

Technological University Dublin ARROW@TU Dublin

Prospectus: Kevin Street

Kevin Street College

1997

Full-time Courses, Entry 1997

City of Dublin Vocational Education Committee

Follow this and additional works at: https://arrow.tudublin.ie/proskt

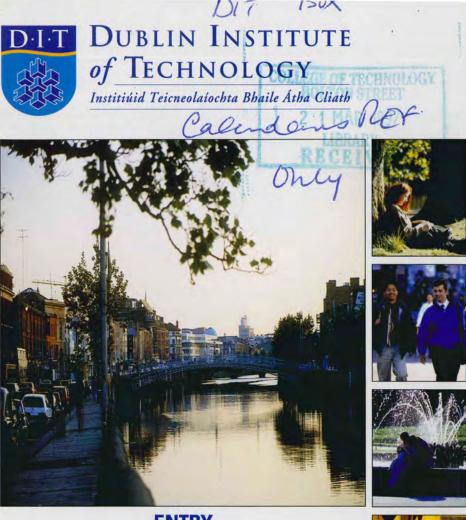
Part of the Curriculum and Instruction Commons

Recommended Citation

City of Dublin Vocational Education Committee, "Full-time Courses, Entry 1997" (1997). *Prospectus: Kevin Street*. 7.

https://arrow.tudublin.ie/proskt/7

This Book is brought to you for free and open access by the Kevin Street College at ARROW@TU Dublin. It has been accepted for inclusion in Prospectus: Kevin Street by an authorized administrator of ARROW@TU Dublin. For more information, please contact arrow.admin@tudublin.ie, aisling.coyne@tudublin.ie, vera.kilshaw@tudublin.ie.



1997

KEVIN STREET SRÁID CAOIMHÍN



ANAIMSEARATH

CURSAI

ME COURSES



Dublin City...

OUR mpus 3

DIT Adelaide Road, Dublin 2 Telephone: 478 4788 Fax: 478 4738

DIT Aungier Street, Dublin 2 Telephone: 402 3000 Fax: 402 3003

DIT Bolton Street, Dublin 1 Telephone: 402 3000 Fax: 402 3999

DIT Cathal Brugha Street, Dublin 1 Telephone: 402 3000 Fax: 402 4499

DIT Kevin Street, Dublin 8 Telephone: 402 3000 Fax: 402 4999

DIT Mountjoy Square, Dublin 1 Telephone: 402 3000 Fax: 402 4299

Dublin Institute of Technology Fitzwilliam House, 30 Upper Pembroke Street, Dublin 2, Ireland Telephone: (+353 1) 402 3000 Fax: (+353 1) 402 3399







8









Foreword

DIT Awards

Applications

Minimum Entry Requirements Selection Procedures COLLEGE OF TECHNOLOGY BOLTON STREET Method of Application Points System

2 1 MAR 1997

LIBRARY

Special Category Applicants

Mature Applicants **Overseas Applicants** Trade/Craft Applicants Transferee Students

Offers and Acceptances of Places

Deferred Entry

Grants and Scholarships

Higher Education Grants V.E.C. Scholarships ESF Training Allowances

Applicants with Disabilities

Student Facilities

Library **Computer** Centre **Restaurant Facilities** Careers and Appointments Service Student Counselling Service Chaplaincy Student Services Office Student Service Fund Student Accommodation Service First Aid/Medical Service Student Assistance Fund Child Care Support Fund **Development Fund** Clubs and Societies Students' Union

List of Full-Time Courses







Foreword

This is a particularly exciting time to be considering entering higher education with such a wide range of excellent course choices on offer in different kinds of institutions. If you are involved in this process it is important that you consider and evaluate carefully the various opportunities available before completing your CAO/CAS form and entering your course selections in order of preference. Few decisions which you will make are likely to have a more profound effect on your life and future career path.

We expect that in your evaluation of the various courses available you will give special attention to those offered by Dublin Institute of Technology (DIT). We hope that our promotional literature will provide you with the details which you require about our programmes to make an informed choice. The Institute has a very wide range of programmes with more than 80 different courses or course options at Certificate, Diploma and Degree levels, thus offering excellent opportunities to progress to the highest academic and professional levels.

Most of our courses are vocationally oriented and have a special focus on the needs of the job market. Our graduates are very highly regarded, both nationally and internationally. They are acknowledged as having a good balance of academic knowledge, skills and aptitudes which are acquired while pursuing carefully formulated courses, reviewed regularly in order to maintain their relevance and quality standards.

This is an interesting period in DIT following the implementation of its new legislation which brought its six Colleges together to form a major new Institute, building on strengths and traditions that go back more than a century. As DIT enters a new phase of development and expansion it offers many opportunities for young people (and the not so young!) to achieve their career goals and realise personal ambitions and fulfilment in a stimulating and caring educational environment. If you decide to include DIT courses amongst your preferences and are successful in obtaining a place in one of them we hope that you will both enjoy and benefit from your time with us.

Brendon foldsnith

Dr. Brendan Goldsmith President.

June 1996



DIT Awards

The colleges of DIT, under the authority of the City of Dublin Vocational Education Committee, (CDVEC), under which they operated until 1992, began making their own awards in the late 1950's. Over the years these awards won national and international recognition and also met the full academic requirements for membership of professional bodies associated with the various discipline areas.

The Dublin Institute of Technology Act 1992, under which DIT is now established as a statutory body independent of CDVEC, has confirmed the academic awarding capacity of the Institute at Certificate and Diploma levels and has provision for the Institute to make its own Degree awards under an order made by the Minister for Education with the concurrence of the Minister for Finance. The Minister for Education has not, at the time of publication, made such an order empowering DIT to make its own degree awards, pending the restructuring of the Institute as a single integrated body in accordance with it legislation.



University of Dublin Degree Awards

Degree awards of the University became available to graduates of certain courses conducted by DIT under a partnership agreement entered into between CDVEC and the University of Dublin (Trinity College) in 1975.

Since then several thousand DIT graduates have been conferred with University of Dublin degree awards with honours classification as well as with DIT diplomas and this arrangement continues to be in place in respect of some 20 degree course options. Details relating to the different degree awards are included under the individual course entries. Graduates of these courses apply to the University for conferment of their degrees by completing appropriate documentation and paying the specified commencement fees to the University.

Method of Application

Application for admission to 1st year of all DIT full-time 3rd level courses must be made directly to:

The Central Applications Office Tower House, Eglinton Street, Galway.

Application must be made on the CAO/CAS Joint Application form, which is available - together with the CAO/CAS Joint Handbook - from the CAO.

Closing date for receipt of applications is 1st February 1997.

You should read the CAO/CAS Joint Handbook for full details of the application procedure before submitting an application.

Minimum Entry Requirements

The minimum entry requirements for each course are included within the course entries in the section following.

Applicants who do not meet these requirements will not be eligible for consideration for the course(s) concerned.

It should be noted that due to the high demand for places within DIT, an entrance standard well above the minimum will be required.

For the purpose of meeting minimum entry requirements, results from any number of sittings of the Irish Leaving Certificate Examination may be combined.

Selection Procedures

For the majority of DIT full-time 3rd level courses, selection of applicants for places is based upon Leaving Certificate Examination performance which involves allocating points to examination grades. The points system used is shown on page 6.

An applicant's examination score will be calculated by adding together the points scored in the best six subjects in a single sitting of the Irish Leaving Certificate.

In the case of a small number of courses there are additional selection procedures and these are outlined below:



Courses with additional selection procedures

Code	Title	Suitability Test	Portfolio Assessment	Audition	Interview
FT101	Architecture				
FT601	Music Performance				
DT102	Architectural Technology				
DT511	Environmental Design				
DT512	Visual Communication Design				
DT515	Certificate in Design (Display)				
DT516	Certificate in Design (Presentation	on)			
DT517	Certificate in Design (Visual Me	dia)			
DT518	Fine Art				
DT602	Music Teaching				
DT603	Speech and Drama Studies				

It is important to note that applicants who do not reach the required standard in the suitability test/portfolio assessment will not be called to interview and will not be considered further for the course(s) involved.

In the case of FT601, DT602 and DT603 applicants must attend for an audition **and** interview and those who reach the required standard will be invited to sit a written/aural musicianship test.

The maximum assessment points awarded for the above selection procedures are as follows:

Suitability Test:	100
Interview:	100
Portfolio Assessment + Interview:	600
Audition+Interview+Written Test	
(FT601, DT602, DT603 only):	100

In the case of these courses, an applicant's overall points score will be calculated by adding together the examination points score and assessment points score. **Points System for all courses** The table shows the number of points awarded to each grade in the Irish Leaving Certificate Examination.

	Higher Level	Grade	Ordinary Level
	100	A1	60
	90	A2	50
	85	B1	45
	80	B2	40
From	75	B3	35
1992	70	C1	30
	65	C2	25
	60	C3	20
	55	D1	15
	50	D2	10
	45	D3	5
	95	Α	55
Before	80	В	40
1992	65	С	25
	50	D	10



Special Category Applicants

Where applicants wish to be considered for places on the basis of entry qualifications other than the Leaving Certificate, they would normally fall into one of the categories listed below. Such applicants are treated as special category applicants and are assessed seperately from the main stream of candidates.

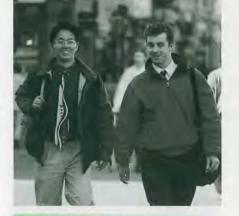
Mature Applicants

A mature applicant who is 23 years of age or over on 1st January of the year of entry and who does not meet the normal minimum admission requirements may be considered for admission to an appropriate course after attending in person for interview and satisfying the Institute as to his/her ability to benefit from the proposed course. Such applicants may be required to sit and pass an entrance test or suitability test before being admitted.

