English
James French Tech Ref
Michael Gleeson
Peter Grainger
James Hassey
David Kelly

External Examiners
Kevin O'Rourke BE MIE

Mr. Michael O'Donnell
Acting President DIT

Mr. Michael Murphy
Acting Director

Mr. Michael Marnane
College Secretary/Registrar

Mr. Joe Bernie
Head of School Construction Trades

Mr. Gerald Walker
Head of School Architecture, Surveying & Building

CHAPLAINS
Catholic: Rev. Michael Foley SSCC
Sr. Rosemary McGowan RSC

Church of Ireland — Rev. Nigel Dunne
Presbyterian — Rev. A.V. Martin

PHYSICAL EDUCATION
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Mr. James Horan  
Architecture & Town Planning

Mr. Brian Kennedy  
Printing & Graphic Communication

Mr. Dominick Tuite  
Transport Engineering

Mr. Eanna de Búrca  
Surveying & Building

Mr. Derry Cotter  
Mathematics, Science & General Studies

Mr. Patrick Kelly  
Construction Trades

Mr. Oliver McNulty  
Engineering Technology

Mr. Robert Eustace  
Engineering Trades

Dr. Patrick McCormack  
Industrial Liaison Officer

Mr. Peter Cahalane  
College Librarian
FOREWORD

BY THE

ACTING PRESIDENT

This booklet has been prepared to provide you with information about the whole time courses offered by Bolton Street College and how to apply for them. We are aware of the difficulties facing young people in deciding on careers and selecting the most suitable course to prepare for them and hope that you will find the booklet informative and helpful. We encourage you to consider carefully the course options that we have to offer in this College.

Since the Bolton Street College is but one of the six that form the Dublin Institute of Technology, each of which plays a complementary role in the provision of third level education, its range of programmes is necessarily concentrated. We offer considerable opportunities for those wishing to prepare for the important professions in Architecture, Engineering and Surveying and careers related to them disciplines in Construction, Manufacturing and Transport. College is also the main centre in Ireland preparing young people for entry into the Printing Industry. Each of these sectors make a vital and major contribution to the economy and consequently should offer many challenging and rewarding job opportunities in the decades ahead.

There are many things one could say about the College and its programmes which may interest you. It is a technological college institution with the prime objective of assisting young people acquire the knowledge and expertise necessary for fulfilling careers. Our well qualified and experienced staff and the record of achievements of its graduates is something of which it is justifiably proud. If you decide to apply and obtain a place, we hope that you will enjoy your stay with us.

Michael O'Donnell

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DEGREE LEVEL COURSES PROCESS THROUGH THE CAO/CAS DEGREE LIST

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CERTIFICATE, DIPLOMA AND OTHER COURSES
PROCESSED
THROUGH THE CAO/CAS DIPLOMA/CERT. LIST

<table>
<thead>
<tr>
<th>College</th>
<th>Course Code</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT102</td>
<td></td>
<td>Architectural Technician Diploma</td>
</tr>
<tr>
<td>DT114</td>
<td></td>
<td>Construction Technician Certificate and Diploma</td>
</tr>
<tr>
<td>DT115</td>
<td></td>
<td>Geo-Surveying Technician Certificate and Diploma</td>
</tr>
<tr>
<td>DT116</td>
<td></td>
<td>Auctioneering Valuation and Estate Agency Certificate and Diploma</td>
</tr>
<tr>
<td>DT120</td>
<td></td>
<td>Preliminary Engineering Course</td>
</tr>
<tr>
<td>DT126</td>
<td></td>
<td>Civil Engineering Technician Certificate and Diploma</td>
</tr>
<tr>
<td>DT127</td>
<td></td>
<td>Building Services Engineering Technician Certificate and Diploma</td>
</tr>
<tr>
<td>DT128</td>
<td></td>
<td>Mechanical Engineering Technician Certificate and Diploma</td>
</tr>
<tr>
<td>DT130</td>
<td></td>
<td>Technician Certificate in Printing and Diploma in Printing Management</td>
</tr>
<tr>
<td>DT131</td>
<td></td>
<td>Graphic Reproduction Technology Diploma (Application for admission to this course must be made directly to the College.)</td>
</tr>
<tr>
<td>DT150</td>
<td></td>
<td>Technician Certificate in Transport Engineering/Diploma in Motor Industry Management</td>
</tr>
<tr>
<td>DT171</td>
<td></td>
<td>Buildings Maintenance Technician Certificate</td>
</tr>
</tbody>
</table>

Location Map

APPLICATION PROCEDURES FOR 1994 ENTRY

Significant changes have been introduced into the application procedures for entry into wholetime third-level courses in recent years, with the objective of eliminating the necessity to make multiple applications to the CAO, DIT, individual RTCs etc. and paying multiple application fees.

The CAO (Central Applications Office) had been established in 1976 to process applications centrally for admission to undergraduate courses in universities and other colleges in an efficient and equitable manner. DIT used the CAOs services for a number of years to process applications for all its degree courses while it operated a separate DIT applications system for its other courses.

A new organisation was established in 1990 known as CAS (Central Applications Service) for the purpose of dealing with applications to the Irish third-level technological Colleges on a centralised basis. Its membership is representative of the six Dublin Institute of Technology (DIT) Colleges, the nine Regional Technical Colleges, Limerick College of Art, Commerce and Technology (CoACT), and the Crawford College of Art and Design.

The CAO and CAS organisations entered into an arrangement in 1990 whereby applicants, using a single application form, may choose from the entire range of courses in the CAO and CAS systems. There are two sections on the application form for the 1994 entry and using these an applicant may choose

(a) up to ten courses in order of preference from the courses included under the title 'Degree List Choices' in the CAO/CAS handbook (which includes all DIT Degree courses).

(b) up to ten courses in order of preference from the courses included under the title 'Diploma/Cert List Choices'. This includes all wholetime Certificate, Diploma and non degree courses offered by the DIT and other technological colleges.

The joint CAO/CAS applications system is administered from the CAOs premises at Tower House, Eglington Street, Galway. Copies of the 1994 CAO/CAS Handbook which provides all relevant information about the joint application system and the courses which are included in it are available on request from the CAO/CAS as are Application Forms.
**Application Fees**

<table>
<thead>
<tr>
<th>Type</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irish and other EC Applicants (ordinary fee)</td>
<td>£17</td>
</tr>
<tr>
<td>Late applications (received between 2 February and 1 March)</td>
<td>£26</td>
</tr>
<tr>
<td>Late applications (received after 1 March)</td>
<td>£34</td>
</tr>
<tr>
<td>Overseas applicants (ordinary fee)</td>
<td>£34</td>
</tr>
</tbody>
</table>

**Closing Dates**

<table>
<thead>
<tr>
<th>Type</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irish and other EC Applicants</td>
<td>1 February 1994</td>
</tr>
<tr>
<td>Overseas Applicants</td>
<td>15 December 1993</td>
</tr>
</tbody>
</table>

Due to the inclusion of Aptitude Tests and other assessments as part of the selection process, applications received after 1 February 1994 cannot be considered for the Architectural courses, F101 in the CAO List, and DT102 in the Diploma/Cert. List.

Late applications will not be considered for any special category applicant for entry into the first year of courses if received after March 31st 1994 (see pages 4.8 and 30 of CAO/CAS joint handbook).

Late applications will not be considered from Overseas applicants if received after 31 March 1994.

With the exception of the two Architectural courses referred to above late applications in respect of all other courses offered by the College and included in the Degree and Diploma Cert. lists will be considered from Irish and other EC applicants if received by 1 May, 1994.

**Change of Mind Procedure**

After an application is submitted an applicant may change his/her course choices as often as he/she wishes up to 1 July.

These facilities are not available to applicants for the Architectural courses, F101 in the Degree List, and DT102 in the Diploma Cert. List for the reasons already indicated in a previous section.

**Further Information**

Further information about the Joint CAO/CAS Application System for 1993 entry are given in the CAO/CAS Handbook and on the Application Form, both of which are available from:

- **CAO / CAS**, Tower House, Eglinton Street, Galway.
- **Tel:** 091 63318/63269  
  **Fax:** 091 63244

Applicants should read carefully the CAO/CAS Joint Handbook 1994 before submitting an application.

---

**College Degree Level Courses in the 1994 CAO/CAS Degree List**

The following degree level courses offered by the college are in the CAO/CAS Degree List.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Course Duration (Years)</th>
<th>Minimum Entry Points 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT101 ARCH DEG</td>
<td>Architecture</td>
<td>5</td>
<td><strong>328</strong></td>
</tr>
<tr>
<td>FT110 PE DEG</td>
<td>Property Economics</td>
<td>4</td>
<td>390</td>
</tr>
<tr>
<td>FT111 CEN DEG</td>
<td>Construction Economics</td>
<td>4</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Building Services Eng.</td>
<td>4</td>
<td>295</td>
</tr>
<tr>
<td></td>
<td>Mechanical Engineering</td>
<td>4</td>
<td>295</td>
</tr>
<tr>
<td></td>
<td>Production Engineering</td>
<td>4</td>
<td>295</td>
</tr>
<tr>
<td></td>
<td>Structural Engineering</td>
<td>4</td>
<td>295</td>
</tr>
</tbody>
</table>

*These four courses have a common First Year. The allocation of Second Year places on one or other of the courses will as far as possible be in accordance with the students choice, subject to availability. The final assignment of places in the Second Year of the courses will be at the discretion of the Department of Engineering Technology in the College.

**Includes aptitude and interview test scores.**
**Colleges Certificate/Diploma and Other Courses in the CAS List**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Course Duration (Years)</th>
<th>Minimum Entry Points 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>DT102 ARCTEC</em></td>
<td>Architectural Technician Diploma</td>
<td>3</td>
<td><strong>430</strong></td>
</tr>
<tr>
<td><em>DT114 CONSTR</em></td>
<td>Construction Technology Certificate/Diploma</td>
<td>2/3</td>
<td>315</td>
</tr>
<tr>
<td><em>DT115 GOSUR</em></td>
<td>Geosurveying Certificate/Diploma</td>
<td>2/3</td>
<td>320</td>
</tr>
<tr>
<td><em>DT116 AUCVAL</em></td>
<td>Auctioneering Valuation &amp; Estate Agency Certificate/Diploma</td>
<td>2/3</td>
<td>345</td>
</tr>
<tr>
<td><em>DT120 PRIENG</em></td>
<td>Premiminary Engineering</td>
<td>1</td>
<td>325</td>
</tr>
<tr>
<td><em>DT126 CIVENG</em></td>
<td>Civil Engineering Technician Certificate/Diploma</td>
<td>2/3</td>
<td>335</td>
</tr>
<tr>
<td><em>DT127 BSVEG</em></td>
<td>Building Services Engineering Technician Certificate/Diploma</td>
<td>2/3</td>
<td>255</td>
</tr>
<tr>
<td><em>DT128 MECEG</em></td>
<td>Mechanical Engineering Technician Certificate/Diploma</td>
<td>2/3</td>
<td>335</td>
</tr>
<tr>
<td><em>DT130 PRINTG</em></td>
<td>Printing Technician Certificate/Diploma in Printing Management</td>
<td>2/3</td>
<td>295</td>
</tr>
<tr>
<td>DT171 BLMNT</td>
<td>Buildings Maintenance Technician Certificate</td>
<td>1</td>
<td>220</td>
</tr>
</tbody>
</table>

*ESF Grants may be available for students pursuing these courses, provided that they qualify under the means test regulations.
**Includes aptitude and interview test scores.*

**Educational Requirements and Selection Procedures for Entry into First Year of College Degree Courses in 1994**

(a) Courses FT101, FT111, FT110: Irish Leaving Certificate with passes in six subjects, two of which must be at Grade C3 or higher on higher level papers or an acceptable equivalent qualification. The six subjects must include Mathematics and English or Irish.

(b) Course FT125: Irish Leaving Certificate with passes in six subjects including Grade C3 or higher on higher level papers in Mathematics and one of the following subjects: Physics, Chemistry, Physics with Chemistry, Applied Mathematics, Construction Studies and Engineering or an acceptable equivalent qualification. The six subjects must also include English or Irish.

**Selection Procedures**

Applicants are ranked in order of educational score merit in accordance with the points system shown below, allocated to the results of six subjects obtained in one Leaving Certificate examination which will yield the highest score. If an applicant presents two or more Leaving Certificate examinations the one yielding the best score will be credited. Generally demand exceeds the number of places available and qualifications well above the minimum are required.

(i) In the case of the Architectural course FT101 applicants may be required to take an aptitude test in March/April. Applicants who demonstrate a particular suitability in this test are invited to an interview assessment. A maximum of 100 points are awarded for the applicant's performance in the aptitude test and up to a further 100 points for the interview assessment. The results of the aptitude test and the interview assessment are combined with the total educational points scored in the six subjects as specified to produce an overall rating.

(ii) In the case of the professional/degree level courses in Surveying and Engineering (i.e. FT111, FT110, FT125) the selection is based on the educational score in six subjects as already described.

**Points System Applied to Computing Educational Scores in Relation to Courses in Both the CAO and CAS Lists in 1994**

<table>
<thead>
<tr>
<th>Leaving Certificate Grade</th>
<th>Points for Higher Levels</th>
<th>Points for Ordinary Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>100</td>
<td>60</td>
</tr>
<tr>
<td>A2</td>
<td>90</td>
<td>50</td>
</tr>
<tr>
<td>B1</td>
<td>85</td>
<td>45</td>
</tr>
<tr>
<td>B2</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>B3</td>
<td>75</td>
<td>35</td>
</tr>
<tr>
<td>C1</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>C2</td>
<td>65</td>
<td>25</td>
</tr>
<tr>
<td>C3</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>D1</td>
<td>55</td>
<td>15</td>
</tr>
<tr>
<td>D2</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>D3</td>
<td>45</td>
<td>5</td>
</tr>
</tbody>
</table>

*Note: (a) The six best results in one Leaving Certificate examination will be counted for points computation.
(b) The results of only one sitting of the Leaving Certificate Examination will be counted.*
QUALIFICATIONS OTHER THAN THE IRISH DEPARTMENT OF EDUCATION LEAVING CERTIFICATE

The College gives consideration to qualifications other than the Leaving Certificate as meeting the entry requirements for its courses (such as the GCE or other qualification of equivalent standard). In accordance with a decision already announced, the NUI Matriculation is not acceptable as an appropriate DIT entry qualification since 1990.

Applicants for degree level courses may present a General Certificate of Education (GCE) with passes in six subjects including at least two at Advanced level. Overseas applicants must also satisfy the College as to their proficiency in written and spoken English.

Grades A, B and C at GCE Advanced Level meet the higher level paper requirements for degree courses. Grades D and E at GCE Advanced Level and Grades A, B and C at Ordinary Level GCSE are regarded as equivalent to ordinary Leaving Certificate passes.

EDUCATIONAL REQUIREMENTS AND SELECTION PROCEDURES FOR ENTRY INTO THE FIRST YEAR OF COLLEGE CERTIFICATE, DIPLOMA AND OTHER NON-DEGREE COURSES

Educational Requirements
Leaving Certificate with passes in five subjects including Mathematics and English or an equivalent qualification.

Selection Procedures
Eligible applicants are ranked in order of educational score merit in accordance with the points system shown in the previous section. Educational points are allocated to the results of the best six subjects obtained in one Leaving Certificate examination. If only five subjects are presented and the candidate meets the eligibility requirements they will be used to give the applicant's educational score.

(i) In the case of the Architectural Technician Course DT102, applicants may be required to take an aptitude test in March / April. Applicants who demonstrate a particular suitability in this test are invited to an interview assessment. A maximum of 100 points are awarded for the applicants performance in the aptitude test and up to a further 100 points for the interview assessment. The results of the aptitude test and the interview assessment are combined with the educational points scored in the best six Leaving Certificate subjects (or five if only that number is presented) to produce an overall rating.

(ii) In the case of all other courses (i.e. DT114, DT115, DT116, DT120, DT126, DT127, DT128, DT130, DT150 and DT171) the selection is based on the educational points scored in the best six subjects in the Leaving Certificate (or five subjects if only five are presented). The minimum points scores necessary to gain entry to the Certificate and Diploma Courses in 1992 are shown in the table on page 2.10. Please note that the score for Course DT102 includes points for the aptitude test, the interview and the Leaving Certificate results.

Special Category Applicants
A number of different categories of applicants are processed as special cases. All such applicants seeking admission to the First year of any of the College courses listed in CAOICAS Handbook should apply directly to CAOICAS using the standard application form by the specified closing date. When returning the completed form applicants should ensure that pages 3 and 4 are fully completed and include all documentary evidence available, including examination results, in support of their applications. Further information about a number of the different categories is given on page 3 of the CAOICAS joint handbook. The following notes are intended to complement that information in relation to this college.

(a) Mature Applicants: A mature applicant in respect of 1994 entry is defined as a person who is at least 23 years of age on January 2nd 1995. Where such an applicant does not meet the normal minimum admission requirements he/she may be considered for admission to an appropriate course after attending in person for interview and satisfying the College Authorities as to his/her ability to benefit from the proposed course. Such applicant may be required to sit and pass an entrance or suitability test before admission. The application should clearly indicate Mature category in the space provided on page 3 of the CAOICAS application form.

(b) Overseas Students: Overseas students seeking admission to the College should apply to CAOICAS not later than 15th December, 1993 using the standard application form available on request. When completed this should be forwarded with documentary evidence of qualifications in English (translations should be certified by an appropriate authority) showing subjects passed, levels and grades obtained.

Because of the large number of applications received each year from qualified Irish applicants, and the limited number of places available, the College regrets that it may have to limit admission of overseas applicants to the small quota of places reserved for those who are sponsored by official agencies linked to Ireland's development aid programme.
(c) Trade Students: Students holding the Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a science subject satisfy the minimum eligibility requirements for courses in the DIT Colleges which specify a pass in five subjects in Leaving Certificate Examination as the entrance requirement. Students holding this Certificate with three endorsements in academic subjects are eligible for consideration for entry into related professional/degree level courses provided that they also meet any special entry requirements (e.g., Higher Level Mathematics for Engineering courses). Where endorsement subjects are not offered in the trade examinations, a pass in an appropriate subject of the Elementary Technological Certificate Examinations of the Department of Education is an acceptable equivalent.

(d) Holders of N.C.E.A. National Certificates and Diplomas or Similar Level Awards: Applications for entry into the First year of any of the College's courses should be made using the standard CAO/CAS application form.

Applicants seeking admission into the Second or subsequent years should contact the College or DIT Admissions Office for a special application form and further information about the procedures. The closing date for such applications is 1st May, 1994.

Such applicants should request their former College to forward in confidence to the DIT Admissions Office, 14 Upr. Mount St., Dublin 2, a full transcript of results (including subjects studied and grades obtained) as soon as they are available but in any event not later than 10th July. The applications will not be processed until this has been received.

(e) Applicants Seeking Exemptions from one or more years of a College Course: The general procedure is as in (d). Such applicants should ask their former College to forward in confidence to the College Admissions Office, a full transcript of previous attainments which it is claimed will justify the exemptions sought. The application will not be processed until this is received.

(f) Transfer/Re-Entry Applications: Current students who wish to transfer from one course to another within the College or previous wholetime students who wish to re-enter the College into a year other than the First Year should make a written application to the College Admissions Office (Room 315), stating clearly what is being sought and on what basis.

Queries relating to Special Category Applicants should be directed in the first instance to the College Admissions Office or to the Head of the appropriate Academic Department in the College.

OFFERS AND ACCEPTANCE IN 1992

Applicants will be assessed in accordance with the procedures already indicated and offers of places will be issued simultaneously, where appropriate, in respect of the CAO List and the CAS List. While it is possible that an applicant may receive two offers (in respect of each list in accordance with the preference(s) entered) acceptance must be confined to one of them. Otherwise any offers made may have to be withdrawn.

Acceptance Procedure

The acceptance procedure involves completing the appropriate section of the Offer Notice and returning it by the specified date after it has been duly stamped by a Bank to confirm that the required acceptance deposit has been paid. Further information about the Offer and Acceptance procedure is given on page 5 of the CAO/CAS Joint Handbook 1994.

The College will communicate in writing with the successful applicants for its courses in early September, advising them of registration procedures and the commencement date of classes (which is expected to be during the third week of September).

Students attending for registration are required to present the following documentation:

(a) the CAO/CAS offer notice carrying a bank stamp confirming acceptance,
(b) four copies of a recent passport photograph signed on the back,
(c) other documentation as requested.

An applicant who is offered a place in a course which is not his/her first preference may subsequently be offered a place in a course of higher preference if such a place becomes available. This applies whether or not the earlier offer has been accepted by the applicant.

The acceptance deposit is transferrable if paid in respect of an offer made in an earlier round to that in a later round, even between different colleges or institutions (provided of course they are involved with the CAO/CAS application system).

Deferral of Entry

If an applicant is offered a place on a course, it may be possible to defer entry for one year. An applicant wishing to avail of this facility should write as soon as possible after receiving the offer to the DIT Admissions Officer, 14 Upr. Mount Street, Dublin 2, stating the reasons for seeking a deferral for one year. The letter should be received at the DIT Admissions Office at least two days before the closing date for acceptance of the offer.
FEES, GRANTS AND SCHOLARSHIPS

Fees are payable before commencing attendance at classes and are not refundable except where a class or course does not form. An enrolment is not transferable from one student to another. Enrolment/registration is only complete when a student is issued with his/her official College Student Card. This must be retained by the student for inspection by staff at any time while he/she is in the College.

Fees for all courses for Session 1993/94 are listed on page 1. Please note that fees are likely to be revised in respect of Session 1994/95.

(a) Local Authority Grants: Students who register for Diploma/Degree level courses conducted by the College are eligible to apply to the Local Authority where their parents or guardians normally reside for a Higher Education Grant. Information on eligibility conditions and application forms are available from the appropriate Local Authority (County Council or Corporation).

(b) VEC Scholarships: Students who register for courses leading Diploma/Degree awards which do not benefit from ESF Training Grants may be eligible to apply to the Vocational Education Committee of the area where their parents or guardians normally reside for a VEC Scholarship. Information on eligibility conditions and application forms are available from the appropriate Vocational Education Committee.

Note: Both Local Authority Grants and VEC Scholarships are of the same value and an applicant is not entitled to hold both simultaneously.

(c) ESF Training Grants: ESF (European Social Fund) training grants may be available to EC students aged over 16 years while they are pursuing certain two or three year courses provided their attendance record and general performance is satisfactory. These grants cover tuition fees and also provide for payment of a monthly allowance. The courses which were included in the scheme for the 1992/93 session are marked by a double asterisk(*) in the Table on page 2.10. For Session 1992/93, a grant of £16.16 per week (full attendance) was payable to students who travel or who could reasonably be expected to travel daily between their home and the College, or whose home is within 15 miles of the College. A grant of £40.58 per week (full attendance) was payable to other eligible students. The maintenance allowance for students entering the first year of courses which are eligible for ESF grants has been subject to means testing as from 1st September, 1992. Such students will not be required to pay tuition fees.

(d) Ivan Webb Scholarships: The Construction Industry Federation and the Master Builders Association have established a scholarship fund to commemorate the late Ivan Webb, a former Council member of both bodies, who was killed in the Stansted air disaster. The object of the scholarship fund is to assist students in pursuing their course of study. The scholarships apply to full-time and part-time Construction Technician Courses in the College and are awarded on the following basis: One scholarship valued at £500 to the student attaining the highest place in the results of the year’s work and examinations in the first year of the full-time course and two scholarships valued at £250 each to the two students attaining the highest places in the year’s work and examinations in the second year of the part-time course.

(e) The G.H. Minet Insurance Co. Scholarship: This company, in association with the Construction Industry Federation, has initiated a scholarship scheme which is open to students who have completed a construction trade apprenticeship and have gained admission to designated construction related whole time courses conducted by the College. The scholarship will be advertised locally within the College and may have a value of up to £1,000 per annum. Enquiries about it should be directed to the Principals Office.

(f) BETA Scholarships: These are offered by the Engineering Graduates of the College to nominated students in the whole time degree level Engineering courses who achieve particularly a meritorious performance in the previous year of their course. The BETA Silver Medal is awarded to the outstanding Engineering degree graduate each session.

(g) Bank Loans: The major banks are prepared, under normal circumstances, to consider applications from students for loans, and enquiries about these should be directed to the banks.
THE PAGES THAT FOLLOW GIVE DETAILS OF THE WHOLETIME COURSES OFFERED BY THE COLLEGE

FOR FURTHER INFORMATION CONTACT

College Admissions Office (Room 315)
Officer in Charge: Mr. Liam Cooke

Architecture and Town Planning (Room 441)
Mr. James Horan (Dept. Head)

Surveying & Building Technology (Room 341)
Mr. Eanna De Búrca (Dept. Head)

Building Maintenance (School of Trades)
Mr. Joseph Bernie (Head of School)

Engineering Technology (Room 241)
Mr. Oliver McNulty (Dept. Head)

Transport Engineering (Room 119)
Mr. Dominic Tuite (Dept. Head)

Printing & Graphic Communications (Room 217)
Mr. Brian Kennedy (Dept. Head)

College Secretary/Registrar
Mr. Michael Marnane

College of Technology
Bolton Street
Dublin 1.
Tel. 01-8727177
Fax 01-8727879

DIT Admissions Office
14 Upper Mount Street
Dublin 2.
Tel. 01-6766584
Fax 01-6762608

Details of part-time and craft apprenticeship courses are given in another section/publication.
Award

Graduates of this course are eligible for the following awards:
- Diploma in Architecture (Dublin Institute of Technology)
- Bachelor of Architectural Science (University of Dublin).

They are also eligible on graduation for Associate Membership of the Royal Institute of the Architects of Ireland. Following two years of post graduate experience they may take the Institute's examination in Professional Competence and thus become members of the RIAI.

The Diploma in Architecture of the College is a qualification which is recognised for the profession of architect in member States of the European Community.

Career Opportunities

The qualification is for the profession of Architect. Architects are concerned with the design of buildings and supervision of building projects. They may practice in a personal professional capacity, or in employment in private and public sector organisations. The field of practice is quite extensive in Ireland and abroad and may offer alternatives of general practice or specialisation throughout a career. Some graduates spend a time abroad to gain wider and more varied design experience.

The course and the career require a creative aptitude for architectural design and the organisational ability for its implementation in practice. The range of subject material in the course is wide, and calls for an interest and ability in artistic and cultural aspects as well as in technical matters and in managerial skills.

Further Information

Mr. James Horan,
Department of Architecture and Town Planning.
Telephone (01) 8727177.

Course Outline

**First Year:**

**Second Year:**

**Third Year:**

During this year students undertake a major integrated project.

**Fourth Year:**
- Planning, Urban Economics, Valuations, Taxation.

In the Fourth Year each student prepares a major dissertation as part of the Final Examination.

Duration

Four years wholetime.

Location

D.I.T. Bolton Street.

**PROPERTY ECONOMICS DIPLOMA/DEGREE B.Sc (Surv)**

Course Description

This is a four year wholetime course which prepares students who wish to make their careers in Valuation Surveying, Property Management and Investment, and Estate Agency. It is also suitable for those interested in Property Development and Town Planning. Graduates may be employed as valuers, estate agents, property advisors, developers and planners. The course provides an education in the financial, legal, planning and construction aspects of property in the context of the investment market in general and it provides students with a thorough understanding of the economic functioning of the built environment.

Students reviewing Architectural project with their lecturer.
The minimum educational qualification required for entry is the Irish Leaving Certificate with passes in six subjects, at least two of which must be at Grade C3 or higher in the higher level course or equivalent qualifications. The six subjects passed must include Mathematics and English.

Graduates of this course are eligible for the following awards:
- Diploma in Property Economics (Dublin Institute of Technology)
- Bachelor of Science (Surveying) (University of Dublin).

Upon successful completion of a test of professional competence, holders of these awards are eligible for Corporate Membership of the Royal Institute of Chartered Surveyors (General Practice Division). They are exempted from the Intermediate Examination of the Royal Town Planning Institute and are also accepted for entry to appropriate post-graduate courses in Ireland and abroad. The course is also recognised by the Irish Auctioneers and Valuers Institute.

The qualification is for the profession of Chartered Surveyor, which includes occupations in the field of construction and property management.

Property Economists are concerned with the broader areas of land and property development, valuation surveying, estate management and town planning. They are employed in private and public organisations such as property development companies, valuation consultants, local authorities and the national valuation office.

The courses and careers in the discipline of Surveying call for an interest and ability in the financial and legal aspects of the construction industry, and in the managerial skills applied to building and property developments.

To date, Property Economists have obtained suitable employment mostly in private practice, but also in areas such as the financial investment departments of banks and insurance companies.

Mr. E. De Búrca,
Department of Surveying and Building,
Telephone (01) 8727177.

First Year:

Second Year:

Third Year:

Fourth Year:
Building Economics, Construction Administration & Management, Tender Documentation.

In the Fourth Year, each student prepares a major dissertation as part of the Final Examination.

Four years wholetime.

D.I.T. Bolton Street.

Entry Requirements
The minimum educational qualification required for entry is the Leaving Certificate with passes in six subjects, at least two of which must be at Grade C3 or higher in the higher level course or equivalent qualifications. The six subjects must include Mathematics and English.
Graduates of this course are eligible for the following awards:

**Diploma in Construction Economics** (Dublin Institute of Technology)

**Bachelor of Science (Surveying)** (University of Dublin).

Upon successful completion of a test of professional competence, holders of these awards are eligible for Corporate Membership of the Royal Institute of Chartered Surveyors (Quantity Surveyors Division), and the Architects and Surveyor’s Institute. The Chartered Institute of Building requires graduates to undergo an additional examination in management subjects and satisfy an interview board as to their professional experience before admitting them to membership. Graduates are also accepted for entry to appropriate post-graduate courses in Ireland and abroad.

### Career Opportunities

The qualification is for the profession of Chartered Surveyor, which includes occupations in the field of construction and property management.

The Construction Economist is concerned with the more detailed aspects of the construction and site development. He/she may specialise as a quantity surveyor, in which case he/she analyses building design for purposes of cost planning, and, later, detailed tendering and cost control. Alternatively he/she may practice as a building manager with responsibility for the organisation of contracts, for labour, materials, plant, and negotiations with main and sub-contractors. The courses and careers in the discipline of Surveying call for an interest and ability in the financial and legal aspects of the construction industry, and in the managerial skills applied to building and property developments. In general, Construction Economics Graduates have obtained employment in quantity surveyors offices and in the construction industry with contractors and developers.

### Further Information

Mr. E. De Búrca, 
Department of Surveying and Building, 
Telephone (01) 8727177.

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**ENGINEERING DEGREE**

This is a four year wholetime course which prepares students for a career in Engineering up to and including the highest levels of responsibility. There is a common first year at the end of which students branch out into the following specialities:

- **FT121** Building Services
- **FT122** Mechanical
- **FT123** Manufacturing (option at the end 2nd year Mechanical)
- **FT124** Structural

A good mathematical and analytical ability is required for all specialities. Students are encouraged to obtain suitable summer employment in the industry to supplement their studies.

### Course Outline

Common first year Mathematics, Mechanics, Engineering Drawing, Engineering Technology, Physics, Materials Science, Professional Development, Workshop, Laboratory Work, Computing and German.

### Duration

Four years wholetime.

### Location

D.I.T. Bolton Street.

### Entry Requirements

The minimum educational qualifications required for entry are the Leaving Certificate in six subjects with Grade C3 or higher on higher level papers in Mathematics and a suitable Science subject (i.e. Physics, Chemistry, Physics with Chemistry, Applied Mathematics, Construction Studies and Engineering) and a pass in four other subjects which must include English or an equivalent qualification.

### Award

Graduates of this course are eligible for the following awards:

- **Diploma in Engineering** (Dublin Institute of Technology)
- **Bachelor of Science (Engineering)** (University of Dublin)

They are eligible for Membership of the Institution of Engineers of Ireland and are also accepted for entry to appropriate University post-graduate courses in Ireland and abroad.
Building Services Engineering

Second Year:

Third Year:

Fourth Year:
Mathematics, Fluid Mechanics and Heat Transfer, Building Services Design 1, 2 & 3, Professional Development, Major Project and Laboratory.

A major project is also undertaken.

The qualification is appropriate to those wishing to make their careers in Building Services Engineering which is concerned with the design and installation of the Mechanical and Electrical Services necessary to ensure the efficient operation of modern buildings. They form part of the team of professionals involved with construction projects and work closely with Architects, Quantity Surveyors and Structural Engineers.

Career Opportunities
The qualification is appropriate to those wishing to specialise in either General Mechanical or Process Engineering. Mechanical Engineers are likely to be involved with the design and construction of all types of equipment ranging from individual items to complete factories or process plants. They may also be involved with the management of projects and firms and with the maintenance of plant and equipment.

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FT123
Manufacturing Engineering

Third Year:

Fourth Year:
Mathematics and Computing, Control Engineering, Manufacturing Technology, Mechanics, Materials Science, Manufacturing Management, Laboratory Work and a Project.

Career Opportunities
The qualification is appropriate to those wishing to specialise in Manufacturing Engineering. Manufacturing Engineers are likely to be involved with the manufacture of all types of products ranging from individual items to large batches using robotics and highly automated machines. They may also be involved with the management of projects and industries and with the maintenance of plant and equipment.

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FT124
Structural Engineering

Second Year:

Third Year:

Fourth Year:
The qualification is appropriate to those wishing to make their careers in Structural Engineering, which is a specialisation of Civil Engineering. Structural Engineers are concerned with the design and construction of buildings, bridges and special structures. They form part of the team of professionals involved with construction projects and in this way work closely with Architects, Quantity Surveyors and Building Service Engineers.

Graduates of all disciplines have prospects of employment with contractors, research organisations, as well as state and semi-state agencies and local authorities. Some pursue post-graduate studies in Ireland or abroad directly after graduating or they may go abroad to work initially and in this way gain wider or specialised experience.

Mr. O. McNulty, 
Department of Engineering Technology,  
Telephone (01) 8727177.

ARCHITECTURAL TECHNICIAN DIPLOMA

This is a three year wholetime course leading to an Architectural Technician Diploma award. It aims to give the student a high standard of architectural and technical drawing and presentation, with a good knowledge of building construction, materials, methods and equipment. The course uses the project system extensively during which students are required to prepare working drawings, details, schedules, etc. for building work. Lectures in selected subjects such as Building Construction, Structures, Materials and Services are integrated with the projects as far as possible. During the summer vacation period students are encouraged to obtain suitable practical work experience to complement their College training.

First Year:

Second Year:

Mr. James Horan  
Department of Architecture and Town Planning,  
Telephone (01) 8727177.

CONSTRUCTION TECHNOLOGY CERTIFICATE/DIPLOMA

This is a three year wholetime course leading to a Construction Technology Certificate award after two years and a Diploma award on completion of an additional year. It is designed to meet the needs of the construction industry for technical staff having a sound understanding of the principles of construction and

Third Year:

Duration
Three years wholetime

Location
D.I.T. Bolton Street.

Entry Requirements
(a) Leaving Certificate with passes in five subjects including Mathematics and English.  
or  
(b) an equivalent qualification. Applicants may be required to undertake a suitability test and if successful in this they may be interviewed as part of the selection process.

Award
Graduates from this course are eligible for the following award:  
Architectural Technician Diploma  
(Dublin Institute of Technology).

This Diploma is recognised for Technician Membership by both the Incorporated Association of Architects and Surveyors, and the Royal Institute of the Architects of Ireland. It is also recognised for Associate Membership of the British Institute of Architectural Technicians (BIAT) in the U.K. and for full Membership subject to approved post-graduate experience.