Overseas Applicants

Applicants whose permanent residence is outside the European Union are regarded as overseas applicants and must apply not later than 15th December 1996 using the CAO/CAS application form which is available on request from CAO.

Because of the large number of applications received each year from qualified E.U. applicants and the limited number of places available, the Institute regrets that it has 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. Certified translations of overseas qualifications, not issued in English, must be furnished with the application.



Trade/Craft Applicants

For many of the courses in DIT which specify a pass in five subjects in the Leaving Certificate Examination as the entrance requirement, the Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a science subject will satisfy the minimum entrance requirement. Students holding this Certificate with three endorsements in academic subjects are eligible for consideration for entry into related professional/degree level courses. Where endorsement subjects are not offered in trade examinations, a pass in an appropriate subject of the Elementary Technological Certificate of the Department of Education is an acceptable equivalent.

Transferee Students

Each year a number of applicants, who already possess third-level qualifications, e.g., National Certificates and/or Diplomas, are admitted to the more advanced stages of DIT Diploma and Degree courses. Typically, those who are qualified at Certificate level may transfer to Diploma courses and those who already hold a Diploma may transfer to a Degree course, provided they have an appropriate educational background and level of achievement which is contiguous or closely related to the standard of the course for which they have applied. Such students do not apply through the CAO, but should complete a DIT transferee application form, available on request from the DIT Admissions Office.

Offers and acceptances of places

uring the period August-September offers of places are issued through CAO in a series of offer rounds.

The initial offer round in early August will include applicants who have already been assessed and are not awaiting Leaving Certificate results for the current year. (e.g. Mature, Overseas, Deferred Entrants etc).

The main bulk of offers will be issued as soon as possible after the Leaving Certificate results become available, normally towards the end of August.

The procedures for accepting offers will be clearly detailed on the offer notices issued by CAO. These procedures must be strictly adhered to in order to secure a place.

Applicants receiving offers are advised to read very carefully all documentation issued by CAO at offer stage, and to follow all instructions precisely.

FAILURE TO DO SO MAY RESULT IN THE LOSS OF THE PLACE BEING OFFERED.

Please read the CAO/CAS Joint Handbook now.



Deferred Entry

A facility to defer entry for one year is available at present. In order to avail of the facility, an applicant must first be offered a



place on a DIT course and then take the following steps:

1. The successful applicant should not accept the place offered or pay any deposit.

2. He/She must apply in writing to the Admissions Officer, Dublin Institute of Technology, 30 Upper Pembroke Street, Dublin 2, requesting deferral and giving the reason. The CAO/CAS offer notice must be included.

3. The written request must be received in the DIT Admissions Office no later than two days before the closing date for acceptance of places in the particular offer round.

If the request for deferral is granted the applicant will be advised in writing and a place on the course involved will be reserved for him/her for the following year. If the request is not granted, the applicant will be notified in writing and may then

accept the original offer for the current year. Applicants who are granted deferral will

be required to comply with certain procedures for taking up the reserved place, including the submission of an application form to CAO for the deferred course in the following year. Such procedures will be advised to the applicant in writing by the Admissions Officer before the 15th January of the following year.

Grants and Scholarships

Higher Education Grants

Students who are admitted to Diploma/Degree level courses conducted by the Institute may apply for a Higher Education Grant to the Local Authority where their parents or guardians normally reside. Information on eligibility, conditions (including closing date) and application forms are available from the appropriate Local Authority (County Council or Corporation).

V.E.C. Scholarships

Students who are admitted to Diploma/Degree level courses conducted by the Institute may apply for a VEC Scholarship from the Vocational Education Committee of the area where their parents or guardians normally reside. Information on eligibility, conditions (including closing date) and application forms are available from the **appropriate Vocational Education Committee.**





ESF Training Allowances

ESF (European Social Fund) training allowances may be available to students while they are pursuing certain 1,2, & 3 year courses provided their attendance record and general performance is satisfactory. These allowances cover tuition fees and may also provide for payment of a monthly maintenance allowance for those who are admitted to a course of this type.

Applicants should note that the maintenance element of these allowances is subject to a means test and applications for maintenance should be made to your local Vocational Education Committee. ESF training allowances may be available in 1997 for all DIT Certificate/Diploma courses except DT120, DT272, DT317, DT409, DT511, DT512 and DT518.

A student may not hold more than one of the above in respect of his/her attendance on a course.

Applicants with disabilities

It is appreciated that some applicants with disabilities of various kinds may require special facilities. Such applicants should contact the DIT Admissions Office well in advance of submitting an application to discuss particular needs and the possible availability of the special facilities required.

Student facilities

DIT Library Facilities

All DIT Centres have their own libraries. Total collections are presently in excess of 100,000 items with 1,000 current journal titles received. Library facilities are available to all students with your DIT I.D. card also being your library card. The libraries are networked operating the same computer system and sharing a common database the entire holdings, their locations and status are displayed on the Opacs (on-line terminals) in each site. You may borrow from any of the DIT Libraries. Generally your local library provides

study facilities, textbooks, reference and course materials and journals to support the courses offered and to facilitate research. Material may be available in many formats: videos, slides, microfilms, CD-ROMS, disks, tapes and maps.

Special information tools, indexing and abstracting journals, CD-ROM services and on-line searching are available, to varying degrees, in the different libraries. Hours of opening vary from library to library according to the time of year. All of the libraries operate a book security system to safeguard their collections. Photocopying services are provided. Your library will be a valuable resource for you during your years at college.

DIT Computer Centre

The DIT Computer Centre at Aungier Street provides a central computing service to the Centres of the Institute. This service covers both academic and administrative requirements at staff and





student levels. The centres are linked together in a Metropolitan Area Network (MAN) in which the Computer Centre forms the hub. This MAN integrates extensive PC and Fileserver based Local Area Networks (LAN) at each site with the central computing systems. The MAN also hosts a DIT-wide voice system. DITNET is also connected to the rest of the world through HEANet, IEunet and Telecom Eireann's EIRPAC service providing a full range of world-wide Internet services.

Staff and students have access to IBM compatible PCs, Apple MACs, Fileservers, and the popular DEC VAX minicomputer systems in an integrated networked environment.



The Computer Centre manages the support and development of both the central computing facility, the MAN and the LANs, and also acts in an advisory capacity to the development and integration of local computing and communications facilities.

Applications directly provided by the central computing service include: student, finance and library administrative systems and a large variety of academic computing applications.

DIT Restaurant Facilities

Each of the major DIT Centres has restaurant facilities which provide lunches and teas at reasonable prices as well as morning and afternoon snacks in comfortable surroundings.

DIT Careers and Appointments Service

In their final year in DIT students are faced with a number of important decisions.



The options include going on to further study, entering employment or taking a year out. The Careers and Appointments Service helps students with these decisions through individual and group guidance. Information is available through the computer network on a range of post-graduate courses, graduate employment opportunities and job vacancies in Ireland and abroad.

Seminars are held throughout the academic year on the jobs market, application procedures and interview skills.



Employers contact the Careers and Appointments Officer about job vacancies and these are notified to recent graduates as well as students. Lecturers in individual DIT Centres also provide students with advice and information on employment and career opportunities.

DIT Student Counselling Service

The DIT Student Counselling Service is a confidential service staffed by a team of Counselling Psychologists with an office in each of the six DIT centres.

The Counselling service aims to help students to identify and solve any difficulties, large or small, that might interfere with academic and personal development. Some of the issues that a student might talk to a counsellor about would include social/personal difficulties, financial worries, studies worries, to name but a few. But you certainly don't have to have enormous problems before you talk to a counsellor. In addition to individual counselling, the service offers a variety of workshops/training seminars in such areas as study skills, stress management, communication skills etc. Students can make an appointment by telephoning the central office or by contacting the counsellor directly in the DIT centre.

DIT Chaplaincy

The DIT Chaplaincy is an inter-faith ecumenical service. It is made up of men and women from different Christian traditions and offers a welcome to all of the students. Education is more than what is written in the curriculum and more than what happens during lectures. The old word for education 'educere', means 'to draw out' or to discover. The Chaplains are here to help you to grapple with the business of meaning of trying to make sense of it all, especially when it doesn't seem to make much sense. Feel free to stop the Chaplain in the corridor if you have any questions or drop into the chaplains room at any time. If you find the Chaplain engaged, than simply make an appointment and drop back at a time that suits you both.

You will find opportunities at the Chaplaincy to get involved in some very worthwhile social justice issues or community building projects. You might like to spend some time working with children, the handicapped or the elderly. Maybe you would like some quiet time away from it all. If so the chaplains offer times of reflection and meditation and even retreat week-ends that might be just what you're looking for. Keep an eye on the Chaplains' notice-board for details.

DIT Student Personal Accident Insurance

All full-time students are automatically covered by this insurance scheme. The premium is included in the Student Services Fee and cover is provided for a period of one year from enrolment (subject to some exclusions) for a wide range of benefits in respect of certified accidents that occur, irrespective of whether the student is on a DIT premises or elsewhere.

DIT Student Services Office

The DIT Student Services Office administers a variety of services in the DIT centres, and oversees the distribution and expenditure of the Student Services Fund, which is created from the Student Services Fee included in the capitation fee paid by each student of the Institute.