Career Opportunities
The majority of graduate Architectural Technicians are employed in private professional architectural offices. Other areas of employment are the architectural and technical sections of Government Departments, semi-state bodies, local authorities, and the building industry generally, with contractors and manufacturers.

A number choose to work overseas for a few years to gain useful and wider experience.

Further Information
Mr. James Horan  
Department of Architecture and Town Planning,  
Telephone (01) 8727177.
construction materials, together with a good appreciation of management skills and the economics of the industry.

First Year:

Second Year:

Third Year:

Students are encouraged to gain industrial experience during the summer vacation.

Duration
Two/Three years wholetime.

Location
D.I.T. Bolton Street.

Entry Requirements
First Year:
(a) Leaving Certificate with passes in five subjects including Mathematics and English.

or
(b) An equivalent qualification.

Third Year (Diploma Stage): Applicants are expected to have reached a good standard at the end of Certificate or Second Year, or possess an equivalent qualification acceptable to the College.

Award
Students who successfully complete this course are eligible for the following awards:

Construction Technology Certificate
(Dublin Institute of Technology)

Construction Technology Diploma
(Dublin Institute of Technology)

Holders of the Diploma are entitled to Membership Part 1 of the Chartered Institute of Building following two years experience in building practice.

The Architects and Surveyor's Institute admits holders of the Diploma to Licentiate Membership.

Career Opportunities
These awards are particularly suitable for those who wish to attain positions relating to production planning, purchasing, quality control, estimating, surveying, inspection and general administration in the Construction Industry. They also provide a suitable background for those who wish to make their careers in building in the public sector (i.e. Central and Local Government).

The majority of past graduates work in building firms as Estimators, Building Surveyors, Programmers, Planners, Contract Managers and Site Managers. Many have attained a high level in management where they are now executive directors or managing directors. Other graduates are working for consultants in various capacities.

Further Information
Mr. E. De Búrca,
Department of Surveying and Building Technology,
Telephone (01) 8727177.

D115 GEO-SURVEYING CERTIFICATE/DIPLOMA

This wholetime course prepares students for a Certificate award in Geo-Surveying after two years and a Diploma award on completion of an additional year. There is a good balance between the theoretical and practical aspects of Geo-Surveying thereby ensuring a sound undertaking of the applications of its technology. Project work is a significant feature of the course and it is an important element in the overall assessment.
Course Description

First Year:

Second Year: (Certificate Stage)

Third Year: (Diploma Stage)

Field Camps are conducted at the end of both the First Year and Second Year. In addition, students are encouraged to gain practical experience during the summer vacation.

I am eligible for membership of the Irish Institution of Surveyors. Certificate and Diploma graduates have freedom of movement for employment within the EC and may also pursue further education programmes.

Career Opportunities

The Geo-Surveyor may be employed in a wide variety of occupations such as with engineering, land survey and hydrographic consultancies as well as with mining, photogrammetric and construction companies. The work can be very varied due to the variety of survey sites requiring different techniques and equipment but generally the work involves the preparation of a plan for a development or the setting out of a design on the ground for construction. The Geo-Surveyor should have a preference for an outdoor life and an ability to co-operate and work in a team with other specialists. Sophisticated optical and electronic instruments are commonly used in conjunction with computers and microprocessors in Geo-Surveying and some specialise in the use of this equipment.

Further Information

Mr. E. De Búrca,
Department of Surveying and Building Technology,
Telephone (01) 8727177.

DT116

AUCTIONEERING VALUATION AND ESTATE AGENCY CERTIFICATE/DIPLOMA

Course Description

This course has been developed to prepare students for a Certificate award in Auctioneering, and Estate Agency after two years of wholetime study. Those who achieve the required standard in the Certificate may proceed to the Diploma stage, for which they are required to undertake a prescribed course of study and course assignments.

Course Description

First year:

Second Year:

Third Year:
Valuations, Building Construction, Management Accounting, Marketing, and a Feasibility Study.

Duration
Two/Three years wholetime.

Entry Requirements

First Year:
(a) Leaving Certificate with passes in five subjects including Mathematics and English.
or
(b) An equivalent qualification.

A modern continental language is desirable to facilitate subsequent movement to other EC countries for further study, work experience or employment.

Third Year (Diploma Stage): Applicants are normally expected to have reached Distinction or Credit (Merit) level in the Certificate Examination at the end of the Second Year in order to qualify for admission into the Third Year. However, those holding a Pass Certificate and at least one year of appropriate post-Certificate experience will be considered for admission to the third year.

Graduates from this course are eligible for the following awards:
(a) Certificate/Diploma in Geo-Surveying
   (Dublin Institute of Technology)
(b) National Certificate/Diploma in Geo-Surveying
   (National Council for Educational Awards).

Holders of the Diploma (Diplomates) are eligible for exemptions from the Part II/II Land Survey Examination of the Royal Institution of Chartered Surveyors. Diplomates with appropriate experience are eligible for membership of the Irish Institution of Surveyors.

DT116

AUCTIONEERING VALUATION AND ESTATE AGENCY CERTIFICATE/DIPLOMA

Course Description

This course has been developed to prepare students for a Certificate award in Auctioneering, and Estate Agency after two years of wholetime study. Those who achieve the required standard in the Certificate may proceed to the Diploma stage, for which they are required to undertake a prescribed course of study and course assignments.

Course Description

First year:

Second Year:

Third Year:
Valuations, Building Construction, Management Accounting, Marketing, and a Feasibility Study.

Duration
Two/Three years wholetime.
Location: D.I.T. Bolton Street.

Entry Requirements:
(a) Leaving Certificate with passes in five subjects including Mathematics and English.

or

(b) An equivalent qualification.

Third Year (Diploma Stage):
Applicants are normally expected to have reached Credit or Distinction level in the Certificate Examination at the end of the Second Year in order to qualify for admission to the Third Year. However, those holding a Pass Certificate and at least one year of appropriate post-Certificate experience will be considered.

Award:
Students who successfully complete the course are eligible for the following awards:
(a) Certificate in Auctioneering and Estate Agency (after two years) and Diploma in Auctioneering, Valuations, and Estate Agency (after a further year) (Dublin Institute of Technology).

(b) National Certificate in Auctioneering and Estate Agency (after two years) and National Diploma in Auctioneering, Valuations and Estate Agency (after further year) (National Council for Educational Awards).

Career Opportunities:
The course is suitable for those wishing to prepare for a career as an auctioneer, estate agent and property valuer and aims to give an understanding of the legal, economic and physical framework within which the property market functions. It also aims to give the basic skills needed to practice as an auctioneer.

The Diploma course meets the academic requirements of the Irish Auctioneers and Valuers Institute (IAVI) and is recognised by the Institute of Professional Auctioneers and Valuers (IPAV). These are professional bodies in the field of Auctioneering and Estate Agency in the Republic of Ireland. Students with the Diploma can pursue their studies to degree level by obtaining advanced entry into related degree courses in the UK. This course provides a route to obtaining membership of the Royal Institute of Chartered Surveyors.

Auctioneers and Estate Agents are involved in the sales, lettings, management and valuation of property. Generally, they work in partnerships or on their own account.

The career is suitable for those with an interest in people and in the built environment. Other desirable character traits are an outgoing nature with an ability to get on with people.

Further Information:
Mr. E. De Búrca,
Department of Surveying and Building Technology.
Telephone (01) 8727177.

DT125

PRELIMINARY ENGINEERING
This is a one year full-time course whose main purpose is to prepare for entry into the first year of the College's Engineering Diploma/Degree Course FT125. Students who have not satisfied the specified entry requirements in terms of Higher Level Mathematics or appropriate Science subject etc.,

The subjects studied are: Mathematics; Mechanics, Engineering Technology, Physics, Chemistry, Engineering Drawing, Communications and Liberal Studies.

Examination and Other Requirements:
Students are required to:
(a) take College examinations at the end of each session.

(b) present laboratory notebooks and project work reports to the satisfaction of the College.

Duration:
One year wholetime

Location:
D.I.T. Bolton Street

Entry Requirements:
Leaving Certificate with passes in five subjects including Mathematics and English or an equivalent qualification. In practice the typical candidate gaining admission will probably have a number of ‘Honour’ Grades. The course is suitable for those wishing to prepare for a career as an auctioneer, estate agent and property valuer and aims to give an understanding of the legal, economic and physical framework within which the property market functions. It also aims to give the basic skills needed to practice as an auctioneer.

Course Description:
This course prepares students for a Technician Cert. award in Civil Engineering at the end of two years and for a Technician Diploma award at the end of a further year of study. The students attend the College from September until the end of May each year and are encouraged to spend the summer months gaining practical experience in approved Civil or Structural Engineering design offices, construction sites, etc. The course requires an analytical ability to understand and solve technical problems.

DT126

CIVIL ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA
This course prepares students for a Technician Cert. award in Civil Engineering at the end of two years and for a Technician Diploma award at the end of a further year of study. The students attend the College from September until the end of May each year and are encouraged to spend the summer months gaining practical experience in approved Civil or Structural Engineering design offices, construction sites, etc. The course requires an analytical ability to understand and solve technical problems.
Course Description

First year:

Second Year (Certificate Stage)
Structural Design and Detailing, Mathematics, Concrete, Geology and Soil Mechanics, Surveying, Construction Services and Supplies, Planning and Administration, Complementary Studies, Laboratory Work, German and Computing.

Third Year (Diploma Stage) — Structural Option
Theory of Structures, Structural Design, Minicipal Engineering, Structural Design (Steel/Concrete), Engineering, Mathematics, Computing, Management Studies and a Project.

Third Year (Diploma Stage) — Environmental Option
Mathematics, Management Studies, Road Engineering, Sanitary Services, Waste Management, Environmental Impact Assessment, Environmental Studies (environmental economics, ecology, air and water pollution), Environmental Law and Planning and Building Regulations and a Project.

Examination and Other Requirements:
(a) Students take a College examination at the end of each session which is moderated by the National Council for Educational Awards, and the Dublin Institute of Technology.
(b) They are required to submit reports on their project and laboratory work.

Duration
Two/three years wholetime.

Location
D.I.T. Bolton Street.

Entry Requirements
First year:
Leaving Certificate with passes in five subjects including Mathematics, and English, or an equivalent qualification.

Third Year (Diploma Stage):
Students are expected to reach Distinction or Credit (Merit) level in the Certificate Examination at the end of the Second Year to qualify for admission to the third year of the course leading to the Diploma award. Students who hold a Pass certificate and at least one year of appropriate post-Certificate experience may also be considered. The Diploma stage is made up of two options: Structural Design and Environmental Engineering. The Environmental Option will commence in the Academic year 1994/95.

Graduates of this course are eligible for the following awards:
(a) Technician Certificate/Diploma in Civil Engineering
(Dublin Institute of Technology)
(b) National Certificate/Diploma in Engineering (Civil)
(National Council for Educational Awards)

Recognition by Professional Bodies
Those who have successfully completed the Certificate Stage of this course meet the academic requirements for Technician status with the Institution of Engineers of Ireland, while those who have completed the Diploma stage meet the Technician Engineer level and can qualify for the non-Corporate Associateship grade of membership after they have completed a suitable period of practical training.

The qualification as appropriate to those wishing to enter engineering as a Technician specialising in Civil Engineering. Civil Engineering Technicians may be involved in the design and construction of buildings, bridges, roads, water supply, sanitary services etc. Graduates have prospects of employment in contracting firms, engineering design offices, state and semi-state bodies, and research organisations engaged in Civil Engineering work.

Mr. Oliver McNulty, Department of Engineering Technology, Telephone: (01) 8727177.

BUILDING SERVICES ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA

This course prepares students for a Technician Certificate award in Building Services Engineering at the end of two years and for a Technician Diploma award at the end of a further year of study. The students attend the College from September until the end of May each year and they are encouraged to spend the summer months gaining practical experience in Heating, Ventilating and Air Conditioning in Consulting Engineers' offices and related industry. The course requires an analytical ability to understand and solve technical problems.

First year:
Second Year:
Mathematics, Thermal & Fluid Plant, Electrotechnology and Industrial Instrumentation, Complementary Studies, Environmental Plant Design, Lighting, Acoustics and Water Services, Environmental Engineering, Laboratory Work, a Project, Computing and German.

Third Year:

Examination and Other Requirements:
(a) Students take a College examination at the end of each session which is moderated by the National Council for Educational Awards and the Dublin Institute of Technology.
(b) They are required to submit reports on their project and laboratory work.

Duration
Two/three years fulltime.

Location
D.I.T. Bolton Street

Entry Requirements
First year:
Leaving Certificate with passes in five subjects including Mathematics and English, or an equivalent qualification.

Third Year (Diploma Stage):
Students are expected to reach Distinction or Credit (Merit) level in the Certificate Examination at the end of the Second Year to qualify for admission to the third year of the course leading to the Diploma award. Students who hold a Pass certificate and at least one year of appropriate post-Certificate experience may also be considered.

Awards:
Graduates of this course are eligible for the following awards:
(a) Technician Certificate/Diploma in Building Services Engineering (Dublin Institute of Technology)
(b) National Certificate/Diploma in Engineering (Building Services) (National Council for Educational Awards)

Those who have successfully completed the Certificate stage of this course meet the academic requirements for Technician status with the Institution of Engineers of Ireland, while those who have completed the Diploma stage are at Technician Engineer level and can qualify for the non-Corporate Associate grade of membership after they have completed a suitable period of practical training.

Career Opportunities
This qualification is appropriate to those wishing to enter engineering as a Technician specialising in Building Services Engineering. Building Services Engineers are involved with the design and installation of all types of building services such as heating, ventilation, air conditioning, water and electrical services. They are also involved with the drafting, planning and management of projects and the maintenance of plant and equipment.

Graduates have good prospects of employment with mechanical services contractors and in design offices. The range of jobs available includes engineering design, maintenance engineering, consulting engineering and technical sales.

Further Information
Mr. Oliver McNulty,
Department of Engineering Technology,
Telephone (01) 8727177.

The College Library.
MECHANICAL ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA

Course Description
This course prepares students for a Technician Cert. award in Mechanical Engineering at the end of two years and for a Technician Diploma award at the end of a further year. The students attend the College for eight months each year commencing in September, and they are encouraged to spend the summer period getting practical experience in industry, design offices etc. The course requires an analytical ability to understand and solve technical problems.

Course Outline
First year:

Second Year:

Third Year: Common Subjects
Mathematics, Electrotechnology and Electronics, Management Studies and Computing.

Manufacturing Option:

Process Option:

Examination and other Requirements:
(a) Students take a College examination at the end of each session which is moderated by the National Council for Educational Awards and the Dublin Institute of Technology
(b) They are required to submit reports on their project and laboratory work.

Duration
Two/three years wholetime.

Location
D.I.T. Bolton Street

Entry Requirements
First year:
Leaving Certificate with passes in five subjects including Mathematics and English, or equivalent qualification.

Third Year: (Diploma Stage):
Students are expected to reach Distinction or Credit (Merit) level in the Certificate Examination at the end of the Second Year to qualify for admission to the third year of the course leading to the Diploma award. Students who hold a Pass certificate and at least one year of appropriate post-Certificate experience may also be considered. The Diploma stage is specialised. At present two options are offered — Manufacturing Technology or Process Plant.

Award
Graduates of this course are eligible for the following awards:
(a) Technician Certificate/Diploma in Mechanical Engineering
   (Dublin Institute of Technology)
(b) National Certificate/Diploma in Engineering (Process or Manufacturing) (National Council for Educational Awards)

Those who have successfully completed the Certificate stage of this course meet the academic requirements for Technician status with the Institution of Engineers of Ireland. Those who have completed the Diploma stage are at Technician Engineer level and can qualify for the non-Corporate Associateship grade of membership after they have completed a suitable period of practical training.
The qualification is appropriate to those wishing to enter engineering as a Technician specialising in Mechanical Engineering. Mechanical Engineers and Technicians are concerned with the design, manufacture and installation of all types of equipment ranging from individual items to complete factories or process plants. They may also be involved in drafting, detail planning and in management of projects and with plant maintenance.

Graduates have prospects of employment in manufacturing or processing firms, research organisations, as well as state and semi-state agencies.

**Further Information**
Mr. Oliver McNulty,
Department of Engineering Technology,
Telephone (01) 8727177.

**DT130**

**TECHNICIAN CERTIFICATE IN PRINTING/ DIPLOMA IN PRINTING MANAGEMENT**

**Course Description**
This course is designed to prepare young people for technical/managerial positions in printing and related industries. The course leads to a Certificate award in Printing after two years of study and to a Diploma Award in Printing Management after a further year's study.

**Course Description**

**First Year:**

**Third Year:**
The following subjects are included in the Diploma (third year) programme:— Management Accountancy, Marketing, Estimating, Production Planning, Quality Management, Costing, Computer Science, Languages, Management Science, and a major Project.

**Duration**
Two/Three years wholetime.

**Location**
D.I.T. Bolton Street.

**Entry Requirements**
**First Year:**
Leaving Certificate with passes in five subjects including Mathematics and English, or an equivalent qualification.

**Diploma Stage (Third Year):**
Certificate in Printing with Distinction or Merit (Credit) or a Pass with one year of relevant work experience or an acceptable equivalent qualification.

**Award**
Graduates from this course are eligible for the following awards:
(a) **Technician Certificate in Printing**
(Dublin Institute of Technology),
**National Certificate in Technology (Printing Technology)**
(National Council for Educational Awards)
(b) **Diploma in Printing Management**
(Dublin Institute of Technology),
**National Diploma in Business Studies (Printing Management)**
(National Council for Educational Awards)

**Career Opportunities**
The majority of graduates to date have found positions in printing, packaging, publishing or advertising firms in the following areas: Estimating, Production Planning, Cost Accountancy, Marketing, Quality Management, Customer Services and Technical Liaison.

**Further Information**
Mr. Brian Kennedy,
Department of Printing and Graphic Communications,
Telephone (01) 8727177.

![Lithographic printing apprentices using the Heidelberg four colour press.](image)
DT131  DIPLOMA IN GRAPHIC REPRODUCTION TECHNOLOGY

Course Description
This one year course in Graphic Reproduction Technology has been formulated in response to the needs of the graphic industries for creative personnel with experience of the production and finishing processes in the graphic arts.

Students following this Graphic Reproduction Technology course design and process a wide range of items for print production. Subjects covered include Graphic Design, Typographic Design, Desk Top Publishing etc. Extensive hands on experience in the various laboratories is a feature of the course and from the skills acquired students are expected to produce finished products from their own designs. The objectives were formulated in consultation with interested bodies in the graphic communications industries, following an assessment of the requirements for print designers.

Course Description

Duration
One year wholetime

Location
D.I.T. Bolton Street.

Entry Requirements
National Certificate in Design of the NCEA with Distinction or Credit (Merit); or National Certificate in Design of the NCEA with a Pass and one year’s relevant working experience; or National Diploma in Design of the NCEA; or equivalent qualifications. Intending students should apply directly to the College and are required to present a portfolio of recent work.

Award
Graduates of the course are eligible for the following awards:
(a) Diploma in Graphic Reproduction Technology
(Dublin Institute of Technology)
(b) National Diploma in Technology (Graphic Design)
(National Council for Educational Awards).

Career Opportunities
Graduates find suitable employment with advertising agencies, design studios, printing firms and publishing companies. They should also be capable of setting up and running their own studios.

Further Information
Mr. Brian Kennedy,
Department of Printing and Graphic Communications,
Telephone (01) 8727177.

DT150  TECHNICIAN CERTIFICATE IN TRANSPORT ENGINEERING — DIPLOMA IN MOTOR INDUSTRY MANAGEMENT

Course Description
This whole-time course (separate but complementary to the motor apprentice trade courses) is designed to give students a good overall knowledge of the Motor Industry. All aspects of the industry are covered with emphasis on the technical side for the first two years and the managerial/administrative side for the final year. The course leads to the award of a Transport Engineering Technician Certificate at the end of two years study and to the award of the Diploma in Motor Industry Management at the end of a further year’s study.

First year:

Second Year:

Third Year:

Examination and Other Requirements: Progress to successive years of the course will be on the basis of the student’s work during the session, and success in the College sessional examinations. Only students who successfully complete the Certificate stage and who display an aptitude for management will be accepted for the Diploma stage. A requirement of the course is that students spend 2-3 months of each summer vacation in suitable employment in the Motor Industry gaining appropriate experience. Where students are unable to arrange this employment, the Institute of the Motor Industry, the College Authorities and the Student Society of Motor Industry Management may assist in their placement.

Duration
Two/three years wholetime.

Location
D.I.T. Bolton Street
Entry Requirements
(a) Leaving Certificate with passes in five subjects including Mathematics and English, or an equivalent qualification.

Awards:
Graduates of this course are eligible for the following awards:
- Technician Certificate in Transport Engineering
  (Dublin Institute of Technology)
- Diploma in Motor Industry Management
  (Dublin Institute of Technology)

Graduates holding the Diploma are eligible for full exemptions from the Certificate of Management examination requirement of the Institute of Motor Industry and for subject exemptions from the examinations of the Institute of Road Transport Engineers.

Career Opportunities
There are many and varied career opportunities in the automobile and transport industries for those completing these courses including the following: Vehicle Body Repair Supervisor, Garage Service Department Supervisor, Reception Engineer, Vehicle Salesperson, Training Advisor, Vehicle Finance Company Representative etc. Generally they progress to more senior management positions in the Retail Motor Industry or Transport Industry.

Further Information
Mr. Dominick Tuite, Department of Transport Engineering, Telephone (01) 8727177.

DT171 BUILDINGS MAINTENANCE TECHNICIAN CERTIFICATE COURSE

Course Description
This two-year wholtime course has been developed to prepare students for a Technician Certificate award in Building Maintenance. The programme extends over the full academic session from September to June. The course has a good balance between the theoretical and practical aspects and participants are given an appreciation of a range of construction skills. Students are encouraged to spend the summer vacation gaining practical work experience in the areas of Building Maintenance and Inspection, Building Supplies, Technical Sales and related activities.

Course Description
First Year:

Second Year:

Duration
Two years wholtime.

Location
D.I.T. Bolton Street

Entry Requirements
(a) Leaving Certificate with passes in five subjects including Mathematics and English.

Award
Students who successfully complete the course are eligible for the following awards:
- Buildings Maintenance Technician Certificate
  (Dublin Institute of Technology)
- National Certificate in Construction Studies (Buildings Maintenance)
  (National Council for Educational Awards).

Career Opportunities
The Buildings Maintenance Technician may find employment in a variety of areas such as Buildings Maintenance, Maintenance Contract Administration, Building Inspection, Building Supplies and DIY Sales, Technical Sales, Trainee Estimating, Purchasing Officer etc. There may also be opportunities in this area for self employment.

Further Information
Mr. J. Bernie, Department of Construction Trades, Telephone (01) 8727177.
DUBLIN INSTITUTE OF TECHNOLOGY

APPRENTICE 93-94

BOLTON STREET COLLEGE
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INFORMATION ABOUT APPRENTICESHIP

Introduction

The College has a had a major involvement and commitment to apprenticeship education and training since it was opened in 1911 and over the years it has played an important role in its development. In the 1992/93 session a total of more than 3600 apprentices were enrolled in the College pursuing one of 20 different trades in the Construction, Engineering or Printing designations.

The following College Departments are involved in the provision of apprenticeship courses:

- Building Trades
- Metal Fabrication and Plumbing
- Engineering Trades
- Transport Engineering
- Printing and Graphic Communications

The overall apprenticeship activities in the different Colleges of Dublin Institute of Technology (DIT) are co-ordinated and monitored by an Apprentice Education Board which reports directly to the DIT Governing Body. Members of the Board include the Heads of Schools and Departments involved in the apprenticeship area in the different DIT Colleges as well as elected or co-opted teaching staff members.

Amongst the highlights in the calendar of the apprenticeship area each year are the National Apprenticeship Competitions. Normally the College hosts some ten finals annually for different trade specialisations on behalf of the Department of Education and the candidates are likely to include representatives from RTCs and other centres as well as from this College. The overall winner is eligible to receive a silver medal as well as special consideration for selection for the national team which represents Ireland in the International Youth Skills Olympics. These prestigious competitions are normally held every second year in different parts of the world and Irish apprentices have performed very well in them to date showing that the standards of craftsmanship of the skilled young Irish workforce compare favourably with those in the more advanced industrial countries.

Role of FAS

FAS, the National Training and Employment Authority, has been given special statutory responsibility by the Minister for Labour for monitoring and co-ordinating different aspects of apprenticeship. It operates a number of training centres which provide opportunities for "off the job" training during the first year of apprenticeship and also makes arrangements with other training centres to provide similar facilities for selected apprentices during their first year. Part of the "off the job" training programme involves attendance at a College. In the second and subsequent years of apprenticeship FAS monitor the training arrangements in industry and the release to attend colleges for educational and other aspects.

In 1989 FAS undertook a review of the existing apprenticeship arrangements and published a discussion document following extensive consultation with the different interests. This proposed a standards-based apprenticeship system
culminating in the National Craft Certificate for those who pass the stipulated tests and envisaged that in future full craft status would only be afforded to those holding this Certificate. Pilot programmes in Automobile Engineering and Brickwork under the New Apprenticeship Scheme began in May 1993 and it is expected that these may be extended to a number of additional trades in September 1993. The new scheme will comprise seven phases of on and off-the-job training for each trade.

How to become an Apprentice

Those interested in becoming an apprentice should first check that they have the stipulated basic minimum educational qualifications. They should then seek out a suitable employer having a vacancy for an apprentice in the trade chosen. While the responsibility for securing an apprenticeship rests with the individual or with his/her parents FAS may be able to assist and those interested should register at the nearest FAS office where further useful information may also be available.

College Courses for Apprentices

College courses for apprentices are conducted on a Day-release or Block-release basis during which the apprentices are released from their employment on full pay. The courses are designed to cover the requirements of the Junior and Senior Trade Certificate examinations of the Department of Education and corresponding examinations of the City & Guilds of London Institute. The subjects covered on these courses include the relevant trade theory and practice, together with Science, Mathematics, Communications and Social Studies.

For those engaged in the Engineering or Construction industry, the preparation for the Junior Trade Certificate examination may be pursued in two ways:

(i) Apprentices undergoing 'off-job' training in an approved training centre during the first year of their apprenticeship, are released to attend Day-release or Block-release courses in the College during that period. The skill training course and the terminal test conducted by the Training Centre meets the requirements for the practical element of the Junior Trade Certificate examination and the College course prepares the students to take the remaining subjects of the examination.

(ii) Those apprentices who do not pursue 'off-job' training in a training centre are normally released from their employment to attend Day-release or Block release courses conducted by a College over a two-year period to prepare them for all elements of the Junior Trade Certificate examination.

Both categories of apprentices pursue a further two-year Day release or Block release course of preparation for all elements of the Senior Trade Certificate examination of the Department of Education. The Senior course is conducted entirely at the College and the apprentices are released from their employment to enable them to attend.

For those apprentices employed in the Printing industry the College provides courses of education and training on a Block-release basis during their first three years of apprenticeship. The first year course of 23 weeks duration commences in January each year and the second and third year courses, each of 8 weeks duration, are conducted between September and December each year. Printing students sit for the Junior Trade Certificate examination at the end of the first year course and the Senior Trade Certificate examination at the end of the third year course.

Special evening courses may be conducted to assist those who wish to re-take elements of the Senior examination in which they were unsuccessful.

Ladders to Higher Levels for Apprentices

Post-apprenticeship courses are provided by the college where a demand for these courses exists and thus opportunities are made available for students who are successful in the Senior Trade Certificate Examination to proceed to higher level studies. These include a number of craft-based technician courses which are specially designed for those with craft backgrounds. Details of these courses are provided in the College Prospectus or are available on request.

Students holding the Senior Trade Certificate of the Department of Education with one endorsement in mathematics or a science subject satisfy the minimum entrance requirements for courses in the DIT Colleges which specify a pass in five subjects in the Leaving Certificate Examination as the entrance requirement.

Students holding this Certificate with three endorsements in academic subjects are eligible for consideration for entry into related professional degree level courses provided that they also meet any special entry requirements (e.g. Higher Level Mathematics for Engineering courses). Where endorsement subjects are not offered in the trade examinations, a pass in an appropriate subject of the Elementary Technological Certificate Examinations of the Department of Education or an equivalent qualification may be acceptable.

Admission Requirements

Trade courses are provided for the sole purpose of supplementing the practical trade training of persons actually employed at and engaged in the various
operations of the trade. The college realises that it is impossible for a person to learn a trade solely by attendance at these courses and is further of the opinion that the admission of persons not actually engaged in the trades would be not only of little benefit to them but might prejudicially affect the instruction of those for whom the courses have been organised.

Accordingly the College reserves the right to restrict enrolment in the trade practic courses to those persons who are actually employed in the several processes and operations of the trade. For admission to these courses proof of actual employment in the trade may be required as well as certificates to that effect from the employer, the official Trade Union for the trade concerned or FAS. Employers are kept informed during the session of absences or lates on the part of their apprentices. In addition, an end of session report on attendance and progress is issued to the students and employers. Apprentices and employers are asked to note particularly that details of the employment and the attendance of all apprentices enrolled in release courses will be made available to FAS — the National Training and Employment Authority — whether or not the apprentices are registered with the body.

National Craft Certificate (NCC)
The National Craft Certificate is awarded jointly by the Department of Education and FAS. It attests to the successful completion of the apprenticeship programme and may be a required qualification for Irish craftpersons who wish to find work at home or in other countries. It is also likely to become a compulsory requirement in the future for recognition as a craftsperson in Ireland.

Requirements for the Award of NCC
To qualify for the award of a National Craft Certificate applicants must provide proof that they have:

(a) been registered with FAS (formerly AnCO).
(b) served the full period of apprenticeship
(c) completed the first year ‘off-the-job’ training course (may be waived in certain circumstances)
(d) attended the full educational release programme
(e) achieved a pass grade in the following:
   (i) First year assessment programme and terminal test (may be waived in certain circumstances)
   (ii) Department of Education Junior Trade Written Examination.
   (iii) Department of Education Senior Trade Certificate.

Application Procedure for NCC
Application forms and all necessary information can be obtained from:
Apprenticeship Services
N.C.C. Administration Section
FAS — The Training and Employment Authority
P.O. Box 456, 27-33 Upper Baggot St., Dublin 4.
Telephone: (01)-6685777
BUILDING TRADES COURSES

A101A  BRICKWORK: Day Release
This course requires attendance on one day and one night a week for the First and Second Year and one day per week thereafter. The course is designed to prepare students to take Junior and Senior Trade Certificate Examinations (Practical and Written) of the Department of Education and the City & Guilds of London Institute Craft Certificate Examinations.

Entrance Requirements
Apprenticeship to the trade.

A101B  BRICKWORK: Off-the-job
This course meets the requirements of apprentices who are attending full-time for one year at a FAS Training Centre. Students attend the College on one day and one evening per week during this one year course. The course is designed to prepare students to take the Junior Trade Certificate Examination of the Department of Education.

Entrance Requirements
Enrolment as an apprentice in an approved Training Centre.

A102A  PLASTERWORK: Day Release
This course requires attendance on one day and one evening per week for the First and Second Year and one day only per week thereafter. The course is designed to prepare students to take the Junior and Senior Trade Certificate Examinations (Practical and Written) of the Department of Education and the City & Guilds of London Institute Craft Certificate Examinations.

Entrance Requirements
Apprenticeship to the trade.

A102B  PLASTERWORK: Off-the-job
This course meets the requirements of apprentices who are attending full-time for one year at a FAS Training Centre. Students attend the College on one day and one evening per week during this one year course. The course is designed to prepare students to take the Junior Trade Certificate Examination of the Department of Education.

Entrance Requirements
Enrolment as an apprentice in an approved Training Centre.

PAINTING AND DECORATING: Day Release
This course requires attendance on one day and one evening per week for the first and second year and one day per week thereafter. The course is designed to prepare students to take the Junior and Senior Trade Certificate examinations (Practical and Written) of the Department of Education and the City & Guilds of London Institute Craft Certificate Examinations.

Entrance Requirements
Apprenticeship to the trade.
Entrance Requirements
Apprenticeship to the trade.

PAINTING AND DECORATING: Off-the-job
This course meets the requirements of apprentices who are attending full-time for one year at a FAS Training Centre. Students attend the College on one day and one evening per week during this one year course. The course is designed to prepare students to take the Junior Trade Certificate Examination of the Department of Education.

Entrance Requirements
Enrolment as an apprentice in an approved Training Centre.

CABINETMAKING/CHAIRMAKING: Day Release
This course requires attendance on one day per week for four years. The course is designed to prepare students to take the Junior and Senior Trade Certificate Examinations (Practical and Written) of the Department of Education with endorsements and the City & Guilds of London Institute. The Junior examination is taken after two years and the Senior examination after four years. Students who complete the course satisfactorily can proceed to more advanced courses leading to City & Guilds of London Institute Examinations.

Entrance Requirements
Enrolment as an apprentice in an approved Training Centre.

CABINETMAKING/CHAIRMAKING: Off-the-job
This course meets the requirements of the apprentices who are attending full-time for one year at a FAS Training Centre. Students attend the College on one day and one evening per week during this one year course. The course is designed to prepare students to take the Junior Trade Certificate Examination of the Department of Education.

Entrance Requirements
Enrolment as an apprentice in an approved Training Centre.

CARPENTRY AND JOINERY: Day Release
This course requires attendance on one day per week for four years. The course is designed to prepare students to take the Junior and Senior Trade Certificate Examinations (Practical and Written) of the Department of Education with endorsements and the City & Guilds of London Institute. The Junior examination is taken after two years and the Senior examination after four years. Students who complete the course satisfactorily can proceed to more advanced courses leading to City & Guilds of London Institute Examinations.

Entrance Requirements
Enrolment as a Carpentry and Joinery apprentice in an approved Training Centre.

WOODCUTTING MACHINIST: Day Release
This course requires attendance on one day per week for four years. The course is designed to prepare students to take the Junior and Senior Trade Certificate Examinations (Practical and Written) of the Department of Education with endorsements and the City & Guilds of London Institute. The Junior examination is taken after two years and the Senior examination after four years. Students who complete the course satisfactorily can proceed to more advanced courses leading to City & Guilds of London Institute Examinations.

Entrance Requirements
Enrolment as a Woodcutting Machinist apprentice in an approved Training Centre.

WOODCUTTING MACHINIST: Off-the-job
This course is designed to meet the requirements of apprentices who are attending a Training Centre on a full-time basis during their first year. They are released to attend the College on one day per week during this period and the course prepares them to take the Junior Trade Certificate Examination of the Department of Education.

Entrance Requirements
Enrolment as a Woodcutting Machinist apprentice in an approved Training Centre.
METAL FABRICATION AND PLUMBING TRADE COURSES

A123A WELDING: Day Release
This course requires attendance on one day and one evening per week over four years. The course is designed to prepare students to take the Junior and Senior Trade Certificate Examination after two years and the Senior Stage examination after four years. Students who complete the course satisfactorily may proceed to the craft-based Technician Course in Metal Fabrication and Welding.

Entrance Requirements
Employment as a welding apprentice.

A125 FOUNDRY MOULDER/COREMAKER: Block Release
This course is conducted at intervals to meet the needs of the Foundry Industry. Students are nominated by their employers or are sponsored by FAS. The course is based on the syllabus for foundry craft studies of the City & Guilds of London Institute and normally entails attending four Block Release courses, each 11 weeks duration spread over a 4 year cycle.

The course involves both practical and theoretical training in Safe Working Practice, Materials, Methods, Equipment and Related Studies.

In cases where students are employed in foundries outside the Dublin area, a one year off-the-job course may be provided entailing full-time attendance for one year and Block Release attendance for a further two years.