DIT Student Services Fund

This Fund is distributed under the following headings:

- Clubs and Societies: Sports Recreational Course-Related Cultural Social
- Students' Union
- Welfare: Accommodation Service Medical Service Student Assistance Fund Child Care Support Fund
- Development Fund

DIT Student Accommodation Service

This is an information service provided by the Student Services Office, in co-operation with the Students' Union. A list is produced containing available living accommodation, both self-catering and lodgings ("digs"), including details of location, number of places and charges, etc. This list may be obtained from the Registration Office or the Students' Union on each campus, or from the Student Services Office.



DIT Kevin Street.



DIT Bolton Street.



DIT Adelaide Road.



DIT Mountjoy Square.



DIT First Aid/Medical Service

The Student Medical Service is a scheme whereby a number of Medical Practitioners provide treatment at a subsidised cost to students requiring medical assistance, and who are not covered by Medical Cards. Patients are seen by appointment, either at specified times in the DIT centre, or in the doctor's own rooms.

Some centres also have an on-site First Aid service during normal lecture hours. This service is provided in association with the Order of Malta Ambulance Service.

DIT Student Assistance Fund

The Student Assistance Fund, administered by the Student Services Officer, provides limited additional support for full-time students who are experiencing temporary or unforeseen financial difficulties due to a significant change of circumstances. Small financial grants may be made having regard to the individual's needs. The Student Assistance Fund can normally only deal with cases of extreme hardship, and is available to students who have already spent at least one term in college. Students are usually referred to the fund by DIT Student counsellors, Chaplains, Course Tutors or Students' Union Welfare Officers.

DIT Child Care Support Fund

The Child Care Support Fund, also administered by the Student Services Officer, is a scheme which provides a small subsidy to students who are parents and need assistance in meeting the cost of child care during the academic year. As these students are usually entitled to some state benefits and allowances, the scheme is restricted and means-tested.

DIT Development Fund

A sum is set aside annually as a contribution by students towards the costs



DIT Aungier Street.



DIT Cathal Brugha Street.



DIT Fitzwilliam House (Central Office).

associated with the establishment of a DIT Student Social and Recreational Centre.

DIT Clubs and Societies

Over 150 Clubs and Societies operate in the Institute. These represent all of the major (and many minor) sporting disciplines, as well as cultural and social activity and numerous course-related societies. Some of the DIT centres have well-equipped gymnasiums and the swimming pool in DIT Kevin Street is available to registered students. Other local facilities are used as required.

DIT Students' Union

This is the representative body for the students of the Institute. It promotes the social and organisational side of student life, including the clubs and societies, and represents the interests of students in college.

The Students' Union operates a number of commercial services, including shops,



photocopying, the issue of USIT International Student Identity Cards and travel tickets, and organises lunchtime concerts, discos and other social events. The Students' Union also provides travel and general information as well as financial and welfare advice. In this respect, the Union's officers work closely with the Institute's Student Services Office,

Counselling Service and Chaplaincy.







Full-time courses available at DIT Kevin Street

Code	Title	Duration (Years)	Min. Entry Points '95	DIT Award	Page
DEGRE	E LEVEL				
FT221	Electrical/Electronic Engineering:	4	354	Diploma [†]	20
I I MAI	Electrical Power				20
	Control Systems				20
	Communication Systems				20
FT222	Applied Sciences:	4	390	Diploma [†]	22
	Chemistry and Physics				22
	Chemistry and Mathematics				24
	Mathematics and Physics				24
	Mathematics and Computer Science				24
	Computer Science and Physics				24
	Computer Science and Software Engineering				24
	Food Science and Food Technology				24
FT223	Human Nutrition and Dietetics	41/2	485	Diploma [†]	27
DIPLO	MA/CERTIFICATE LEVEL				
DT200	Bakery Production & Management	3	215	Diploma	29
DT214	Medical Laboratory Sciences	3	450	Certificate	3 3
DT231	Electrical Engineering Technician	3	275	Diploma	38
DT244	Electrical & Electronic Draughting	1	210	Certificate*	4 0
DT255	Languages & Business (French)	3	370	Diploma	41
DT256	Languages & Business (German)	3	305	Diploma	4 1
DT257	Languages & Business (Spanish)	3	325	Diploma	4 1
DT266	Computer Science	3	375	Diploma	43
DT272	Optometry	4	510	Diploma	45
DT273	Applied Science Technician	3	340	Diploma	47
	Applied Biology				47
	Applied Chemistry				47
1000	Applied Physics			-	47
DT279	Photography	3	365	Diploma	4 9
DT287	Applied Electronics	3	320	Diploma	51
1	Communications Engineering				51
_	Electronic Engineering				51
DT289	Electronics Technician	2	240	Certificate	53
	R THIRD LEVEL COURSES (NOT AVAILABLE TO SC	HOOL-LEAV	ERS)		
DT213	Graduate Diploma of the Institute				-
	of Food Science and Technology	1	N/A	External	3 1
DT215	Biomedical Sciences	2	N/A	Diploma ⁺	# 34
DT219	Graduateship Diploma of the Institute of Biology	11/2	N/A	External	# 37
DT299	Chemical Sciences (Leading to Graduateship				

of the Royal Society of Chemistry) N/A 1 External ⁺ Graduates of this course are also eligible for degree awards of the University of Dublin (Trinity College)
^{*} Subject to validation by DIT
The Minimum Entry Points for 1996 were not available at the time of publication but will be available in September 1996 from the DIT Admissions Office. Telephone: 402 3445.

19

55

Electrical/Electronic Engineering FT221 HONOURS DIPLOMA/DEGREE BSc (Eng.) (Three Specialist Options)



Course Description

This course is designed for the education of electrical/electronic engineers to an honours degree level. There is a moderate degree of specialisation in one of the following fields:

- Electrical Power
- Control Systems

Communication Systems

The content of the course includes lectures, tutorials and, where appropriate, practical and laboratory work. The first two years of the course are common to all students. At the beginning of the third year students commence their specialist option which extends over the final two years. It is intended that there should be approximately equal numbers of students in each of the three options. In the first instance option choice will be by student preference. However, priority will be given on the basis of performance in the second year Summer examinations.

Course Outline

First Year:

Mathematics, Applied Mechanics, Physics, Fields and Circuits, Electronic Systems, Computer Systems Engineering, Communication Studies. French or German.

Second Year:

Mathematics, Physics, Fields and Circuits, Signals and Systems, Electronic Engineering, Computer Systems Engineering, Electrical Power, Instrumentation, French or German.

Third Year:

The core subjects for the third year of the course are as follows:

Mathematics, Fields and Circuits, Business and Management Studies, Electronic Engineering, Computer Systems Engineering, Signals and Systems, French or German.

In addition students will study one of the following Major subjects:

- Communication Systems
- Control Systems
- Electrical Power Systems

Fourth Year:

The core subjects for the final year of the course are:

Mathematics, Business and Management Studies, Electronic Engineering, Computer Systems Engineering and an Engineering Project. It may be possible for final year students to undertake their project in a third level institute in an EU member state under the Socrates programme.

In addition, students will continue to study the Major subject which they commenced in third year and will also undertake as a Minor course one of the two remaining subjects from the third year Major subject list. Further, students are required to undertake one course from a list of possible option subjects. This list will include French, German and a number of specialised Engineering topics.

Duration

Four years full-time.

Location

DIT Kevin Street.

Entry Requirements

Passes in six subjects in the Irish Leaving Certificate, including English or Irish, with Grade C3 or higher in higher level papers in Mathematics and one of Physics, Chemistry, Physics and Chemistry, Applied Mathematics or Engineering. or

Such qualification as the Institute may deem equivalent.

Note: It must be emphasised that the above are the minimum requirements for the course. Because of the large numbers seeking entry a much higher standard is necessary in practice to gain a place.

Points for Subjects with Weighting: Mathematics, from 1992: A1-150, A2-135, B1-128, B2-120, B3-113, C1-105, C2-98, C3-90. Pre-1992: HA-143, HB-120, HC-98. Physics, Chemistry, Physics and Chemistry, Applied Mathematics, Engineering, from 1992: A1-120, A2-108, B1-102, B2-96, B3-90, C1-84, C2-78, C3-72. Pre-1992: HA-114, HB-96, HC-78.

Award

Diploma in Electrical/Electronic Engineering (Dublin Institute of Technology) with grades of Pass, Second Class Honours and First Class Honours as appropriate and BSc(Eng) (University of Dublin) with the same honours classification.

The course has been accredited by the Institution of Engineers of Ireland as satisfying the academic requirements for Corporate Membership of the Institution.



Career Opportunities

Graduates of the course are employed in all areas of electrical/electronic technology, including computer engineering, electronics, telecommunications, control systems and power electronics.

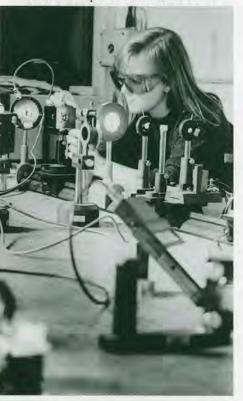
Further Information

Dr. J.C. Fisher, Head, Department of Control Systems and Electrical Engineering. Telephone: (01) 402 4551.

FT222 Applied Sciences DIPLOMA/DEGREE BSc (Applied Sciences) (Seven Programmes)

Course Description

Seven four-year full-time programmes are offered for the Diploma in Applied Sciences. This course has been designed to cover those areas of Chemistry, Mathematics, Physics, Computer Science and Food Science and Technology which are of the widest application in Industry. This course in combined applied sciences provides for great flexibility in the fields in which graduates may usefully be employed. There is considerable emphasis in the course on practical and applied work. The Diploma will be awarded in



respect of one of the seven possible options studied for the final year of the course as follows:

- Chemistry and Physics
- Chemistry and Mathematics
- Mathematics and Physics
- Mathematics and Computer Science
- Computer Science and Physics
- Computer Science and Software Engineering
- Food Science and Food Technology

In the final year a research/development project is undertaken by each student in one of the subjects in the option they have chosen. In the past a number of these projects have led to post-graduate research while others have led to products with commercial potential.