Entrance Requirements
Employed as an apprentice in the Foundry Industry.

A129A SHEET METALWORK: Day Release
This course requires attendance on one day and one evening per week over four years. The course is designed to allow students to take the Junior and Senior Trade Certificate Examinations (Practical and Written) of the Department of Education with endorsements and the City & Guilds of London Institute. Generally, students take the Junior Stage Examination after two years and the Senior Stage Examination after four years. Students completing the course in a satisfactory manner can proceed to the more advanced courses leading to the craft-based Technician Certificate Course in Sheet Metal Work.

Entrance Requirements
Employed as a Sheet Metalwork apprentice.

A130A METAL FABRICATION: Day Release
This course requires attendance on one day and one evening per week over four years. The course is designed to allow students to take the Junior and Senior Trade Certificate Examinations (Practical and Written) of the Department of Education with endorsements and the City & Guilds of London Institute. Generally, students take the Junior and Senior Stage Examinations after two years and the Senior Stage Examination after four years. Students completing the course satisfactorily may proceed to the craft-based Technician Certificate Course in Metal Fabrication and Welding.

Entrance Requirements
Employment as a Metal Fabrication apprentice.

A130B METAL FABRICATION: Off-the-job
This course meets the requirements of first year apprentices undergoing off-the-job training in a training centre. The apprentices attend the College on 1½ days each week for classes in Trade Technology, Mathematics, Science, Drawing and General Studies. On completion of the course, students are expected to sit the Junior Trade Certificate Examination (Written and Practical) of the Department of Education with endorsements.

Entrance Requirements
Enrolment as an apprentice to an approved Training Centre.

A131A PLUMBING: Day Release
This course requires attendance on one day per week over four years. The course is designed to allow students to take the Junior and Senior Trade Certificate Examinations (Practical and Written) of the Department of Education with endorsements. The Junior Examination is taken after two years and the Senior Examination after four years. Students who complete the course satisfactorily can proceed to the more advanced courses leading to the craft-based Technician Certificate Course in Plumber.

Entrance Requirements
Employment as a Plumbing Apprentice.

A131B PLUMBING: Off-the-job
This course meets the requirement of first year apprentices undergoing off-the-job training in a Training Centre. The apprentices attend the College on one day per week for classes in Trade Technology, Mathematics, Science, Drawing and General Studies. On completion of the course, students are expected to sit the Junior Trade Certificate Examination (Written and Practical) of the Department of Education with endorsements.
ENGINEERING TRADES COURSES

A140A
FITTING, TURNING & MAINTENANCE SYSTEMS: Day Release

Objective
Department of Education Junior & Senior Trade Certificates with endorsements and City & Guilds Certificate in Engineering Systems Maintenance competences, Parts II and III.

Duration of Course
Four years of day release (1 day and 1 evening per week).

Subjects

Entrance Qualifications
Apprenticeship to the Trade.

NOTE: Courses on the Part II and Part III of The City & Guilds Certificate in Engineering Systems Maintenance Competences classes are available in the evenings.

A140B
FITTING/TURNING & MAINTENANCE SYSTEMS: Off-the-job

This course is designed for Fitter/Turner and Maintenance Fitter Apprentices attending off-the-job courses in Training Centres.

Objective
Department of Education Junior Trade Certificate with full endorsements, and City & Guilds Certificates in Engineering Systems Maintenance Competences, Parts II and III.

Duration of Course
One year release (one week in three over the session). Release in years 2 & 3 from industry is on a Day or Block Release basis.

Subjects

Entrance Qualifications
Enrolment as an apprentice fitter/turner or maintenance fitter in an approved Training Centre.

NOTE: A course to prepare for the Part III City and Guilds Certificate may be available in the evenings.
FITTING/TURNING AND MAINTENANCE SYSTEMS: Block Release
This Course is designed for Fitters/Turners and General Maintenance Fitters.

Objective
Department of Education Junior and Senior Trade Certificates in Fitting and Turning with full endorsement and City & Guilds certificates in Engineering Systems Maintenance Competences — Parts II and III.

Duration of Course
Four years of Block Release (11 weeks each year).

Subjects

Entrance Qualifications
Apprenticeship to the Trade.

TOOLMAKING
This course caters for Toolmaking apprentices.

Objective
Department of Education Junior and Senior Trade Certificates with endorsements, and modules of City and Guilds Computer-Aided Engineering Course.

Duration of Course
First year release from Training Centres for Department of Education Junior Stage Examinations with full endorsements and City & Guilds Computer-Aided Engineering Stage I — followed by two years of day release from industry (1 day and 1 or 2 evenings each week) for Department of Education Senior Stage Examinations with full endorsements, and City & Guilds Computer-Aided Engineering Stage II with an option for Stage III and IV.

Subjects

Entrance Qualifications
Apprenticeship to the Trade.

TRANSPORT ENGINEERING TRADES COURSES

AIRCRAFT ENGINEERING APPRENTICES COURSE: Sandwich
This two year sandwich course aims to train apprentices already employed in the Aeronautical Engineering Industry as Aircraft technicians capable of achieving the ICAO Maintenance Engineers’ Licence issued by the Department of Tourism & Transport. Students attend the College on a full-time basis from September to June and spend the remainder of the year working in the Aircraft industry.

Entrance Requirements
(a) Department of Education Intermediate or Day Group Certificate in suitable subjects; and
(b) Employment as an apprentice in an Aeronautical Engineering environment.

Course of Study
Examinations and Other Requirements

Students are required to pass Examinations as follows:

(a) At the end of the year — the Department of Education Junior Trade Certificates and Elementary Technological Examinations in Mechanical Engineering; and City and Guilds of London Institute Aeronautical Engineering Competence Part I Certificate.

(b) At the end of the second year — The Department of Education Senior Trades, and City and Guilds of London Institute Aeronautical Engineering Occupational Competences Part II Certificate and Aeronautical Engineering Technician’s Certificate Part I.

Department in Charge
Transport Engineering.

GENERAL AIRCRAFT ENGINEERING APPRENTICES COURSE — DAY OR BLOCK RELEASE

Objective
This is a block or equivalent day release course to prepare Aircraft apprentices for the Department of Tourism & Transport Aeronautical Engineering Certificates, Parts 1, 2, 3 and 4, City & Guilds Aeronautical Craft Studies Certificate or appropriate Trade Certificate of the Department of Education.

Duration of Course
Block release or equivalent day release over 3 years.

Department in Charge
Transport Engineering.

HEAVY VEHICLE MECHANICS: Off-the-job

Objective:
Department of Education Junior Trade Certificate including endorsement subjects and the City & Guilds of London Institute Craft Certificate 381 Part I.

Duration of Course
One year of 36 weeks.

Attendance
One week (35 hours) in every three weeks for first year.

Subjects

Entrance Qualifications
Apprenticeship to Trade.

HEAVY VEHICLE MECHANICS: Block Release

Objective
Department of Education Junior and Senior Trade Certificates plus endorsement subjects.

Duration of Course
Block release for 11 weeks each year (32½ hours per week) over four years.

Subjects

Entrance Qualifications
Apprenticeship to the Trade.

HEAVY VEHICLE MECHANIC: Day Release

Objective
Department of Education Junior and Senior Trade Certificates with endorsement subjects and the City & Guilds of London Craft Certificate 381 Part I.

Duration of Course
Four years of 38 weeks each year.

Attendance
One day (7 hours) and two evenings (6 hours) each week.

Subjects

Entrance Qualifications
Apprenticeship to Trade.

MOTOR CYCLE MECHANICS

Objective
The City & Guilds of London Institute Craft Certificate 389.

Duration of Course
Two years of 38 weeks each year.

Attendance
One day (7 hours) and two evenings (6 hours) each week.

Subjects

Entrance Qualifications
Day Vocational Group Certificate or Intermediate Certificate.
A167A  **LIGHT VEHICLE MECHANICS: Off-the-job**

**Objective**
Department of Education Junior Trade Certificate with endorsement subjects.

**Duration of Course**
One year over 36 weeks.

**Attendance**
One week (35 hours) every 3 weeks for first year. One day (7 hours) and two evenings (6 hours) each successive year.

**Subjects**

**Entrance Qualifications**
Enrolment as an apprentice in an approved Training Centre.

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A167B  **LIGHT VEHICLE MECHANICS: Block Release**

**Objective**
Department of Education Junior and Senior Trade Certificates plus endorsement subjects.

**Duration of Course**
Block Release for 11 weeks during each year of apprenticeship with attendance at College for 35 hours each week.

**Subjects**

**Entrance Qualifications**
Apprenticeship to the Trade.

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A167C  **LIGHT VEHICLE MECHANICS: Day Release**

**Objective**
Department of Education Junior and Senior Trade Certificates plus endorsement subjects and the City and Guilds of London Craft Certificate.

**Duration of Course**
4 years of 38 weeks each year.

**Attendance**
1 day (7 hours) and 2 evenings (6 hours) each week.

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A167D  **LIGHT VEHICLE MECHANICS: Off-the-job**

*(One and a half Day Release)*

**Objective**
Department of Education Junior Trade Certificate with endorsement subjects:

**Duration of Course**
One year over 38 weeks.

**Attendance**
One and a Half Days (10 hours) and one Evening (3 hours) each week.

**Subjects**

**Entrance Qualifications**
Enrolment as an apprentice in an approved Training Centre.
**LIGHT VEHICLE MECHANICS:** Two Day Release

**Objective**
Department of Education Senior Trade Certificate with endorsement subjects.

**Duration of Course**
Two years of 38 weeks.

**Attendance**
Two days (14 hours) each week.

**Subjects**

**Entrance Qualifications**
Department of Education Junior Trade Certificate.

**CONSTRUCTION PLANT FITTERS COURSE:** Off-the-job

**Objective**
The City & Guilds of London Institute 620, Part I.

**Duration of Course**
One year over 36 weeks.

**Attendance**
One week (35 hours) every 3 weeks.

**Subjects**

**Entrance Qualifications**
Enrolment as an apprentice in an approved Training Centre.

**CONSTRUCTION PLANT FITTERS:** Block Release

**Objective**
The City and Guilds of London Institute 620, Parts I and II.

**Duration of Course**
Block Release Course of 11 weeks during each year of apprenticeship with attendance at College for 35 hours each week.

**Subjects**

**Entrance Qualifications**
Apprenticeship to the Trade.

**CONSTRUCTION PLANT FITTERS COURSE:** Day Release

**Objective**
The City and Guilds of London Institute 620, Parts I and II.

**Duration of Course**
4 years of 38 weeks each year

**Attendance**
1 day (7 hours) and 2 evenings (6 hours) each week.

**Subjects**

**Entrance Qualifications**
Apprenticeship to the Trade.
LIGHT VEHICLE BODY REPAIR: Off-the-job

Objective
The City & Guilds of London Institute 385 Certificate.

Duration of Course
Six months part-time day (7 hours) and two evenings (6 hours) each week.

Subjects

Entrance Qualifications
Enrolment as an apprentice in an approved Training Centre.

LIGHT VEHICLE BODY REPAIR: Block Release

Objective
The City & Guilds of London Institute 385 Certificate Parts I and II.

Duration of Course
Block release for 11 weeks during each year of apprenticeship.

Subjects

Entrance Qualifications
Apprenticeship to the Trade.

LIGHT VEHICLE BODY REPAIR: Day Release

Objective
The City & Guilds of London Institute 385, Parts I and II Certificates.

Duration of Course
4 years part-time day and evening course, 1 day (7 hours) and 2 evenings (6 hours) each week, 38 weeks each year.
COMPOSITORS' WORK: Block Release
First year attendance: twenty three weeks.
Second year attendance: eight weeks.
Third year attendance: eight weeks.
Students are prepared for the Trade Certificate Examinations of the Department of Education in Compositors Work.

Entrance Requirements
Apprenticeship to the Trade.

BOOKBINDING: Block Release
First year attendance: twenty three weeks.
Second year attendance: eight weeks.
Third year attendance: eight weeks.
Students are prepared for the Trade Certificate Examinations of the Department of Education in Bookbinding.

Entrance Requirements
Apprenticeship to the Trade.

LITHOGRAPHY: Block Release
First year attendance: twenty three weeks.
Second year attendance: eight weeks.
Third year attendance: eight weeks.
Students are prepared for the Trade Certificate Examinations of the Department of Education in Lithography.

Entrance Requirements
Apprenticeship to the Trade.

GRAPHIC REPRODUCTION: Block Release
First year attendance: twenty three weeks
Second year attendance: eight weeks
Third year attendance: eight weeks
Students are prepared for appropriate examinations.

Entrance Requirements
Apprenticeship to the Trade.
STUDENT DISCIPLINE

1. Students are expected to participate in College activities in a manner suitable to establishing a sound educational atmosphere.
2. All students are required to observe the published regulations laid down by the College.
3. Any student disrupting or causing disruption of any College activity may be suspended from the College.
4. Students must at all times obey the lawful instructions of lecturers and other members of the college staff who are responsible for the maintenance of good order.
5. Misconduct in any of the Colleges comprising the Institute may lead to suspension by the College Principal of the student or students concerned.
6. Students are liable for the cost of repair or replacement of Institute or College property maliciously or negligently damaged by them.
7. Students are not allowed to smoke in the College except in areas designated for smoking.
8. Students are required to carry their Identity Card with them while in College or wherever they may be required to identify themselves as students of the College.
9. The Dublin Institute of Technology reserves the right to expel from the College at any time any student whose conduct is in serious breach of the regulations.
10. Students are forbidden to park cars/bicycles/motor cycles except in such places as they are authorised to do so from time to time.

FOR FURTHER INFORMATION

Enquirers seeking further information about Day or Block Release apprenticeship and other craft-related courses provided by the college should contact Departments or Sections as follows:

Building Trades ‘A’
Building Trades ‘B’
Metal Fabrication/Welding
Plumbing/Heating
Engineering Trades
Transport Engineering
Printing and Graphic Communications

Courses A101 - A105 inclusive.
Courses A111-A122 inclusive.
Courses A123-A130 inclusive.
Courses A131-A132 inclusive
Courses A140-A142 inclusive.
Courses A154 - A176 inclusive.
Courses A190-A193 inclusive.

College Telephone Number 8727177

SENIOR STAFF IN THE APPRENTICESHIP AREA OF THE COLLEGE

Head of the School of Construction Trades

Joseph Bernie (ext. 505)
Frederick Hosford (ext. 512)
Joseph Lawlor (ext. 511)
*Patrick Kelly (ext. 520)
James Kelly (ext. 521)
Edward Donohoe (ext. 542)
Seamus Murran (ext. 531)
*Robert Eustace (ext. 202)
Joseph Shiel's (ext. 204)
*Dominick Tuite (ext. 120)
Kenneth Bracken (ext. 118)
William Brazil (ext. 552)
*Brian Kennedy (ext. 220)
John Foley (ext. 216)
*Philip Murray (ext. 532)

*Head of Department.

The College also provides a number of Evening courses which may assist those who wish to resit for elements of the Senior Trade examinations in which they have not been successful so far or to broaden or enhance their qualifications. Details of these courses are provided in a separate section of the College prospectus, in leaflets or in another publication available on request.
CENTRES:
Main Complex, Bolton Street, Dublin 1.
School of Trades, Yarnhall Street, Dublin 1.
Annex 23-27 Beresford Street, Dublin 7
Tel: 8727177 Fax: 8727879

Acting Director
MICHAEL MURPHY, DipEng, MSc, CEng, MlMEchE

Secretary/Registrar
MICHAEL J. MARNANE, BComm, DPA, MACRA

Enquiries should be directed to:
THE SECRETARY/REGISTRAR.

DUBLIN INSTITUTE OF TECHNOLOGY
Head Office: 30 Upper Pembroke Street, Dublin 2.
Tel. 6611688. Fax: 6611696.

Acting President
MICHAEL O’DONNELL, BE, BComm, MEconSc, MAI(hc) Eirling, CEng, FIEI

Published July 1993

The information in this Prospectus is intended as a guide for persons seeking admission to the College and shall not be deemed to constitute a contract between the College and a student or any third party. The college reserves the right to change or modify any of the courses or information given in the Prospectus without prior notice.

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INTRODUCTION

The College has a strong commitment to providing a wide range of part-time day and/or evening courses relating to its main specialisations in Construction Engineering and Printing disciplines and associated areas. The aim of these courses is to provide both young people, and the not so young with opportunities to achieve worthwhile qualifications and to enhance and broaden their existing qualifications base.

Some of the part-time courses offered by the College parallel those available on a whole-time basis and enable those who enrol in them to achieve the same qualifications as those pursuing them through full-time studies. Not surprisingly, the part-time route takes a little longer and involves a considerable commitment on the part of those who combine their studies with full-time employment.

The part-time courses offered by the College have enabled many past students to advance in their careers by exploiting the educational ladders which they provide. In this way successive generations of craftspersons have progressed to supervisory and technician positions, technicians have moved on to professional levels, while professionals have advanced their status to managerial or other senior positions, all greatly assisted by the courses they have followed. Some have also used them to change their career path to another specialisation or by updating their expertise in the new technologies and other advances.

The College is anxious to respond in a flexible manner to the needs of its potential part-time students. It offers some courses on either a part-time day or evening basis on through a combination of these modes. It finds that many employers are very supportive of students pursuing relevant part-time courses, paying their tuition fees, releasing them and/or facilitating them when they have to undertake course work or study.

If you are interested in pursuing studies on a part-time basis you are encouraged to review carefully the range of programmes offered by the College in Construction Engineering, Printing, Transport or related disciplines as described in this publication. If the College is not offering the course which you are looking for and you feel that there is a significant demand for it you are invited to bring it to the attention of the appropriate Head of Department or other senior college staff. In this context the College welcomes proposals from groups of potential students or employers regarding the establishment of new courses.

TUITION FEES

The College offers most of its programmes at moderate tuition fees although in some areas for budgetary reasons they have to be set at an economic level. These fees are set out below and are payable in full on enrolment and before attendance at the first class. Fees are not refundable except where a class does not form due to a low level of enrolment, etc.