Course Outline

First Year:

Students will study five of the six subjects listed below. Students may choose either Chemistry or Computer Science.

Chemistry – Inorganic Chemistry, Physical Chemistry, Organic Chemistry.

Mathematics – Calculus, Algebra, Computing, Mechanics.

Physics – Electricity and Magnetism, Thermal and Mechanical Properties of Matter, Mechanics, Modern Physics, Geometrical Optics, Vibrations and Waves, Physical Optics.

Computer Science – Introduction to Computer Science, Programming (C).

Management Studies.

Language - French or German.

Second Year:

In the second year students take one of the following programmes and continue their study of Management Studies and Language:

- Chemistry, Physics and Ancillary Mathematics
- Chemistry and Mathematics
- Mathematics and Physics
- Mathematics and Computer Science
- Computer Science, Physics and Ancillary Mathematics

Chemistry – Analytical Chemistry, Physical Chemistry, Organic Chemistry, Inorganic Chemistry, Industrial Chemistry.

Mathematics – Linear Algebra, Numerical Analysis, Statistics, Analysis, Differential Equations.

Physics – Circuit Theory, Physical Electronics, Electromagnetic Theory, Mechanics, Quantum Physics and Relativity, Wave Theory, Geometrical and Physical Optics, Thermodynamics, Kinetic Theory.

Computer Science – Advanced Programming, Systems Analysis and Information Systems, Operating Systems, Computer Architecture.

Ancillary Mathematics – (For those students who have not taken the Mathematics option).

Management Studies.

Language - French or German.

Third Year:

The number taking Food Science and Technology in Year 3 is limited to 12. The order of priority will be established by the class ranking at the Summer Examinations at the end of Year 2. In the third year, students take one of the following programmes and continue their study of Management Studies and Language:

- Chemistry, Physics and Ancillary Mathematics
- Chemistry and Mathematics
- Mathematics and Physics
- Mathematics and Computer Science
- Computer Science, Physics and Ancillary Mathematics
- Food Science and Technology and Chemistry

Chemistry – Applied Physical Chemistry, Analytical Chemistry, Applied Inorganic Chemistry, Applied Organic Chemistry. Unit operations: Solvent extraction, Distillation, Drying.

Mathematics – Mathematical Methods, Analysis and Metric Spaces, Complex Analysis, Applied Statistics and one of the following options:

Algebra and discrete Mathematics, Numerical Analysis, Classical Mechanics.

Physics – Atomic and Nuclear Physics, Solid State Physics, Electromagnetism and Applied Optics, Electronics, Microprocessors, Topics from Applied Biophysics.

Computer Science – Data Communications, Systems Analysis and Information Systems, Programming (Object-Oriented) and Mathematics for Computer Science.

Food Science and Technology – Biochemistry, Biology, Microbiology. Ancillary Mathematics – (For those students who have not taken the Mathematics option).

Management Studies.

Language - French or German.

Fourth Year:

In the fourth year students take one of the following programmes:

- Chemistry and Physics
- Chemistry and Mathematics
- Mathematics and Physics
- Mathematics and Computer Science
- Computer Science and Physics

Computer Science and Software Engineering

Food Science and Food Technology

Physics – Solid State Physics, Electrical and Electronic Instrumentation, Modern Applied Optics, Thermodynamics and Statistical Physics, Radiation and Nuclear Physics, Acoustics, Opto-Electronics and Medical Imaging. Students take the first three subjects and two of the last five subjects. Not all combinations of the latter five will necessarily be offered in any given year.

Chemistry – Applied Organic Chemistry, Applied Physical Chemistry, Applied Inorganic Chemistry, Analytical Chemistry, Unit Operations, Reactor Design, Filtrator Size Reduction, Heat and Mass Transfer.

Mathematics – Mathematical Methods (Integral Transforms, Partial Differential Equations, Integral Equations, Green's Functions). Functional Analysis and one of the following options: Numerical Analysis, Operations Research and Applied Statistics, Quantum Mechanics, Continuum Mechanics, Non Linear Differential Equations and Control Theory.

Computer Science – Systems Programming and Compiler Theory, Computer Networks and Distributed Systems and two of the following options: Information Technology Management, Operations Research and Simulation, Graphics and Image Processing, Neural Networks and Artificial Intelligence, Medical Informatics and Assistive Technology, Formal Methods and Mathematical Computing, System Technologies.

Software Engineering – Computer Aided Software Engineering and Human Computer Interface, Intelligent Systems Engineering and Formal Specifications and options as specified for Computer Science. Students take the first two subjects and two options.

Food Science and Food Technology – Food Chemistry, Processing and Distribution of Food, Food Microbiology, Nutrition, Applied Nutrition, Food Safety.



French or German is offered as one of the options on all programmes except Food Science and Food Technology.

Project – All students will undertake and complete a Project.

Duration

Four years full-time for all programmes with the exception of **Food Science and Food Technology** which is four and a half years.

Opportunities exist under Erasmus/ Socrates and other EU programmes to take a unit of the course in a European partner Institution.

Location

DIT Kevin Street.

Entry Requirements

(a) Irish Leaving Certificate in six subjects including Mathematics and English or Irish, with grade C3 or higher in two subjects on higher level papers, one of which must be Mathematics, Applied Mathematics, Physics, Chemistry, Physics and Chemistry, Biology, Agricultural Science, Engineering or Technical Drawing and at least Grade B3 in Ordinary Level Mathematics

or

(b) such qualification as the Institute may deem equivalent.

Note: It must be emphasised that the above are the minimum entry requirements for the course. Because of the large numbers seeking entry a much higher standard is necessary in practice to gain a place.

The number taking Computer Science in Year 1 will be limited to fifty.

Award

Graduates of this course are eligible for the following awards:

Diploma in Applied Sciences (Dublin Institute of Technology) with grades of

Pass, Second Class Honours or First Class Honours as appropriate and **BSc (Applied Sciences)** (University of Dublin) with the same honours classification.

The Institute of Physics has recognised the qualifications of graduates who have taken the Physics and Mathematics or the Physics and Chemistry options as satisfying the academic requirements for Corporate Membership of the Institute, the former being allocated to Schedule A under the Institute Schedule of Recognised Qualifications and the latter to Schedule B(1).

Career Opportunities

The main thrust of the course is towards industrial and commercial applications of the various sciences. The graduates of the course are uniquely qualified for employment in a wide range of industries and also for post-graduate research. In the past, graduates have gone on to do postgraduate work in Ireland and abroad in France, United Kingdom, Germany, Canada and the United States. Some have gone into the food and computer industries, while others have gone into the public service, hospitals, electricity supply and telecommunications. Some have embarked on careers in education.

Further Information

Dr. D.C. Hickey, Department of Physics, Telephone: (01) 402 4626.



FT223 Human Nutrition and Dietetics

DIPLOMA/DEGREE BSc (Human Nutrition and Dietetics)

Course Description

This Degree Course is run jointly by the Dublin Institute of Technology (DIT, Kevin Street) and the University of Dublin (Trinity College).

The course is designed to provide an integrated training in the science of nutrition and dietetics and its application to human health and well-being both at the individual and community level. This includes six months hospital internship and also a period of practical Catering Administration and Management. Students are responsible for their own upkeep during these training periods since they are unpaid.

Course Outline

First Year:

Mathematics, Physics, Chemistry, Biology, Food Studies, Communication Studies, French/German.

Second Year:

Biochemistry, Physiology, Nutrition, Dietetics, Medicine, Catering Administration, Microbiology, Statistics and Computation, Communication Studies, French/German.

Third Year:

Biochemistry, Nutrition, Dietetics, Medicine, Clinical Studies, Food Science, Microbiology, Computer Science, Communication Studies and Management Studies, French/German.

Fourth Year:

Nutrition, Dietetics, Communication Studies, Management Studies, Project, Hospital Internship.

Duration

Four and a half years full-time.

Location

DIT Kevin Street.

Entry Requirements

Irish Leaving Certificate in six subjects with grade C3 or higher in three subjects on higher level papers, one of which must be Chemistry. Subjects must include Mathematics and English or Irish at either level.

or

such qualification as the Institute may deem equivalent.



Award

Graduates are eligible for the following awards: **Diploma in Human Nutrition and Dietetics** (Dublin Institute of Technology) with grades of Pass, Second Class Honours and First Class Honours as appropriate and **BSc (Human Nutrition and Dietetics)** (University of Dublin) with the same honours classification.



Career Opportunities

Nutrition as a science is a relatively young discipline. The scientific study of nutrition was not possible until the development of the chemical, physical and biological sciences throughout the 19th century. These foundations have been consolidated and new fields investigated.

The application of this scientific knowledge for the improvement of health and the prevention of disease requires an understanding of many factors. A career in nutrition or dietetics may appeal to those who are interested in nutrition, have an aptitude for science and for work in medical, social or scientific fields. Graduates from this course are equipped to find employment in many different spheres of nutritional work. In this country, at present, the majority of posts held by graduates are in the Hospital

Service in clinical dietetics. Other areas where posts are becoming available in which graduates have obtained employment include: Public Health or Community Nutrition, Preventative Medicine and Health Education, and in research in the Food and Pharmaceutical Industries. Many undertake postgraduate research for MSc and PhD.