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ENROLMENT FEES FOR PART-TIME DAY AND EVENING COURSES IN THE 1993/94 SESSION

£230
£350
£195
£590
£900
£750
£1,150

METHOD OF APPLICATION AND ENROLMENT

With the exception of the computing courses E70, E71, E72, E81 and E82, application and admission to part-time day and evening courses is by personal attendance for interview at the College between 6.30 p.m. and 8.00 p.m. in accordance with the following schedule.

Monday, 13th September: Enrolment for all part-time and evening courses provided by the College except courses in the following: Printing, Automobile and Aeronautical Engineering.

Wednesday, 15th September: Enrolment for courses in Printing, Automobile and Aeronautical Engineering.

Thursday, 16th September and Friday, 17th September: Enrolment for all part-time day and evening courses in which vacancies remain.

Prior application or contact with the College is not necessary. Candidates are encouraged to bring with them evidence of existing qualifications and employment together with the specified tuition fee (or confirmation from an employer willing to pay it when invoiced) to enable them to complete the enrolment if they are acceptable and permitted to do so. Classes are generally scheduled to commence during the week commencing September 27th and those who have enrolled will be expected to report for classes in accordance with the schedule which will be available.

Applications for admission to the computer courses must be made on the official form available on request from the College before 17th September, 1993.
CONSTRUCTION TECHNOLOGY CERTIFICATE/ DIPLOMA PART-TIME

This day release course is similar to the whole-time Construction Technology Certificate/Diploma course (DT114) and leads to the award of the Construction Technology Certificate/Diploma. Classes are scheduled on one day and two evenings per week over a period of four years. Entry to this course is open to those holding:

(a) The secondary schools Leaving Certificate in at least five subjects including Mathematics and English or an equivalent qualification.

(b) Appropriate employment in the Construction Industry.

Department in Charge
Surveying and Building Technology.

DIPLOMA/DEGREE IN CONSTRUCTION ECONOMICS PART-TIME

This day release course is similar to the corresponding whole-time course (FT02) and leads to the award of a Diploma/Degree in Construction Economics. Classes are scheduled on one day and two evenings per week over a period of six years. The academic entry qualifications to the First Year of the course are similar to these for FT02. Candidates holding relevant technical qualifications at an appropriate level may be eligible for exemptions from one or more years of the course. Candidates must be in appropriate employment in the Construction Industry.

Department in Charge
Surveying & Building Technology.

PROFESSIONAL COURSE IN SURVEYING AND CONSTRUCTION STUDIES

This evening course assists students who hold Intermediate Level qualifications in the construction and surveying fields, in progressing to full professional qualifications of appropriate institutions. Students may attend classes up to two evenings per week depending on their choice of subjects.

Entry Qualifications


Department in Charge
Surveying and Building Technology.

GRADUATE DIPLOMA IN ARBITRATION LAW

The objectives of this one year part-time course are to provide participants with a better knowledge of the law and arbitration including the Arbitration Acts of 1954 and 1980. It has been developed at the request of and in co-operation with the Irish Branch of the Chartered Institute of Arbitrators. Normally this course runs on alternate years. It is expected that it will again be provided in 1993/94.

Entrance Requirements

Relevant professional qualification (e.g. Law, Engineering, Architecture, Surveying, Accountancy, Insurance etc.) with exemptions from modules (a) and (b) for practising lawyers and those with a recognised law degree. Exceptionally, applications will be accepted from unqualified students who have appropriate training or experience. Selection will be subject to interview. Exempted students will be deemed to enrol in course ESA.
E7

GRADUATE DIPLOMA IN PLANNING AND DEVELOPMENT ECONOMICS

The objective of this part-time post-graduate course, which extends over two academic years, is to meet the educational requirements for practice as a Planning and Development Surveyor. The first year of this course will next be offered in the 1994/95 session.

Entrance Requirements
(1) (a) a recognised professional qualification in the fields of Planning, Architecture, Surveying, Engineering, Law, Accountancy or (b) an Honours Degree in an appropriate discipline viz. Surveying, Economics, Law, Geography, Business Studies, and

(2) Employment in, or evidence of appropriate post-certification work experience in the Built Environment field.

Course of Study
The course consists of two parts:

Part II consists of one integrated subject area containing a number of elements under the general title ‘Planning and Development Policies, Practice and Procedures’.

Examinations & Awards
Part I examinations in the subjects listed above will be held at the end of Year 1. Part II examinations will be held and a major planning and development case study presented at the end of Year II.

On successful completion of the course, students are expected to qualify for the award of a Dublin Institute of Technology Graduate Diploma in Arribration Law. Exemption will be sought for holders of this Diploma from the Part II and III examinations of the Planning and Development Division of the Royal Institution of Chartered Surveyors.

Department in Charge
Surveying & Building Technology.

E6

GRADUATE DIPLOMA IN INTERNATIONAL ARBITRATION LAW

The objectives of this one year part-time course are to provide a better knowledge of the practice of international arbitration law and procedures. It has been developed at the request of and in co-operation with the Irish Branch of the Chartered Institute of Arbitrators and will next be offered in the 1994/95 session.

Entrance Requirements
Application will be open to those holding the DIT Diploma in Arbitration Law, Fellows of the Chartered Institute of Arbitrators and those who have passed Parts I and II of the examinations of that Institute. Selection will be subject to interview.

Course of Study
The course comprises two taught modules and four special seminars. The taught modules are:
(a) Comparative Law & Procedure; (b) International Arbitration, Practice & Procedure. The special intensive two day seminars are led and directed by visiting specialist lecturers and are organised by the Irish branch of the Chartered Institute of Arbitrators.

On successful completion of the course students will be awarded the Dublin Institute of Technology Graduate Diploma in International Arbitration Law.

Department in Charge
Surveying & Building Technology.

Course of Study
The course comprises of three taught modules and two seminars. The taught modules are: (a) Legal Principles, Civil Procedure & Evidence (b) Contract & Tort and (c) Arbitration Law & Procedure, Alternative Methods of Dispute Resolution. The two seminars which are organised by the Irish Branch of the Chartered Institute of Arbitrators deal with: (i) Introduction to Arbitration and (ii) ADR and Award Writing. They are subject to a separate fee payable to the Irish Branch of the Institute.

Examinations & Awards
On successful completion of course students will be awarded the Dublin Institute of Technology Graduate Diploma in Arbitration Law. It is intended to seek exemption for holders of this Diploma from Parts I and II of the examinations of the Chartered Institute of Arbitrators.

Department in Charge
Surveying & Building Technology.

E2

GRADUATE DIPLOMA IN PLANNING AND DEVELOPMENT ECONOMICS

The objective of this part-time post-graduate course, which extends over two academic years, is to meet the educational requirements for practice as a Planning and Development Surveyor. The first year of this course will next be offered in the 1994/95 session.

Entrance Requirements
(1) (a) a recognised professional qualification in the fields of Planning, Architecture, Surveying, Engineering, Law, Accountancy or (b) an Honours Degree in an appropriate discipline viz. Surveying, Economics, Law, Geography, Business Studies, and

(2) Employment in, or evidence of appropriate post-certification work experience in the Built Environment field.

Course of Study
The course consists of two parts:

Part II consists of one integrated subject area containing a number of elements under the general title ‘Planning and Development Policies, Practice and Procedures’.

Examinations & Awards
Part I examinations in the subjects listed above will be held at the end of Year 1. Part II examinations will be held and a major planning and development case study presented at the end of Year II.

On successful completion of the course, students are expected to qualify for the award of a Dublin Institute of Technology Graduate Diploma in Arribration Law. Exemption will be sought for holders of this Diploma from the Part II and III examinations of the Planning and Development Division of the Royal Institution of Chartered Surveyors.

Department in Charge
Surveying & Building Technology.
ARCHITECTURAL TECHNICIAN TRANSFER COURSE

This is a course for Technician members of the Royal Institute of the Architects of Ireland who wish to transfer from Architectural Technician Class of the RIAI to the study of Architecture via the RIAI examination system. Success in the course will give exemption from the Intermediate Examinations of the Institute.

The course extends over one year (26 weeks) and is not offered every year. Selection of students is made by the Royal Institute of the Architects of Ireland to whom application should be made in the first instance. It may be offered in the 1993/94 session if the demand justifies it.

Course of Study
Subjects of the course are: Theory of Architecture; History of Architecture; Urban Studies; and Architectural Design.

Entry Qualifications
Technician Membership of the RIAI and selection by the RIAI.

Department in Charge
Architecture & Town Planning.

SHORT COURSES

Short Courses in aspects of Building, Project Management and Computer Applications may be held during the session. Enquiries relating to these will be welcomed by the Department of Surveying and Building Technology.

Department in Charge
Surveying and Building Technology.

ENGINEERING DIPLOMA/DEGREE

It is proposed to offer this part-time course in the academic year 1994/95. The full programme runs over six years. It is envisaged that holders of Technician level qualifications will qualify for certain exemptions. Courses in various branches of engineering will be offered.

GRADUATE COURSES IN ENGINEERING

This is a day and/or evening course to prepare students for the Part II examinations of Professional Engineering Bodies including:

(i) Institution of Engineers of Ireland.
(ii) The Engineering Council (UK) and its associated Professional Bodies such as:
   (a) The Institution of Mechanical Engineers;
   (b) The Institution of Production Engineers;
   (c) The Institution of Structural Engineers;
   (d) Chartered Institute of Building Services Engineers.

Courses are offered for subjects in the Part II stage provided there are sufficient applicants of a suitable educational standard.

Depending on demand, the following Part II subjects may be offered: The Engineer in Society, Mechanics of Solids, Materials, Structural Analysis, Structural Design, Thermodynamics, Fuel and Energy, Construction Management, Geotechnical Engineering and possibly other subjects. Students are required to complete a Laboratory Programme as part of this course.

Details of the syllabus and examination regulations are available from the Institution of Engineers of Ireland, 22 Clyde Road, Dublin 4, or the Engineering Council, Examination Dept., Second Floor, Savoy Hill House, London WC2R OBU, Tel: 01-379 7459.

Before entry, applicants must meet the requirements of the appropriate Institution for student membership. They are urged to make early applications to the Institutions because it may take several months to process and it is not possible to sit the examinations until this has been completed.

The requirement for students membership of the Institution of Engineers of Ireland is Leaving Certificate with Honours or GCE Advanced Level in Mathematics and a suitable Science subject together with four Ordinary Level subjects including English.
Certain Technician qualifications also meet the educational requirements for student membership and may give exemption from all or some subjects in Part I. Details are available from the Department of Engineering Technology.

Department in Charge
Engineering Technology

D43C

CIVIL ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA COURSE

This part-time day and evening course prepares students for a Technician Certificate/Diploma in Civil Engineering. Students are expected to be already suitably employed in a Civil Engineering or Construction firm before commencing this course. It parallels the corresponding wholetime course DT126 and follows the same core syllabus.

Entrance Requirements

Leaving Certificate or equivalent with passes in Mathematics, a Science subject (preferably Physics), English and two other subjects or a Senior Trade Certificate with suitable endorsement subjects.

Course of Study


Stage II — Third and Fourth Years (Certificate Stage) Subjects: Structural Design and Detailing, Engineering Materials and Laboratory Work, Mathematics, Construction Services and Supplies, Surveying, Planning and Administration, Complementary Studies and Computing.

Stage III — Fifth and Sixth Years (Diploma Stage) This stage offers options in Municipal Engineering, Structural Engineering and Environmental Engineering. Candidates are expected to be employed and gaining suitable experience in the appropriate field and are required to have passed the Certificate Stage with Credit or have one year's suitable experience together with a Pass Certificate.

Municipal Option: Mathematics, Road Engineering, Management Studies, Planning and Building Regulations, Hydraulics and Sanitary Services, Structural Design and a Project.
(Structural Option): Mathematics, Management Studies, Theory of Structures, Structural Design (Concrete), Structural Design (Steel), Municipal Engineering and a Project.


A number of subjects in the various options are taken in common, particularly in the fifth year.

The Environmental Option will commence in the academic year 1994/95.

Examinations and Other Requirements

At the end of each session students take a College examination which is moderated by the National Council for Educational Awards and the Dublin Institute of Technology.

Recognition by Professional Bodies

Those who have successfully completed the Certificate Stage of the course meet the academic requirements for Technician Status with the Institution of Engineers of Ireland, while those who have completed the Diploma stage meet the Technician Engineer level and can qualify for the non-Corporate Associateship grade of Membership after they have completed a suitable period of practical training.

Department in Charge
Engineering Technology

E43C

CIVIL ENGINEERING TECHNICIANS' CERTIFICATE COURSE

This is a four-year evening course to prepare students in suitable employment for a Civil Engineering Technicians' Certificate. It parallels Course D43C and Course DT126 and follows the same syllabus.

Entrance Requirements

The entrance requirement is Leaving Certificate in five subjects including Mathematics or equivalent qualification.
Course of Study

Stage I — First & Second Year Subjects:

Stage II — Third & Fourth Year (Certificate Stage) Subjects:
Structural Design and Detailing, Engineering Materials, Surveying, Mathematics, Planning and Administration, Construction Services, Complementary Studies and Computing.

Department in Charge
Engineering Technology.

D43M
MECHANICAL ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA COURSE

This part-time day and evening course prepares students for a Technician Certificate/Diploma in Mechanical Engineering. Students are expected to be already suitably employed in Mechanical Engineering before commencing the course. It parallels the corresponding whole-time course DT128 and follows the same core syllabus.

Entrance Requirements
Leaving Certificate or equivalent with passes in Mathematics, a Science subject (preferably Physics), English, and two other subjects or a Senior Trade Certificate with suitable endorsement subjects.

Course of Study

Stage II — Third and Fourth Years (Certificate Stage): At this stage three options are offered: Mechanical, Welding and Fluid Power.


Mechanical Option: Mechanics, Design and Engineering Materials, Manufacturing Technology and Design (years work).


Stage III — Fifth and Sixth Years (Diploma Stage) At this stage an Instrumentation Option is offered on a part-time basis at present and candidates are expected to be employed in this field. Subjects: Mathematics, Mechanics, Complementary Studies, Electrotechnology and Electronics, Control Engineering, Industrial Instrumentation, Design, and Project Work.

Candidates are required to have passed the Certificate Stage with Credit (Merit) or to have at least one year's suitable experience together with a Pass Certificate.

Examinations and Other Requirements
At the end of each session students take a College examination which is moderated by the National Council for Educational Awards and the Dublin Institute of Technology.

Recognition by Professional Bodies
Those who have successfully completed the Certificate Stage of this course meet the academic requirements for Technician Status with the Institution of Engineers of Ireland, while those who have completed the Diploma stage meet the Technician Engineer level and can qualify for the non-Corporate Associateship grade of Membership after they have completed a suitable period of practical training.

Department in Charge
Engineering Technology.

E43M
MECHANICAL ENGINEERING TECHNICIANS' CERTIFICATE COURSE

This is a four-year evening course to prepare students in suitable employment for Mechanical Engineering Technician Certificate. It parallels Course DT128 and D43M and follows the same syllabus but specialised options may be available in both Fluid Power and Welding.

Entrance Requirements
The entrance requirement is Leaving Certificate in five subjects including Mathematics and English, or the Senior Trade Certificate with endorsement, or equivalent qualification.

Course of Study
Stage II — Third & Fourth Year (Certificate Stage) At this stage three options are offered, Mechanical, Welding and Fluid Power Engineering.

Common Subjects: Mathematics, Thermal and Fluid Plant, Electrotechnology and Industrial Instrumentation, Complementary Studies.


D43V

BUILDING SERVICES ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA COURSE

This part-time day and evening course prepares students for a Technician Certificate/Diploma in Building Services Engineering. Students are expected to be already suitably employed in Building Services Engineering before commencing the course. It parallels the corresponding wholetime Course DT127 and follows the same core syllabus.

Entrance Requirements

Leaving Certificate or equivalent with passes in Mathematics, a Science subject (preferably Physics) and two other subjects or a Senior Trade Certificate with suitable endorsement subjects.

Course of Study


Stage II — Third & Fourth Years (Certificate Stage): At this stage two options are available, Building Services and Refrigeration Technology.


Department in Charge

Engineering Technology.
Second Year
Science and Mathematics, Drawing and Materials, Production Technology and General Studies.

Third Year
Production Technology, Mathematics and Statistics, Metrology and Management Studies.

Examinations and Other Requirements
At the end of the first year students take the Part I examination of the City & Guilds of London Institute No. 255, Part II at the end of the second year, and Part III at the end of the third year.

Department in Charge
Engineering Technology

E54
STRUCTURAL DESIGN COURSE
This is a one year advanced course intended for those who wish to prepare for the Part III Design examination of the Institution of Structural Engineers. Depending on demand, there may be options in Steel or Concrete Design.

Entrance Requirements
A degree in Civil or Structural Engineering, or a pass in IIE/Engineering Council examinations, or equivalent, together with at least one year of suitable postgraduate experience in a structural design office.

Department in Charge
Engineering Technology

E47
MECHANICAL ENGINEERING TECHNICIAN COURSE
This is a three year evening course to prepare students for the Part I, Part II and Part III examinations of the City & Guilds of London Institute course for Mechanical Engineering Technicians (255) Students should have a suitable craft background and hold the Senior Craft Certificate with endorsement, Elementary Technological Certificate in Mechanical Engineering, GCE Leaving Certificate or equivalent.

The course of study is as set out for Course D47 which is the parallel part-time day course.

Department in Charge
Engineering Technology

E48
CERTIFIED MANUFACTURING TECHNOLOGIST
This course is designed to assist students to prepare for the Manufacturing Engineering Part 1 examination of the Society of Manufacturing Engineers. This leads to the award of Certified Manufacturing Technologist (CMfgT). The course is aimed at technicians, supervisors, production managers and engineers engaged in manufacturing. A further year’s study will lead to the award of Certified Manufacturing Engineer (CMfgE).