Further Information

Department of Biological Sciences. Telephone: (01) 402 4562.



Diploma and Bakery Production DT200 and Management

Course Description

This three year full-time course is designed to prepare students for a career in the bakery and associated food industries. The course content is broadly based and covers all aspects of bakery and food science, bakery technology and product management. This is very much a hands on course with considerable emphasis being place on practical and applied work.

Course Outline

First Year:

Chemistry, Technology and Process Control, Manufacture, Raw Material Studies, Business Communications and Organisation, Computing, German.

Second Year:

Food Science, Technology, Manufacture, Ingredients, Production Planning, Accounting, Economics, Information Systems, German.

Third Year:

Microbiology and Hygiene, Material Testing and Product Development, Technology, Business Administration and Financial Management, Human Resource Management, Marketing, Project, Work Experience.

Duration

Three years full time.

Location

DIT Kevin Street.

Entry Requirements

Irish Leaving Certificate in five subjects including Mathematics and English or Irish at either level. or

Such qualification as the Institute may deem equivalent.

Award

Diploma in Bakery Production and Management with grades of Pass, Merit or Distinction as appropriate.

Career Opportunities

Graduates have secured employment in a wide range of activities within the bakery and associated food industries in the area of production, product development, research, quality control, technical sales, or proceed to further education.

Further Information

Mr. Derek C. O'Brien NBDip. FTC (CGLI). MIIB. MBSB. Head, National Bakery School, Telephone: (01) 402 4566 Fax: (01) 402 4999



DT213 Graduate Diploma of the Institute of Food Science and Technology

Course Description

This course is designed to assist candidates preparing for the Graduate Diploma in Food Science and Technology. The standard sought in this examination by the Institute of Food Science and Technology (UK) is equivalent to an Honours Degree.

On completion of the course, candidates will have a good knowledge of the following areas:

(a) The composition, structure, chemical and biochemical reactions of food.

(b) The interaction of micro-organisms with foods.

(c) The basic principles of human nutrition and their relevance to food supply.

(d) The means by which foods are processed, preserved and stored, and the effect of such treatment on the qualities of foods.

Course Outline

(1) Chemistry, Biochemistry and Properties of Foods

- (a) The components of food.
- (b) Chemical interactions in foods.
- (c) Food analysis.
- (d) Main classes of raw materials.

(2) Microbiology

- (a) General microbiology.
- (b) Fresh Foods.
- (c) Food processing and processed foods.
- (d) Food-borne disease of microbiological origin.
- (e) Food factories and the distribution chain.
- (f) Methods of assessing microbiological quality of foods and food processing plant.



(3) Human Nutrition

- (a) General Introduction.
- (b) Main Classes of substances of dietary value.
- (c) Assessment of diets.
- (d) Further aspects of the influence of diet on health.
- (e) Processing and nutrient content.

(4) Principles of the Production and Distribution of Food.

- (a) Processes of the food industry.
- (b) Food processing as an integral operation.
- (c) Packaging.
- (d) Food Storage and distribution.
- (e) An outline of ancillary aspects of the food process.

Duration

One year full-time

It is also possible to prepare for this qualification by three years of part-time study.

Location

DIT Kevin Street

Entry Requirements

BSc or equivalent.

The Department of Education has recognised this qualification as leading to an honours degree in Food Science and Technology for the purposes of Grant and Scholarship holders. Suitable students may thus transfer from other courses and other third level Colleges and may continue to hold their Grants and Scholarships.

Award

The Graduate Diploma in Food Science and Technology of the Institute of Food Science and Technology of the UK.

Career Opportunities

Graduates of this course would expect to obtain employment as professional food technologists within the food industry in research, development or quality control, or proceed to postgraduate studies leading to MSc and PhD qualifications.

Further Information

Mr. John J. McEvoy BSc BA BD BSc (Econ) AIFSTI, Department of Biological Sciences, Telephone: (01) 402 4884

Degree Programmes in Medical Laboratory Sciences

DIT offers a five year integrated course leading to a Diploma in Biomedical Sciences (DIT) and a BSc (Applied Sciences) from the University of Dublin, both with honours classification. Students qualify for the award of Certificate in Medical Laboratory Sciences after three years of the programme.

This degree programme is accredited by the Institute of Medical Laboratory Sciences.

Graduates are eligible to apply for Associateship of the Institute of Medical Laboratory Sciences (AIMLS) immediately on graduation. They are also exempt from the Part 1 Fellowship Examination of the Institute of Medical Laboratory Sciences.

Opportunities exist under the Erasmus/Socrates EU programme to take a unit of the course in Sweden, Belgium, United Kingdom, Finland.



DT214 Certificate in Medical Laboratory Sciences

Course Description

This course provides education in the appropriate sciences and technologies for those students seeking a career in Laboratory Medicine, Cell Biology and related fields. Students of the course may apply for student membership of the Institute of Medical Laboratory Sciences. In the third year of the course, students attend a designated hospital laboratory for inservice training. Students are continuously assessed on their performance during this year. The award of a Certificate is dependent on attaining a satisfactory grade in this hospital assessment.

Course Outline

First Year:

Chemistry, Biology, Physics, Mathematics, French/German.

Second Year:

Biochemistry, Physiology/Immunology, Applied Physics/Measurement and Instrumentation, Statistics/Computer Science, Medical Laboratory Sciences, French/German.

Third Year: Hospital inservice training.

Duration

Three years full-time, including a one year laboratory placement.

Location

DIT Kevin Street.

Entry Requirements

Irish Leaving Certificate in six subjects with Grade C3 or higher in two subjects on Higher level papers, one of which must be Chemistry. Subjects passed must include: Mathematics, with a minimum of Grade C3 at Ordinary Level, and English or Irish. *or*

Such qualification as the Institute may deem equivalent.

Note: It must be emphasised that the above are the minimum requirements for the course. Because of the large numbers seeking entry to the courses in Medical Laboratory Sciences a much higher standard is necessary in practice to gain a place.

Award

Graduates of this course are eligible for the following award: **Certificate in Medical Laboratory Sciences** (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

Students who obtain the Certificate in Medical Laboratory Sciences are eligible to proceed to the two year full-time course leading to the **Diploma in Biomedical Sciences** (DIT) and a BSc (Applied Sciences) from the University of Dublin.

Career Opportunities

The Certificate is currently the required qualification for basic grade technician posts in the Medical Laboratory Services. Other areas of employment include Veterinary and Medical Research Laboratories. Career opportunities also exist for Medical Laboratory Scientists in developed and developing countries.

Further Information

Mr. Colm P. O'Rourke, DipMedLabSc FIMLS, Department of Biological Sciences. Telephone: (01) 402 4746.

DT215 Diploma in Biomedical Sciences BSc (Applied Sciences)

Course Description

The course is intended for students who have successfully completed the revised, approved Certificate courses in Medical Laboratory Sciences at the Dublin Institute of Technology and the Regional Technical Colleges in Cork and Galway. The course is an integrated, advanced programme of study in Biological, Biomedical and Analytical Sciences and Management Studies. In the final year of the course, students select a specialist option as their major subject. They are also required to undertake a second specialist



discipline as a minor subject and complete a research project.

- The specialist programmes are:
 - Cellular Pathology
 - Clinical Chemistry
 - Clinical Immunology
 - Haematology/Blood Transfusion Science
 - Medical Microbiology

Course Outline

Fourth Year:

Cell Biology/Molecular Genetics, Applied Immunology, Medical Sciences (Pathology, Epidemiology, Pharmacology), Biochemistry, Analytical Sciences/Measurement and Instrumentation, Management Studies.

Fifth Year:

Medical Sciences (Biological Basis of Disease). Specialist Option: The student selects one of the following as a major and a second one as a minor subject: -Cellular Pathology, Clinical Chemistry, Clinical Immunology, Haematology/Blood Transfusion Science, Medical Microbiology. All students undertake a project.

Duration

Two years full-time.

Location

DIT Kevin Street.

Entry Requirements

(a) Certificate in Medical Laboratory Sciences. (This mode of entry applies only to those holding Certificates awarded from 1990 onwards).



(b) Cognate Degrees, Diplomas and Certificates and other qualifications that the Institute may deem equivalent.

Award

Graduates of this course are eligible for the following awards: **Diploma in Biomedical Sciences** (Dublin Institute of Technology) with grades of Pass, Second Class Honours or First Class Honours as appropriate and **BSc (Applied Sciences)** from the University of Dublin with the same honours classification.

The Diploma in Biomedical Sciences (DIT) is recognised by the Institute of Medical Laboratory Sciences (London) as satisfying the requirements for the award of: Associateship of the Institute of Medical Laboratory Sciences (AIMLS).

Career Opportunities

Holders of the Diploma in Biomedical Sciences are eligible to apply for positions in the Medical Laboratory services in this country.

Good career prospects exist in Diagnostic Laboratory services in the European Union, the USA, Australia, the Middle East and Africa. Other career opportunities occur in Medical Research, Veterinary Medicine, Diagnostics Marketing, Biotechnology and Pharmaceuticals.

Many undertake postgraduate Research for MSc and PhD.

Further Information

Mr. J. Vaughan, DipMedLabSc, FIBMS, MSc, Department of Biological Sciences, Telephone: (01) 402 4748



DT219 Graduateship Diploma of the Institute of Biology

Course Description

Graduateship of the Institute of Biology is equivalent to a good honours degree qualification and is universally recognised as such by Industry, Academic Institutions and Departments of Education. Second level teachers having this qualification qualify for the honours degree allowance.

Course Outline

The topics covered include: analytical methodology, metabolism and metabolic regulation, cell biology, immunology, molecular genetics and computer methods.

A laboratory course to supplement the lectures is also included.

The latter half of the course takes a more applied approach, and builds on the knowledge of the student. Subject areas covered include: Applied Aspects of Microbial and Plant Biochemistry, and introduction to Biotechnological Engineering, Commercial Aspects of Enzyme and Animal Products, Applications of Cell Biology, Immunology, Genetic Engineering and Radioisotopes.

Also included in Part II of the course is the project which is an independent investigation which should take some 70 hours of course time. The investigation should be planned to give a definite answer at the end to the project. The project is carried out under the supervision of a member of staff. The report of the project should consist of an abstract of about 300 words and the report should normally be between 5,000 and 7,000 words, excluding figures, tables and bibliography.

Part II of the Graduateship of the Institute of Biology Examination consists of five papers in Biochemistry, the project and assessment components. An oral examination, by Members of the Institute is also mandatory.

Duration

One and a half years full-time.

Opportunities exist under the Erasmus/Socrates EU programme to take the project in Sweden, Belgium and Finland.

Location

DIT Kevin Street.

Entry Requirements

A pass in the Part I Examination of the Institute of Biology or an appropriate BSc (General) Degree, Fellowship of the Institute of Medical Laboratory Sciences, or a quality pass in the Technician Diploma in Applied Science (Biology) from DIT Kevin Street.

Award

Graduateship Diploma of the Institute of Biology with grades of First Class Honours, Second Class Honours, Third Class Honours or Pass as appropriate.

Career Opportunities

Honours graduates from this course may proceed to post-graduate studies leading to the award of MSc or PhD. They may also apply for graduate biochemist positions in the hospital services and in industry and semi-state organisations.

Further Information

Department of Biological Sciences. Telephone: (01) 402 4562.

DT231 Technician Engineering Diploma in Electrical Engineering

Course Description

This is an advanced-level technician course in modern Electrical Engineering. In the early stages, a broad base of electrical engineering science is established and this is then followed by a detailed study of Electrical Power Systems, Power Electronics and Control Systems and Instrumentation. In the third year the final examinations are held in March. The students then commence work on an engineering project. As the Department of Control Systems and Electrical Engineering is linked under the



SOCRATES programme with colleges in many of the EU member states, it may be possible for students on this course to undertake their final-year projects abroad.

Graduates of this course with a Distinction grade in the Diploma are eligible to apply for entry to the third year of the Honours Diploma course in Electrical/Electronic Engineering (Ref: FT221). The Diploma is recognised by the Engineering Council (London) and graduates are given exemption from the Council's Part I Examination. Graduates of this course are eligible for Associate Membership of the Institution of Engineers of Ireland after a period of industrial or other appropriate experience.

Course Outline

First Year:

Mathematics, Applied Mechanics, Physics, Engineering Drawing, Mechanical Workshops, Electricity, Electronics, Electrical Power, Computer Applications, French, German or Spanish.

Second Year:

Mathematics, Field and Circuit Theory, Electrical Power, Electronics, Control Systems and Instrumentation, Business Studies, French, German or Spanish.

Third Year:

Mathematics, Field and Circuit Theory, Electrical Power, Power Electronics, Control Systems and Instrumentation, Engineering Project, Business Studies, French, German or Spanish.



Duration

Three years full-time.

Location

DIT Kevin Street.

Entry Requirements

(a) Irish Leaving Certificate in five subjects with Grade B3 or higher in ordinary level Mathematics. Subjects must also include English or Irish at either level *or*

(b) The Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a Science subject. 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 will be an acceptable equivalent *or*

(c) Such qualification as the Institute may deem equivalent.

Note: It must be emphasised that the above are the minimum entry requirements for the course. Because of the large numbers seeking entry a much higher standard is necessary in practice to gain a place.

Award

Graduates are eligible for the following award: **Technician Engineering Diploma** – **Electrical Engineering** (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

Career Opportunities

As this is a broadly based course graduates take employment in a wide range of activities such as Electrical Supply, Instrumentation and Control, Computing and Consulting.

Further Information

Dr. J.C. Fisher, Head, Department of Control Systems and Electrical Engineering. Telephone: (01) 402 4550



DT244 Certificate in Electrical and Electronic Draughting

Course Description

This is a one-year full-time course designed to prepare students for careers in the drawing offices of consulting engineers, electrical contractors, and electrical/electronic equipment designers, manufacturers and assemblers.

This is a broadly-based course on electrical/electronic draughting and on current drawing-office practice.

Course Outline

Electrical Science (including Electronics), Electrical Installation Theory, Electrical Draughting (including computer aided draughting), Engineering Drawing, Laboratory/Workshop, and Project Work.



Duration

One year full-time. (Proposals are being considered to extend the duration of this course to two years).

Location

DIT Kevin Street.

Entry Requirements

Passes in five subjects in the Irish Leaving Certificate including grade C3 or higher in ordinary level Mathematics and English or Irish, or such qualifications as the Institute may deem equivalent.

Award

Internal examinations are set by the college. A Certificate with Pass, Credit or Distinction, as appropriate, is awarded by the Institute to successful students.

Career Opportunities

As a result of the broad coverage of the course, successful students have taken up positions in drawing offices within consultancies, architectural practices and many firms involved in the design, manufacture, supply and installation of electrical and electronic systems.

Further Information

Mr. R. McCann BA Final (EEP) Dept. of Ed. H.Dip.Ed. Department of Electrical Installation. Telephone: (01) 402 4896.

DT255 DT256

DT257 Diploma in Languages and Business

Course Description

The content and the structure of these courses are intended to provide students with a thorough training and competence in modern languages and in business studies to enable them to meet the requirements of the business world for highly-trained and adaptable personnel in the context of the greater mobility and harmonisation that is to be the hall-mark of the 1990s.

The course includes a mandatory six months stay in a country of the major language. During the stay abroad, the student will research and prepare a business-based project, thus integrating the language and business components of the course.

Please Note: Applicants must take care to apply for the correct course as determined by their choice of Major Language as follows:

Major Language	Apply for		
French	DT255		
German	DT256		
Spanish	DT257		

Course Outline

First Year:

Six Subjects:

Language Major: French or German or Spanish. Language Minor: Italian or Russian or Spanish. Business Studies: Financial Accounting, Business Administration and Business Law, Managerial Economics, Business Statistics, European Studies, English for Business, Keyboard Skills.

Second Year:

Six subjects: Language Major: Continued from Year 1.



Language Minor: Continued from Year 1. Business Studies: Management Accounting, Management, Marketing and Enterprise, Export Management, European Studies, English for Business, Computer Applications.

Third Year:

Four Subjects:

Language Major: Continued from Year 2. Language Minor: Continued from Year 2. Business Studies: Financial Management, Strategic Management, International Marketing, European Studies and Law, Computer Applications, Project. Note: It may not be possible to offer all

options - in languages and in business – every year.



Duration

Three years full-time.

Location

DIT Kevin Street.

Entry Requirements

Irish Leaving Certificate in six subjects including English or Irish and Mathematics and with grade C3 or higher in two subjects on higher level papers one of which must be French for DT255, or German for DT256, or Spanish for DT257. *or*

Such qualification as the Institute may deem equivalent.

Note: Because of the large numbers seeking entry a much higher standard is necessary, in practice, to gain a place.

Award

Graduates of this course are eligible for the following award: **Diploma in Languages**

and Business (Dublin Institute of Technology) with grades of Pass, Merit or Distinction as appropriate.

Career Opportunities

The course is designed to prepare students to work as highly trained and adaptable personal assistants, executive or administrative assistants in business and industrial areas which have a European or International orientation requiring dynamic personnel who combine thorough language competence with a sound working knowledge of business practice.

Further Information

Department of Languages and Industrial Studies. Telephone: (01) 402 4610.

DT266 Diploma in Computer Science

Course Description

This course is designed to meet the requirements of students seeking training as computer personnel. It provides a theoretical and practical knowledge of computers, computer programming and the computing methods in use in industry, commerce, science and research.

Course Outline

First Year:

Computer Programming and Computer Systems, Statistics, Mathematics, Physics, Business Studies, Keyboard Skills, German, French.

Second Year:

Computer Programming, Algorithms, Software Engineering, Operating Systems, Statistics, Mathematics, Numerical Methods, Business Studies, German, French.

Third Year:

Advanced Computer Programming, Microprocessors, Data Transmission, Information Systems and Systems Analysis, Operations Research Techniques, Business Studies, Mathematics, German, (also French from 1997), Discrete Project.

Duration

Three years full-time.

Location

DIT Kevin Street.

Entry Requirements

(a) Irish Leaving Certificate in six subjects with Grade B3 or higher in



Ordinary level Mathematics, and with Grade C3 or higher in two subjects on Higher Level papers; subjects must include Mathematics and English or Irish at either level. or

(b) The Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a Science subject. 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 will be an acceptable equivalent. *or*

(c) Attainment which the Institute regards as equivalent to those specified in (a) or (b) will be acceptable.

Note: It must be emphasised that the above are the minimum entry requirements for the course. Because of the large numbers seeking entry a much higher standard is necessary, in practice, to gain a place.

Award

Graduates are eligible for the following award: **Diploma in Computer Science** (Dublin Institute of Technology) – with grades of Pass, Merit or Distinction as appropriate.