Entrance Requirements
Candidates must have 4 or more years manufacturing engineering experience and/or education.

Course Content
A review of manufacturing engineering fundamentals including applied mechanics, materials, quality control, management, computer applications, automation, manufacturing processes and engineering design.

Duration
One year, two evenings per week.

Department in Charge
Engineering Technology

E55
INDUSTRIAL MANAGEMENT CERTIFICATE AND DIPLOMA COURSE
This is a two year evening Certificate course intended for engineering technicians and trainee production and industrial managers who wish to take the certificate examinations of the Institution of Industrial Managers. The Diploma stage is intended primarily for those responsible for discharging management functions.

Entrance Requirements
Students entering the Certificate course should have reached the Leaving Certificate standard of general education and be suitably employed as managers or supervisors in industry. Applicants holding an appropriate degree or professional qualification and substantial management experience may be admitted directly into the Third Year of Diploma Stage.

Course of Study


Second Year Subjects: Production and Operation Management, Industrial Finance, Personnel and Industrial Relations.

Third Year (Diploma Stage) Subjects: This involves a further one year period of study of Industrial Management Policy and Practice in which knowledge acquired during the Certificate course is applied to solve practical problems by an integrated approach using case studies, etc.
Examinations and Other Requirements

Students must pass a College examination at the end of each year. The examination is moderated by the Institution of Industrial Managers. Those who successfully complete the Certificate course qualify for Associate Membership of the Institution of Industrial Managers. Successful students may continue their studies on the one year Diploma course, which leads to the Membership grade (MIIM).

Those who enrol are required to apply for student membership of the Institution prior to embarking on the course.

Department in Charge
Engineering Technology.

REFRIGERATION ENGINEERING TECHNICIAN COURSE

This is a two year course for technicians employed in the refrigeration engineering industry. Suitable students are prepared for the City & Guilds of London Institute examinations in Science and Technology of Refrigeration (257). The subjects of instruction are: Science, Refrigeration Processes and Machinery, and Drawing.

Department in Charge
Engineering Technology.

SHORT COURSE PROGRAMME

A series of 1-5 day short courses on modern developments in Engineering Technology may be organised at different stages during the session. These may include:
(a) Low Cost Automation;
(b) Fluid Power;
(c) Maintenance Management Techniques;
(d) CAD/CAM
(e) New Developments in Welding Technology;
(f) Fuel Technology;
(g) Fire Safety;
(h) Structural Design Codes;
(i) New Materials;
(k) Water Pollution Control;
(l) Energy Conservation;
(m) Engineering Costing and Estimating.

Department in Charge
Engineering Technology.
STAGE 2

Common Core Subjects
Management of Maintenance
Computer Studies II

Fluid Power Technology Option
Fluid Power Science II
Fluid Power Plant II

Department in Charge
Engineering Technology

DIPLOMA IN COMPUTER APPLICATIONS

This is a modular evening course for students taking the City and Guilds 726 (Information Technology Program) examinations. Details of the modules offered are listed below.

Entrance Requirements
(a) Leaving Certificate or equivalent or
(b) Commercial or Industrial experience related to Computing.

Course of Study
Introductory Computing (Course Ref. E70/1);
Wordprocessing and Desktop Publishing (Course Ref. E70/2);
Databases and Spreadsheets (Course Ref. E70/3)
Introductory Programming (Course Ref. E70/4)

Application Procedure
Application for admission to the course should be made on the official application form available on request from the College before 17th September, 1993. Applicants may be called for interview and selection will be based on academic ability. Where vacancies remain on the course, applications will be accepted in person by attendance at the College after 17th September.

Fee: £195.00 per module

Department in Charge
Science, Mathematics and Computing.

E71

COMPUTER PROGRAMMING I

This is a one year evening course in COBOL to prepare students for the City and Guilds Examination 424 (Preliminary Certificate in Applications Programming).

Entrance Requirements
(a) Leaving Certificate or equivalent and
(b) Commercial or Industrial experience related to Computing.

Course of Study
Fundamentals of Data Processing, Computer Systems & Hardware, File Organisation and Processing, Program Writing and Documentation, COBOL Language.

Application Procedure
Application for admission to the course should be made on the official application form available on request from the College before 17th September, 1993. Applicants may be called for interview and selection will be based on academic ability. Where vacancies remain on the course, applications will be accepted in person by attendance at the College after 17th September.

Other Information
The course involves attendance on two evenings a week throughout the session.

Department in Charge
Science, Mathematics and Computing.

E72

COMPUTER PROGRAMMING II

This is a one year evening course in COBOL to prepare students for the City and Guilds Examination 425 (Applications Programming Certificate).

Entrance Requirements
City and Guilds Preliminary Certificate in Applications Programming in COBOL or equivalent.

Course of Study

Application Procedure
Application for admission to the course should be made on the official application form available on request from the College before 17th September, 1993. Applicants may be called for interview and selection will be based on academic ability. Where vacancies remain on the course, applications will be accepted in person by attendance at the College after 17th September.

Other Information
The course involves attendance on two evenings a week throughout the session.

Department in Charge
Science, Mathematics and Computing.
E81 AUTOCAD

This is a one year evening course to prepare students for the City & Guilds of London Institute Examination 4351 ‘Introduction to AutoCAD’ and to give them a working knowledge of PC software and hardware.

Entrance Requirements
(a) Leaving Certificate or equivalent.
(b) Students should be employed in a technical position with access to a CAD system.
   Preference will be given to those with a third level technical qualification in a drawing related discipline.

Course Content
Using a personal computer; operating MS DOS and simple application packages; setting up and configuring AutoCAD; entity creation and modification; saving and maintaining drawing files; hardcopy generation.

Application Procedure
Application for admission to the course should be made on the official application form available on request from the College before 17th September, 1993. Applicants may be called for interview and selection will be based on academic ability. Where vacancies remain on the course, applications will be accepted in person by attendance at the College after 17th September.

Department in Charge
Science, Mathematics and Computing

E82 ADVANCED AUTOCAD

This is a one year evening course to prepare students for the City & Guilds of London Institute Examinations 4354 ‘Customising AutoCAD’ or 4353 ‘Three dimensional drafting’.

Entrance Requirements
(a) Leaving Certificate or equivalent.
(b) Students should be employed in a technical position with access to a CAD system.
(c) City & Guilds 4351 Introductory AutoCAD or equivalent.

Prospective students may be required to undertake a short practical examination as an alternative to (c).
Preference will be given to students with a third-level technical qualification in a drawing-related discipline.

Course Content
Customising AutoCAD by altering the standard menus; the use of simple LISP command to create new commands; the use of font files; the creation, modification and presentation possibilities available with the three dimensional capabilities offered by AutoCAD.

Application Procedure
Application for admission to the course should be made on the official application form available on request from the College before 17th September, 1993. Applicants may be called for interview and selection will be based on academic ability. Where vacancies remain on the course, applications will be accepted in person by attendance at the College after 17th September.

Department in Charge
Science, Mathematics and Computing.
CRAFT & TRADE RELATED COURSES — EVENING

Enquirers seeking further information about trade and trade-related courses should contact Departments as follows:

**Construction Trades 'A'**
E104A, E104B, 106

**Construction Trades 'B'**
E107, E111, E118, E119, D120, E120, E121, E122A, E122B.

**Metal Fabrication & Plumbing**

**Engineering Trades**
E138, E139, E140, E141A, B, C, D, E, F, E142F

**Transport Engineering**

**Printing and Graphic Communications**

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**E104**

**CONSTRUCTION CRAFTS SUPPLEMENTARY STUDIES**

**E104A**

**Colour in Building Work**
This course is designed to give craftspersons an opportunity to study colour, texture and pattern in building work.

**Duration**
One year — 30 weeks at 3 hours per week.

**Course Content**
The effects of colour, light, pattern and texture on building form and character.

**Entry Requirements**
Senior Trade Certificate of the Department of Education in an appropriate construction trade or an equivalent qualification.

**Examination**
City and Guilds of London Institute Certificate 600-1-09.

**E104B**

**Design in Building Work**
This course is intended to give craftspersons an opportunity to study structure, function and visual effects in buildings.

**Duration**
One year — 30 weeks at 3 hours per week.

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**E106**

**SIGNWORK — ADVANCED**

This course is intended to give painting and decorating craftspersons an opportunity to improve their knowledge and skill in the preparation of signwork.

**Duration**
One year — 30 weeks at 5 hours per week — Part 1.
One year — 30 weeks at 5 hours per week — Part 2.

**Course Content**
Design, shape and form in signwork. Production of signs, Glass Gilding and Etching, Ornamental Gilding, Silk Screening.

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**E107**

**FURNITURE DESIGN AND CONSTRUCTION (ADVANCED)**

This course is designed to give those in the furniture industry an opportunity to study structure and co-ordinate the various aspects of the industry from preliminary sketch drawings to completed design and to prepare people for positions of responsibility in the industry.

**Course Contents**
Sketch and draughtsmanship, Sketch Design, Working Drawings, Presentation Drawings.

**Entrance Requirements**
Employment in furniture industry and/or City and Guilds of London Furniture Craft Studies Certificate.

**Examination**
City and Guilds of London Institute.

**Awards**
City and Guilds of London Certificate in Furniture Design and Construction, Course 579.1.

**Duration**
Two years — 30 weeks at 4 hours/week (2 evenings) each year.
E111 CABINETMAKING/CHAIRMAKING

This course is designed to assist students to prepare for the Senior Trade Certificate Examination of the Department of Education and the Advanced Certificates of the City & Guilds of London Institute.

Duration: One year, two evenings per week.

Subjects: Practical, Trade Theory & Drawing.

Entry Requirements: Prospective students must have completed 3 years of apprenticeship and hold the Department of Education Junior Trade Certificate.

E118 INSTITUTE OF WOOD SCIENCE

Open Learning.

Course Objective: To give all new entrants to the timber trade and anyone involved with the supply and use of timber and associated materials, a broad introduction to the work, materials processes and application.

Application Procedure: The course is administered by TRADA in association with the college. All enrolments are made through the college. On enrolment the student will attend the college and receive a study pack. This will be the first of seven lecture days held in the college. Attendance at the college is spread throughout the college year. The remainder of study is conducted through ‘Open Learning’ at home.

Qualifications: Success in the examination will lead to a preliminary certificate in Timber Technology endorsed by the Institute of Wood Science and TRADA. This is the recognised entry requirement to the IWSC two year course in Timber Technology which leads to Associateship of the Institute.

E119 CONSTRUCTION TECHNICIAN COURSE

This is a three year evening course in Building Construction and associated subjects in preparation for the Department of Education technological examinations.

Duration: 3 years — 3 evenings per week.

Objectives: Elementary level examination at the end of the first year. Intermediate level examination at the end of the second year. Advanced level examination at the end of the third year.

Entry Requirements: Employment in the Construction Industry and possession of a Group or Intermediate Certificate with a Grade C in Mathematics and Mechanical Drawing, or better.

Exemption from First Year of the Course may be granted to an applicant who has achieved an acceptable level in Drawing and Building Subjects. Success in the Elementary Stage Examination is a requirement for entry into the Second Year of the Course.

Success in the Intermediate Stage Examination is a requirement for entry into the Final Year of the Course.

Subjects: 1st Year Building Construction, Mathematics and Geometry.

2nd Year Building Construction, Builders Quantities, Land Surveying and Setting-out, Plane and Solid Geometry.

3rd Year Building Construction, Builders Quantities, Plane and Solid Geometry.

D120 CRAFT TECHNICIAN COURSE IN BUILDING

This course may be offered on a day-release and evening attendance basis in the 1993/94 session. See course E120 for further details.

E120 CRAFT TECHNICIAN CERTIFICATE COURSE IN BUILDING

This is a three-year part-time course. The course has been designed to enable students on completion of their craft studies to further their career prospects in the Building Industry.

Entry Requirements: Prospective students must have completed at least three years as an apprentice in a recognised building trade and hold a Department of Education Senior Trade Certificate or equivalent trade qualifications.

Course of Study

Stage I:

Stage II:
Building Construction II, Building Quantities and Account Procedures, Surveying & Levelling, Structural Engineering and Site Management.
**Stage III:**

**Award**
Craft Based Technician Certificate in Building (Dublin Institute of Technology)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E121</td>
<td>CARPENTRY AND JOINERY — ADVANCED</td>
<td>This course is designed to assist senior apprentices and craftsmen in preparing for the Senior Trade Certificate Examination of the Department of Education and the Advanced Certificate of the City &amp; Guilds of London Institute.</td>
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<tr>
<td>Duration</td>
<td>One year, two evenings per week.</td>
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<tr>
<td>Subjects</td>
<td>Trade Theory, Trade Practice &amp; Drawing.</td>
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<tr>
<td>Entry Requirements</td>
<td>Prospective students must have passed the Junior Trade Certificate Examination in Carpentry and Joinery.</td>
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<tr>
<td>E122A</td>
<td>WOODCUTTING MACHINISTS</td>
<td>This course is designed to give students an appreciation of the practical use of woodcutting machines. Prospective students must be employed in a timber related trade. The course duration is one evening per week over one year.</td>
</tr>
<tr>
<td>E122B</td>
<td>WOOD CUTTING MACHINISTS — CNC</td>
<td>This course is designed to update the skills of Woodcutting Machinists in modern machining techniques including the use of a Computer based Numerically Controlled Router.</td>
</tr>
<tr>
<td>D123</td>
<td>SHORT COURSES IN WELDING PROCESSES — UPDATING OF SKILLS</td>
<td>Short courses in various aspects of Welding may be held during the session in response to demands from industry. Enquiries should be directed to the Department of Metal Fabrication.</td>
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</tbody>
</table>

**E123A COURSE IN WELDING — METAL ARC AND OXY-ACETYLENE**
This course is designed to meet the needs of craftsmen employed in the engineering or allied industries. The course covers both gas and electric-arc welding. Each course is of 22-26 weeks duration, meeting on two evenings each week from 7.00 p.m. to 10.00 p.m.

**Entry Requirements**
Employment as a craftsman in the engineering or allied trades.

**E123B GAS SHIELDED ARC WELDING**
This is a special evening course designed to enable senior apprentices and craftsmen employed in engineering and allied trades to prepare for the ASME IX in S/S Steel and Aluminium Sheet. EN287 in S/S Pipe and BS4872 Parts I and II and also for the BS4872 Part II Certificate in Aluminium (M.I.G. and T.I.G. process).

**Course of Study**
Metal Arc Gas Shielded and Tungsten Arc Gas Shielded Welding.
### Duration
One year. (One evening per week from 7.00 p.m. to 10.00 p.m.)

### Entrance Requirements
Employment in one of the engineering or allied trades.

### E123C
**WELDING — ADVANCED (PIPE AND PLATE)**
This course is designed to assist craftsmen to prepare for the requirements of the BS 4872-ASME IX and EN287 Welding Standards. The course is of 26 weeks duration, meeting on one evening per week from 7.00 p.m. to 10.00 p.m.

### Duration
One year (1 evening per week).

### Entrance Requirements
Employment as a craftsman in the engineering or allied trades and have completed basic welding courses to an acceptable standard.

### E123D
**PIPE FABRICATION COURSE**
Duration: 20 weeks — one evening per week for 3 hours. One third of the Course will be carried out in the classroom.

### Entrance Requirements
Qualified Craftsperson in either one of the following trade areas: Metal Fabrication; Sheet Metal Work; Welding; Pipe Fitters. Other suitably qualified people may also enter for the course provided they are employed in the Engineering or associated industry.

### E125
**ART METAL CASTING**
To introduce Artists and Sculptors and others involved in making statuary and Objets d’Art, to good design practice and the principles involved in casting in Brass, Bronze and Aluminium.

### Duration of Course
One evening per week for 8 weeks or other suitable arrangements.

### Entrance Requirements
Appropriate to those involved in Artistic Work.

### E129A
**SHEET METAL WORK**
This course is designed to assist Craftsmen to prepare for the Senior Trade Certificate Examinations of the Department of Education or the City and Guilds of London.

### Duration
One year, two evenings per week.

### Subjects
Trade Theory & Drawing.

### Entry
Prospective students must have completed 3 years of apprenticeship and hold the Department of Education Junior Trade Certificate.

### E129B
**SHEET METAL WORK — UPDATING OF SKILLS**
This course is designed for the Sheetmetal work crafts person who require to update their practical skills.

### Duration
Ten weeks, meeting on two evenings per week, Monday and Tuesday 7.00 p.m. to 9.30 p.m.

### Course Content
The use of numerical controlled Press Break and Modern Welding Processes as applied to the Sheet Metal Industry.

### Entrance Requirements
Employment in the Sheet Metal Industry.

### E130
**METAL FABRICATION**
This course is designed to assist Senior Apprentices and Craftsmen to prepare for the Senior Trade Certificate Examination of the Department of Education or City and Guilds of London.

### Duration
One year, two evenings per week.

### Subjects
Trade Theory & Drawing.

### Entry
Prospective apprentices must have completed 3 years of apprenticeship and have passed the Junior Trade Certificate.

### E131
**PLUMBING**
This course is designed to assist Senior Apprentices and Craftsmen to prepare for the Senior Trade Certificate Examination of the Department of Education.

### Duration
One year, two evenings per week.

### Subjects
Trade Theory & Drawing.

### Entry
Prospective apprentices must have completed 3 years of apprenticeship and have passed the Junior Trade Certificate.
CRAFT TECHNICIAN CERTIFICATE COURSE IN PLUMBING

This course may be offered on a day release and evening attendance basis in the 1993/94 session. See course E132 for further details.

CRAFT TECHNICIAN CERTIFICATE COURSE IN PLUMBING

This three-year course of study has been designed to prepare craftspersons as craft technicians in Plumbing. Attendance is on three evenings per week (or alternatively on one day and one evening per week).

**Stage I:** Hot and Cold Water Systems, Gas Installations, Sanitation and Drainage, Mathematics, Science, Drawing and Design.

**Stage II:** Mathematics, Science, Mechanics of Fluids, Heating Technology, Drawing and Design.

**Stage III:** Organisation and Management Techniques, Estimating and Quantities, Heating Technology, Welding Technology, Design Project.

Prospective students must have completed at least three years of an appropriate craft apprenticeship and have successfully completed the Senior Stage of the Department of Education Craft Certificate Examination (Written and Practical) with endorsement where such is offered.

At the end of each stage, students will be required to be successful in a College examination in each subject before proceeding to the next stage. A DIT Craft Technician Certificate will be awarded to students who pass the final (Stage III) examination in all subjects. Students who are successful in the final examination may apply for corporate membership of the Institute of Plumbing and are also eligible for the Engineering Technician status of the Engineering Council.

TENDERING AND ESTIMATING PRACTICE (MECHANICAL SERVICES INDUSTRY)

**Duration**
One year — one evening per week.

**Subjects**
- Tendering Procedures
- Tender Documents
- Contracts
- Take-Off Practice
- Pricing Folder
- Labour Rates
- Bill of Quantities
- Material and Labour Schedules

**Entry Requirements**
Department of Education Senior Trade Certificate.
E139 QUALITY ASSURANCE MANAGEMENT

Aims of Course
This programme provides further study for those who have completed the City & Guilds 743 Parts 1 and 2 Certificate and defines the role of management in the supervision of Quality Assurance Principles and Techniques. Particular emphasis will be placed on the Irish market while generally considering new legislation and E.C. directives. Certification is by the Irish Quality Association.

Entry Requirement
City & Guilds Certificate 743 Parts 1 and 2. Applications will also be considered from candidates employed in the area with relevant experience.

Duration of Course
One evening per week for the full session.

Course Content
Quality Legislation and EC Directives; Financial Consideration of Quality; Quality Documentation; Quality Assurance; Practical Problem Solving Techniques and Applications; Case Studies and Site Visits.

E140 ENGINEERING SYSTEMS MAINTENANCE

Objective
City & Guilds of London Institute Part II — 214 Certificate in Engineering Systems Maintenance.
Candidates who successfully complete each element will be issued with a record of achievement and will qualify for the Certificate when they have passed the two core subjects and any three of the optional subjects.

Core Subjects
General Maintenance Technology.
Maintenance Organisation.

Optional Subjects

Duration
Each subject will involve attendance of between 1 1/2 and 3 hours per week. It is expected that students would take at least 2 subjects per year.

E141 COMPUTER-AIDED ENGINEERING

Objective
A series of short courses for those requiring an understanding of new engineering technologies and their implications. — City and Guilds 2302 scheme.

E141A Basic NC/CNC
E141B Basic CAD/CAM.
E141C Basic Robotics

Course Duration
10 weeks — one evening per week or an alternate daytime arrangement, depending on demand.

Entrance Requirements
Applicants should have a suitable engineering background as craftsmen, technicians or other technical positions.

E141D NC/CNC Machine Setting and Operation
This is a one-year course to prepare mechanical engineering craftpersons for the City & Guilds 2303 Level III Certificate. It provides an introduction to CNC machines and their programming.

E141E NC/CNC — Part Programming
The City & Guilds of London Institute 2303 Level III Certificate.

Objective
Simple operating principles of Numerical Control, Data Storage and Transmission Media, the NC Machine-Axis, and the purpose of a machine datum, the principle of co-ordinate dimensioning, pre Planning for Part Programming, part Programming.

Course Duration
One year (one evening per week).

Entry Requirements
City and Guilds of London Institute 2303 Certificate (E141A).

E141F NC/CNC — Advanced Part Programming
The City & Guilds of London Institute 2304 Level IV Certificate.

Objective
Planning programming procedures, the efficient use of canned cycles, sub-routines and other facilities on a number of CNC machines, develop programmes using CAD/CAM Packages, consider the implications of Computer-Aided Manufacturing in Industry, produce working parts on CNC Milling, Turning and Wire Eroding Machines.

Course Duration
One year (one evening per week).

Entrance Requirements
City & Guilds of London Institute 2303 Level III Certificate.
ENGINEERING CRAFT STUDIES — INSPECTION

Objective
The City & Guilds of London Institute Mechanical Engineering Craft Studies Certificate 205, Part II and Part III. This course combines both the theoretical and practical aspects, making use of a well equipped metrology laboratory.

Course Duration
Two years (2 evenings per week)

Entry Requirements
Craft apprenticeship, technician or other engineering qualifications.

FLIGHT OPERATION OFFICER (DISPATCHER COURSE)

This course provides instruction for flight operations officers in all operational aspects related to the preparation for commercial flights and the monitoring of all flights from a safety and efficiency viewpoint from the ground. It includes flight planning, aircraft loading, flight watch and operational considerations such as weight and runway limitations for the aircraft performance, weather, and ATC procedures.

The course follows the guidelines of ICAO standardised course 201.

Duration
One year, two evenings a week.

Entrance Requirements
A general knowledge of aviation appropriate to personnel employed in airlines or associated operations.

PRODUCTION PLANNING COURSE (I.A.T.A.)

This course provides instruction for personnel employed in the Planning Departments of the Aeronautical Industry. The course covers Aircraft Organisation and Practice, and Aircraft Operational and Maintenance Planning.

Entrance Requirements
Personnel employed in Planning Departments in the Industry and holders of Part II Examinations of the City & Guilds of London Institute Certificate Course (258).

Duration of Course
1 year, 2 evenings per week.

MAINTENANCE ENGINEERS' LICENCES OF THE DEPARTMENT OF TOURISM & TRANSPORT

E152A
'A' LICENCE — B.A.C.1-11 AC LICENCE

E152B
F27 MARK 050 AND P & W 125 ENGINE

E152C
'A' LICENCE — B737

E152D
'A' LICENCE — B747

E152E
'A' LICENCE — B727

E152G
'C' LICENCE — P & W JT8D

E152H
'C' LICENCE — P & W JT9D

E152J
'C' LICENCE — ROLLS ROYCE SPEY

E152M
'X' LICENCE — INSTRUMENTS

E152N
'X' LICENCE — ELECTRICAL

E152P
'X' LICENCE — RADIO

E152Q
'X' LICENCE — RADIO (RADAR ENDOREMENT)

E152K
SHORTS 360 AIRCRAFT AND PT6 ENGINE

E152R
'X' LICENCES — AVIONICS

E152S
B 737 CFM 56-3 ENGINE.

E152T
B737 — 200/300 DIFFERENCES COURSE.

E152U
B737 — 400/500 DIFFERENCES COURSE.

E152V
B767 — 300 AIR FRAME

The above courses provide instruction for Aircraft Maintenance Engineers wishing to take the appropriate licence examination of the Department of Tourism & Transport. The courses are of one year duration requiring attendance on two evenings per week.

Entrance Requirements
Basic Aeronautical Engineering Certificate in appropriate Category.

JET ENGINE OVERHAUL PROCEDURES

This course provides instruction in Jet Engine design and overhaul procedures.

Entrance Requirements
Employment in the Industry.

Duration of Course
1 year, 1 evening per week.

AERONAUTICAL ENGINEERING CRAFT STUDIES

Stage 1
This is a one year course requiring attendance for two evenings (6 hours) weekly per session. The course is designed to prepare students for Part I of the City and Guilds of London Institute Examinations in Aeronautical Engineering Industry.
Entrance Requirements: Day Vocational Group Certificate or Intermediate Certificate and be employed in the Aeronautical Engineering Industry.

Stage 2 (Mechanical)
This one year course is designed to prepare students for Part II of the City & Guilds of London Examinations in Aeronautical Engineering Craft Studies (Course No. 208). Classes are held on three evenings per week from October to May.

Entrance Requirements: Part II City & Guilds Aer Engineering Craft Studies or Aeronautical Engineering Occupational Competences.

E155 BASIC AERONAUTICAL ENGINEERING CERTIFICATES

E155B AIRFRAMES PRESSURISED (B.A.E.C.2)
E155C PISTON ENGINES (B.A.E.C.3)
E155D TURBO — PROP & TURBO — JET ENGINES (B.A.E.C.4)
E155E HELICOPTERS (LESS ENGINES) (B.A.E.C.5)
E155F ELECTRICAL (B.A.E.C.6)
E155G RADIO (B.A.E.C.7)
E155H INSTRUMENTS (B.A.E.C.8)
E155J AVIONICS BAEC 9
E155K INSPECTION & REPAIR OF METAL AND COMPOSITES AIRCRAFT STRUCTURES BAEC 10

The above courses are one year duration, requiring attendance for two evenings (6 hours weekly per session). The courses are designed to prepare students for the Basic Aeronautical Engineering Certificate examinations of the Department of Tourism & Transport.

Entrance Requirements: Not less than two years employment in the Aeronautical Engineering Industry.

E156A PRIVATE AIRCRAFT PILOT'S LICENCE
This course provides instruction in Meteorology, Navigation, Air Legislation, Theory of Flight and Aircraft Limitations, for personnel wishing to take the Department of Tourism & Transport Private Pilots Licence.

Duration of Course: 1 year, one evening per week.

E156B PRIVATE PILOTS LICENCE (INSTRUMENT RATING)
This course provides instruction for personnel who already hold a Private Licence and wish to take the Department of Tourism and Transport Private Licence Instrument Rating.

Duration of Course: 1 year, 1 evening per week.

E156C MOTOR CYCLE MECHANICS
Objective: The City & Guilds of London Institute Craft Certificate 389.
Course Duration: 2 years of 30 weeks each year, 3 evenings (6 hours) each week.

Entrance Requirements: Employment as a motor cycle mechanic.

E156D CONSTRUCTION PLANT FITTERS
Objective: The City & Guilds of London Institute Full Craft Certificate 620, Part III.
Course Duration: 1 year of 30 weeks, 2 evenings (6 hours) each week.

Entrance Qualifications: The City & Guilds of London Institute 620, Certificate Part III.

E156E MOTOR VEHICLE PARTS PERSONNEL
Objective: The City & Guilds of London Institute 384, Vehicle Parts Personnel, Part I.

E156F MOTOR VEHICLE CRAFT STUDIES — DIAGNOSTIC TECHNIQUES
Objective: The City & Guilds of London Institute 381 Part III.
Course Duration: Four years, 30 weeks each year.
Attendance: Three evenings (9 hours) each week.
Subjects: Diagnostic Techniques (engine), Diagnostic Techniques (transmission), Automatic Gearboxes.
Entrance Qualifications: City & Guilds of London Institute 381 Part II or equivalent.

**E173B**

**MOTOR VEHICLE CRAFT STUDIES — COMPRESSED AIR SYSTEMS; C.I. ENGINES; FUEL INJECTION EQUIPMENT**

Objective: The City & Guilds of London Institute 381 Part III.
Course Duration: One year of 30 weeks.
Attendance: Three evenings (9 hours) each week.
Entrance Qualifications: City & Guilds of London Institute 381 Part II or equivalent.

**E173C**

**MOTOR VEHICLE CRAFT STUDIES — ELECTRICITY/ELECTRONICS**

Attendance: Three evenings (9 hours) each week.
Objective: The City & Guilds of London Institute 381 Part III.
Course Duration: One year of 30 weeks.
Entrance Qualifications: City & Guilds of London Institute 381 Part II or equivalent.

**D174**

**AUTO-ENGINEERING TECHNICIANS**

Objective: Department of Education Advanced Motor Car Engineering Technological Certificate and the City & Guilds of London Institute Motor Vehicle Technicians Full Technological Certificate (390), Parts II and III.
Duration of Course: 1 year part-time (7 hours) and 2 evenings (6 hours) each week for 38 weeks.

Entrance Qualifications: Department of Education Senior Trade Certificate with endorsement subjects and Department of Education Intermediate Motor Car Engineering Technological Certificate (2 subjects) or the City & Guilds of London Institute 390, Part I.

**D176**

**AUTOMOBILE ENGINEERING UPDATING COURSES — CONTINUING EDUCATION PROGRAMME**

Objective: Updating of trade personnel in modern developments relating to engines, transmission systems and electronics.
Duration of Course: Two days to a few weeks — day and/or evening.
Entry Requirements: Senior Trade Certificate in Motor Engineering.

**E176**

**AUTOMOBILE ENGINEERING UPDATING COURSE**

Objective: Continuing Education Programme.
The City & Guilds of London Institute 381, Part III, Modular.
Course Duration: Short courses of 3 weeks duration, over two evenings per week, on modern developments and techniques in the industry.
Entrance Qualifications: Department of Education Senior Trade Certificate.
TECHNOLOGICAL CERTIFICATE IN AUTOMOBILE ENGINEERING

Objective
Department of Education Elementary, Intermediate and Advanced Technological Certificates in Motor Car Engineering.

Duration of Course
5 years of 30 weeks each year, 4 evenings (12 hours) each week.

Subjects
Motor Car Engineering, Engineering Science and Mathematics, Automobile Electricity, Engineering Laboratory, General Studies including English, Drawing and Sketching, Garage Organisation and Management.

Entrance Requirements
Day Vocational Group Certificate or Intermediate Certificate with Honours in certain specified subjects.

MOTOR INDUSTRY MANAGEMENT STUDIES

This three year course prepares students for membership examinations of the Institute of the Motor Industry.

Subjects

Entrance Requirements
Leaving Certificate or equivalent qualification. Exemptions to stages of the course may be available to suitably qualified candidates.

MOTOR INDUSTRY MANAGEMENT STUDIES

This one-year course prepares students for the Higher Certificate of Management of the Institute of the Motor Industry.

Subjects
Management, Legislation, Accountancy, Organisation and administration.

Entrance Requirements
IMI Certificate of Management.

ROAD TRANSPORT STUDIES

This three year course prepares students for the membership examinations of the Institute of Road Transport Engineers and Certificate of Professional Competence of the Department of the Environment.

Subjects

Entrance Requirements
The Leaving Certificate or equivalent qualifications. Exemptions from stages of the course may be available to suitably qualified candidates.

BOOK AND ARCHIVE RESTORATION

The purpose of this one year course is to train students in the repair and presentation of books, documents, etc. It is of particular value to the staffs of hand bindaries, local record offices and those libraries concerned with the care of manuscripts and archives. Attendance is required on one evening per week. Students will be required to provide some of the materials used.

PRINT FINISHING

This one year course covers techniques and materials used in the production of books, magazines, and a wide range of miscellaneous work handled in the print finishing department. Stress is laid on hand and machine operations, e.g., wire stitching, sewing and folding, machine and hand feeding, gathering, gluing and mounting.

INTRODUCTION TO PRINTING TECHNOLOGY

A one year course to prepare students for the Introduction to Printing Technology P.E.I.1/B.P.I.F. examinations to be accepted as a candidate for the following:—
(a) Estimating examination of the British Printing Industries Federation.
(b) Printing Office Procedure examination of the British Printing Industries Federation.

COST ACCOUNTANCY FOR PRINTERS

A one year course designed to prepare students for the examinations of the British Printing Industries Federation.

Entrance Qualifications
Royal Society of Arts Certificate in Accounting and Office Procedure, or equivalent.

ESTIMATING FOR PRINTERS

A one year course designed to prepare students for the examination of the British Printing Industries Federation.

Entrance Qualifications
Leaving Certificate and Introduction to Printing Technology of the British Printing Industries Federation or equivalent.

PAPER TECHNOLOGY

A two-year course for personnel employed in Printing, Paper and Packaging Industries. Students are prepared for the examination of the Institute of Paper.

Entrance Qualifications
Leaving Certificate or equivalent.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>E187</td>
<td>DESIGN FOR PRINT</td>
</tr>
<tr>
<td></td>
<td>This is a two year course to give students knowledge/skills in the following subject areas: Basic Design, Copy Preparation, Typographic Design, Printing Processes, Book and Magazine Layout, Advertising Design, Packaging Design, Graphic Design.</td>
</tr>
<tr>
<td>Entrance Qualifications</td>
<td>Leaving Certificate or Department of Education Senior Certificate in a graphic arts subject or other equivalent qualification.</td>
</tr>
<tr>
<td>E188</td>
<td>INTRODUCTION TO MANAGEMENT (GRAPHIC INDUSTRIES)</td>
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<tr>
<td>Duration of Course</td>
<td>A one year course to prepare students for the City &amp; Guilds of London Institute Certificate in Introduction to Management (Graphic Industries).</td>
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<tr>
<td>Entrance Qualifications</td>
<td>Department of Education Senior trade Certificate in a Printing discipline or an equivalent qualification.</td>
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<tr>
<td>E191</td>
<td>BOOKBINDING AND PRINT FINISHING RETRAINING</td>
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<tr>
<td></td>
<td>This one year evening course for personnel employed in the Printing Industry provides instruction in the latest techniques, and covers the whole range of materials and technology used in print finishing processes.</td>
</tr>
<tr>
<td>E192</td>
<td>LITHOGRAPHY AND PHOTO-LITHOGRAPHY RETRAINING</td>
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<tr>
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<td>This is a one year course for personnel employed in the Printing Industry provides instruction in the latest techniques of lithographic plate making and press operation.</td>
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<tr>
<td>E194</td>
<td>SCANNING/PRINT PLANNING</td>
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<tr>
<td></td>
<td>This is a one year course for suitably qualified personnel, covering aspects of scanning and print planning.</td>
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<tr>
<td>E197</td>
<td>DESK TOP PUBLISHING</td>
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<tr>
<td></td>
<td>This course is for personnel requiring training in Desk Top Publishing. Design is an important feature of the course. A second year course may be available for those wishing to pursue computer aided design.</td>
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<tr>
<td>D200</td>
<td>SCREEN PROCESS PRINTING</td>
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<td></td>
<td>This is a two year course involving attendance on two half days per week over the session. It trains students in the operation of screen printing presses and in stencil making techniques.</td>
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<tr>
<td>E200</td>
<td>SCREEN PRINTING</td>
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<tr>
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<td>This is a one year course which covers the following topics: Screen Preparation, Printing Techniques, (manual/semi-auto) Single and Multi Colour Work, Materials and Substrates.</td>
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