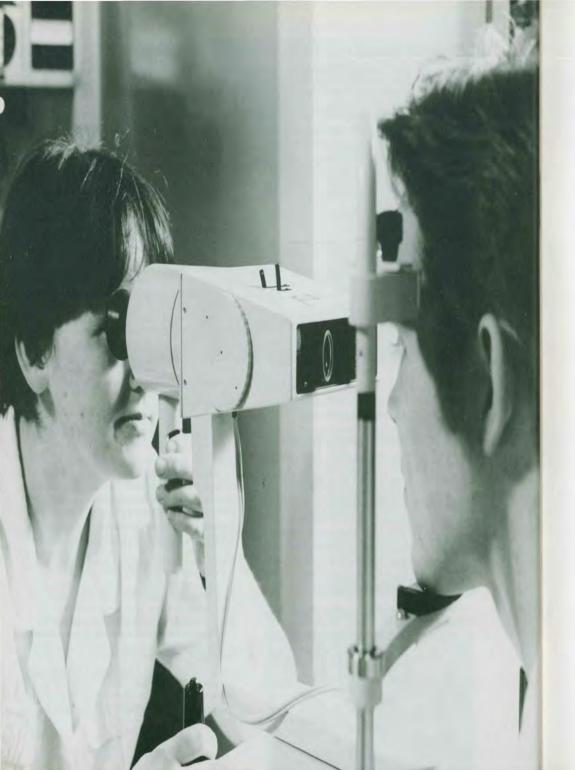
Students should note that this course is organised on a two-semester basis with formal examinations at the end of each semester.

Career Opportunities

The course is designed to train students for the positions of programmer or programmer/analyst in commercial and technological areas. The course content is sufficiently wide to encourage advancement to more senior positions in the computer industry within a few years.

Further Information

Dr. Brendan O'Shea, Assistant Head, Department of Mathematics, Statistics and Computer Science. Telephone: (01) 402 4607.



DT272 Diploma in Optometry

Course Description

This course provides the education and training statutorily required for Optometrists (Ophthalmic Opticians) by the Opticians' Act, 1956, and the Rules made thereunder.

The course is approved by Bord na Radharcmastoiri (the Opticians' Board) which is the Registration Authority set up under the Act.

Holders of the Diploma must also satisfy the Association of Optometrists, Ireland, on their clinical competence, before being eligible to register with the Board.

The period of supervised practice, taken after the successful completion of the third year of the course, is of particular value in developing the practical clinical skills of the students. Students are responsible for their own upkeep during supervised practice since they are unpaid during this period.

On return to the College for the completion of the final year, students are assigned a research project which helps to relate some of the theoretical aspects of the course to the clinical skills required in optometric practice.

Course Outline

First Year:

Physics, Biology, Mathematics and Computing, Chemistry, Introduction to Optometry, Language (French or German), Business Studies.

Second Year:

Visual Optics, Geometrical and Physical Optics, Optical Dispensing, Anatomy and Physiology, Biochemistry, Statistics and Computer Applications, Language.



Third Year:

Optometric and Optical Dispensing, Contact Lenses and Optometric Instruments, Physiology of Vision and Illumination Optics, Abnormal Systemic and Ocular Conditions, Physiology of Vision, Law and Ethics, Binocular Vision, Language, Business Studies.

Fourth Year:

Six months supervised practice followed by a return to College for: Advanced Optometry and Optometry Clinic, Advanced Contact Lenses and Contact Lens Clinic, Research Project and Dissertation, Environmental Optics and Advanced Dispensing, Ocular Pharmacology, Language, Business Studies.

Duration

Four years full-time.

Location

DIT Kevin Street.

Entry Requirements

Irish Leaving Certificate in six subjects including grade C3 or higher on Higher level papers in two subjects one of which must be Physics, Chemistry, Physics and Chemistry or Biology. Results must also include English or Irish and Mathematics at grade B3 or higher on the ordinary level paper.

or

Such qualification as the Institute may deem equivalent.

Note: It must be emphasised that the above are the minimum entry requirements for the course. Because of the large numbers seeking entry a much higher standard is necessary in practice to gain a place.

Award

Graduates of the course are eligible for the following awards: **Diploma in Optometry** (Dublin Institute of Technology) with the grades of Pass, Second Class Honours or First Class Honours as appropriate.

Graduates who have passed the examinations of the Association of Optometrists, Ireland, may, if elected to Membership, be awarded the Fellowship of the Association of Optometrists, Ireland (FAOI).

Career Opportunities

Most optometrists are in individual private practice, in partnership with colleagues, or employed in larger practices. Their primary task is the examination and assessment of the visual function and advising and prescribing for visual defects. Optometrists may also choose to specialise in fields such as contact lenses, environmental vision or the care of the partially sighted. Some opportunities exist for academic and industrial research, and for work in hospital eye departments as optometrists (usually abroad).

Further Information

Ms. E. Doyle Department of Physics, Telephone: (01) 402 4785



DT273 Technician Diploma in Applied Science (Three Course Options)

Course Description

This course is designed to meet the requirements of those students seeking a training as Technicians for:

(a) Research and development in industrial laboratories.

(b) Scientific and industrial instrument manufacturing industries.

(c) The food processing industries.

(d) Educational laboratories.

(e) High technology industries.

After the first year this course offers three options: **Applied Biology**, **Applied Chemistry or Applied Physics**.

An important element in the final year is the project, which is an applied laboratory based problem in the major field of study.

Course Outline

First Year:

Physics, Chemistry, Biology, Mathematics, Business Studies, Technical Drawing, French or German or Irish.

Second Year:

Business Studies, French or German or Irish are common to all options. Subjects taken in Second Year are detailed below in respect of each option available.

Applied Biology Option:

Biochemistry, Microbiology, Biotechnology, Cell Biology, Mathematics (including Computer Studies), Quality Control, Laboratory Practice, Photography.

Applied Chemistry Option:

Physical Chemistry, Inorganic Chemistry, Organic Chemistry, Mathematics and Industrial Chemistry, Analytical Chemistry, Computational Chemistry, Statistics, Computer Laboratory, Management.



Applied Physics Option:

Physics, Electronics, Circuit Theory, Mathematics, Instrumentation and Control Systems, Materials Science, Medical Physics, Photography, Acoustics and Engineering Practice.

Entry to particular Options in Year 2 may be limited. Priority will be given to students according to their position of merit in the class at the Summer Examinations at the end of Year 1.

Third Year:

As in second year, Business Studies is common to each option.

Applied Biology Option:

Biochemistry, Microbiology, Biotechnology and Cell Biology. Students will also take Food Science (including Instrumentation and Control Systems) or Biomedical Science (Haematology and Histology).

Entry to the Elective Subjects in year 3 will be limited. Priority of choice will be given to students according to their position of merit in the class at the Summer Examinations at the end of year 2.

Applied Chemistry Option:

Physical Chemistry, Inorganic Chemistry, Organic Chemistry, Mathematics, Industrial Chemistry, Analytical Chemistry, Business/Language, Project.

Applied Physics Option:

Applied Physics, Materials Science, Electronics, Circuit Theory, Instrumentation & Control Systems, Mathematics, Engineering Practice.

Duration

Three years full-time.

Location

DIT Kevin Street.

Entry Requirements

(a) Irish Leaving Certificate in five subjects including English or Irish and Mathematics (or Applied Mathematics), or

(b) The Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a science subject. 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 will be an acceptable equivalent. *or*

(c) Attainment which the Institute regards as equivalent to those specified in (a) or (b)

Note: It must be emphasised that the above are the minimum requirements for the course. Because of the large number

seeking entry a higher standard is necessary in practice to gain a place.

Award

Graduates of this course are eligible for the following award: **Technician Diploma in Applied Science** (Option Specified) (Dublin Institute of Technology) with grades of Pass, Merit or Distinction as appropriate.

Career Opportunities

Applied aspects of the sciences are the major theme in the three options.

Consequently career opportunities are available to graduates in a wide range of production and service industries – hospitals, higher education, electronics, chemicals and pharmaceuticals, computers, food industry and others. Graduates of this course answer the need for greater technical literacy and competence in virtually all kinds of industry, where technological change is the order of the day. Graduates are eligible to apply for entry to the respective courses leading to Graduate qualifications and membership of Professional Institutes.

Further Information

Re: Entry to First Year, contact: Mr. S.E. O'Flaharta, Department of Physics. Telephone: (01) 402 4814

Re: Applied Biology Option, contact: Dr. D. Neylan, Department of Biological Sciences. Telephone: (01) 402 4562

Re: Applied Chemistry Option, contact: Mr. P. Ashall, Department of Chemistry. Telephone: (01) 402 4777

Re: Applied Physics Option, contact: Dr. Tom Grennan Department of Physics. Telephone: (01) 402 4812

DT279 Diploma in Photography

Course Description

This course, which is modular in form, is a three year full-time course.

Course Outline

Phase One:

Photography Theory, Photography Practical, Visual Studies, Light, Business Studies, Communications, German, Computer Studies, Workshop Practice.

Phase Two:

Photography Theory, Photography Practical, Visual Studies, Optics, Business Studies, German, Electricity, Computer Studies, Communications.

Phase Three:

Photography Theory, Photography Practical, Visual Studies, Holography, Health and Safety, Marketing and Business Communications, Computer Studies, German.



Duration

Three years full-time.

Location

DIT Kevin Street.

Entry Requirements

Irish Leaving Certificate in six subjects two of which must be at Grade C3 or higher on Higher level papers. Results must include English or Irish and Grade C3 or higher on the ordinary level paper in Mathematics. *or*

An equivalent qualification.

or

Acceptable appropriate practical experience.

Award

Students who have achieved a pass in all required modules of the course in Phases One, Two and Three are eligible for the award of **Technician Diploma in Photography** (Dublin Institute of Technology) with grades of Pass, Merit or Distinction as appropriate.

The grade in which the award is made is based on the combined total of points accumulated from the modules undertaken.

Career Opportunities

Graduates work as photographic assistants in photography practice in both the private and public sector.

Further Information

Mr. S. Coonan Department of Physics, Telephone: (01) 402 4786.



DT287 Diploma in Applied Electronics

Course Description

The Diploma course in Applied Electronics is a three-year full-time programme of study which is designed to provide the Irish and European electronics and communications industry with technician graduates of high calibre to service the needs of that industry in the areas of production, test, design and development. The course is structured in modular form and provides options in Communications Engineering and Electronic Engineering. The course has an applications bias which is underpinned by a strong fundamental core of mathematics, applied science and electronics to enable graduates to respond to the rapidly changing technologies in these applied areas. Computer Aided Design techniques are used extensively throughout the course to prepare the students for a work environment which increasingly depends on such techniques.

In addition, students study business methods in the second and third year. A European Language is studied over the three years of the course.

Graduates who obtain a Distinction in the Diploma examinations are eligible to apply for entry into the third year of the Honour Diploma Course in Electrical/ Electronic Engineering (DIT Code FT221). All graduates are granted exemption from the Part 1 examinations of the Engineering Council (previously the Council of Engineering Institutions).

Course Outline

First Year

The subjects studied in the first year (module 1 and module 2) are: Mathematics, Engineering Science, Electric Circuits, Electronic Systems, Electronic Devices, Computer Applications and



Programming, Computer Aided Drafting, Electronic Workshop, European Language.

Second Year

The subjects studied in the second year (module 3 and module 4) are:

Core subjects (both options).

Mathematics, Applied Science, Electric Circuits, Measurements, Electronics, Microprocessor Systems, Business Studies, European Language.

Communications Engineering Option. Analogue and Digital Communications.

Electronic Engineering Option. Control Systems.

Third Year

The subjects studied during the first sixteen weeks of the third year (module 5) are:

Core Subjects (both options)

Mathematics, Electronics, Business Studies, Engineering Project Management, European Language.

Communications Engineering Option

Communications Systems, Communications Engineering, Software Design, Integrated Circuit Design.

Electronic Engineering Option

Production Technology, Communications Systems and Networks, Automatic Test Systems, Electronic Manufacturing, Integrated Circuit Fabrication.

In addition, there is a short-course provision (20 hours during the final four weeks of module 5) which enables the student to choose between a number of specialist topics or a further mathematics component. This is intended to enable those students who wish to pursue further study at degree level to enhance their expertise in Mathematics.

Currently the specialist topics are:

- Communications Test Systems
- Computer-based Manufacturing
- Satellite Communications Systems
- Mobile Radio Communications

The final written examinations are taken at the end of module five.

An Engineering Project is undertaken on a full-time basis during the final twelve weeks (module 6) of the course. It may be possible to pursue this project activity in another European third-level institute.

Duration

Three years full-time.

Location

DIT Kevin Street.

Entry Requirements

Irish Leaving Certificate in five subjects with Grade B3 or higher in ordinary level

Mathematics. Subjects must also include English or Irish at either level.

The Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a science subject. 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 will be an acceptable equivalent.

Such qualifications as the Institute may deem equivalent.

Award

or

Graduates of this course are eligible for the following award with Distinction, Merit or Pass classification: **Diploma in Applied Electronics** (Dublin Institute of Technology) with options in Communications Engineering or Electronic Engineering.

Career Opportunities

As a consequence of the breadth of coverage provided and the option structure, career opportunities for the graduates are correspondingly wide, covering the areas of Production, Test Measurement, Design and Development. These opportunities arise in all branches of the Communications, Electronics and Computer Industries.

Further Information

Mr. C. J. Bruce, Assistant Head of Department Telephone: (01) 402 4577 *or* Dr. Gerard Farrell, Course Director, Telephone: (01) 402 4659 Department of Electronic & Communications Engineering, D.I.T. Kevin Street.

DT289 Technician Certificate in Electronics

Course Description

The course is organised in semester form over two years and is designed to provide a broadly based education in the fundamental principles and practice of electronic engineering at a level appropriate to the electronic technician seeking to obtain employment in the production, test and service sectors of the electronics, communications or computer industry.

The Course orientation is essentially practical with emphasis on the development of diagnostic and faultfinding skills. However, an appropriate mathematical and engineering science foundation is incorporated to ensure that students wishing to extend their studies at some future date will be enabled to do so.

Course Outline

First Year:

Mathematics, Engineering Science, Electric Circuits, Electronic Circuits and Systems, Electronic Technology, Computer Programming, Engineering Workshop, Communications Engineering, European Language.

Second Year:

Mathematics, Electric Circuits, Electronic Circuits and Systems, Microprocessor Systems, Communications Engineering, Industrial and Communication Studies, European Language, Technical Project.

Duration

Two years full-time.

Location

DIT Kevin Street.

Entry Requirements

Irish Leaving Certificate in five subjects



which must include Mathematics with a minimum of Grade C3 at Ordinary level, and English or Irish.

or

The Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a science subject. 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 will be an acceptable equivalent. *or*

Such qualification as the Institute may deem equivalent.

Note: It must be emphasised that the above are the minimum entry requirements for the course. Because of the large numbers seeking entry a higher standard is necessary, in practice, to gain a place.

Award

Graduates of this course are eligible for the following award: **Technician Certificate in Electronics** (Dublin Institute of Technology) with grades of Pass, Merit or Distinction as appropriate.

Career Opportunities

Graduates of the course are qualified to take up employment as technicians across the spectrum of the electronics, telecommunications and computer industries in the production, service and applications sectors.

Further Information

Mr. C.V. Cowley,

Head of Department of Electronic and Communications Engineering, Telephone: (01) 402 4576

DT299 Diploma/Degree BSc (Chemical Sciences)/GRSC

Course Description

The course extends over three full-time semesters. The aim is to provide a pathway for graduates with pass degree/LRSC standard qualifications to proceed to an honours degree qualification and so be eligible for the professional award of GRSC. The course consists of modules in:

Inorganic Chemistry
Organic Chemistry
Physical Chemistry
Analytical Chemistry
Chemical Technology

These modules are covered over the first and second semester. For the third semester each student undertakes a research/development project.

Entry Requirements

(i) Technician Diploma in Applied Science (Chemistry) from DIT with Merit or Distinction; *or*

 (ii) a merit level achievement in a General Degree Programme from a recognised university having chemistry as a final year subject; or

(iii) a pass degree from a recognised university having chemistry as a final year subject followed by at least one year of relevant experience in a chemical or related industry; or

(iv) the Licentiateship of the Royal Society of Chemistry (LRSC) achieved through examination; *or*

(v) the GRSC (Part I) and GRSC Practical with examination; *or* (vi) the HNC/D and Certificate in Applied Chemistry (CAC) with



appropriate bridging studies where required.

Duration

Three semesters full-time. Five semesters part-time.

Award

The graduates of this course obtain: Diploma in Chemical Sciences (DIT) BSc (Chemical Sciences) (DCU) both with honours classification. GRSC (RSC)

Career Opportunities

Graduates are eligible to apply for MSc and PhD programmes at universities and research institutes throughout Europe and America. Alternatively many graduates decide to enter directly into the wide ranging chemical industry. Many of our graduates hold senior positions in industry both in Ireland and abroad.



IT DUBLIN INSTITUTE of TECHNOLOGY Instituidid Teicneolaíochta Bhaile Átha Cliath

All of the DIT locations are adjacent to the centre of Dublin, with three centres on each side of the River Liffey.

Hence DIT students have ready access to the city's main cultural, social and commercial amenities, some of which are depicted in the photographs on this cover.

These amenities add important dimensions to the experiences of DIT students and are shared with others who are part of Dublin's very large student population.

The information in this booklet is intended as a guide to persons seeking admission to the Institute and shall not be deemed to constitute a contract between the Dublin Institute of Technology and an applicant or any third party.

The Institute reserves the right to amend, change or delete any programme of study or academic regulation at any time having given due consideration to students who are already enrolled.

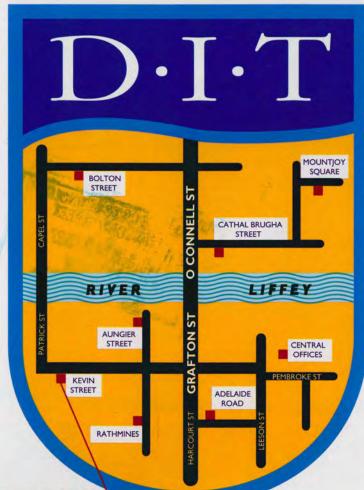
References to the requirements of outside professional bodies are not intended to be complete or exhaustive nor indeed absolutely correct at the time of publication since they are subject to change.

Accordingly, those interested are advised to make direct contact with the professional bodies concerned to ascertain their up-to-date requirements.

Every effort is made to ensure the accuracy of the information in this publication. However, the Institute reserves the right to alter or delete any of the information included at any time and it shall not be bound by any errors or omissions and cannot accept liability in respect thereof.

Dublin Institute of Technology

Admissions Office Fitzwilliam House 30 Upper Pembroke Street, Dublin 2 Telephone: (+353 1) 402 3445 Fax: (+353 1) 402 3392





DIT Kevin Street, Dublin 8

Telephone: 402 3000 Fax: 402 4999