

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

Prospectus: Kevin Street

**Kevin Street College** 

1986

Prospectus: 1986-87

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 "Prospectus: 1986-87 (1986). Prospectus: Kevin Street

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.

```
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
NSTITUID TEICNEOLAIOCHTA RHAILE ATHA CUATH INSTITUID TEICNEOLAIOCHTA
                                        A H I TIT II TELL I HE A
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH
                                            INSTITUID TEICNEOLAIOCHTA
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A
   TTUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE AT
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE AT
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A
   'ITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE AT
   TUID TEICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAÍOCHTA BHAILE A
   TTUID TEICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAÍOCHTA BHAILE ATHA
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CHATH INSTITUID J'EICNEOLAIOCHTA BHAILE ATHA
  TITUID TEICNEOLAÍOCHTA SHAILE ATHA CLIATH INSTITUID TEICNE D'AIOCHTA BHAILE AT
   TUID TEICNEOLAIOCI KA 3 NATT ASAN CLOSENINS DUD TEICNEC AIOCHTA BHAILE ATHA
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
   TUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
   TUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
NSTITUID TEICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAÍOCHTA BHAILE A
   ITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
                                             V. TUII
   TUID TEICNE
   <u>TUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A</u>
   'ITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
   ITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A
   ITUID TEICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAÍOCHTA BHAILE A
   ITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
   TUID TEICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAÍOCHTA BHAILE A
   TUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
<u>VSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INST</u>ITUID TEICNEOLAIOCHTA BHAILE
   'ITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A
   TUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
  <u>TITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE</u>
  TITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
   TUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
  TITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
   TUID TEICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUÍD TEICNEOLAÍOCHTA BHAILE A
  TITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
NSTITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
   TUID TEICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAÍOCHTA BHAILE A
   ITUID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
   TUID TEICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAÍOCHTA BHAILE ATHA
    <u>'UID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A</u>
        TEICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAÍOCHTA BHAILE ATHA
    UID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
         EICNEOLAÍOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAÍOCHTA BHAILE A
        TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
     <u>JID TEICNEOLAIOCHTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE A</u>
NSTITUID TEICNEONA O DITTE HAILE ATHAK CIDATAN II STITUNGS EINBE OLAKSIMIA ETAGLE ATHA
<u>VSTITUID TEICNEOLAIOC</u>HTA BHAILE ATHA CLIATH INSTITUID TEICNEOLAIOCHTA BHAILE ATHA
                         BHAILE
                                ATHA CLIATH
        TEICNEOLAIOCHTA
```

## **CALENDAR**

## **SESSION 1986-87**

# SEISIÚN

1985 SEPT.	Monday 1	TERM 1: Commencement of Session.
SEPI.	Tuesday 2	Commencement of apprenticeship courses except where otherwise arranged.
	Monday 15	Interviews and enrolments for part-time and evening courses commence except where otherwise arranged.
	Monday 22 Wednesday 24	Wholetime classes commence except where otherwise arranged. Votive Mass. All classes closed.
	Monday 29	Part-time and evening classes commence except where otherwise arranged.
DEC.	Friday 19	Final Class meeting of first term.
1987 JAN.	Wednesday 7	TERM 2: All Classes resume.
JAN.	Wednesday /	All Classes results.
FEB.	Sunday 1	Closing date for applications to wholetime courses through the C.A.O. for 1987/88. Closing date for applications for wholetime courses through the DIT Admissions Office for 1987/88 session.
		DIT Admissions office for 1007/00 desirent,
MAR.	Sunday 1	Late closing date for applications for wholetime courses through the DIT Admissions Office for 1987/88 session.
APRIL	Tuesday 14	Final class meeting of second term.
		TERM 3:
APRIL	Monday 27	All Classes resume.
MAY	Monday 18	Commencement of College Summer Examination programme except where otherwise arranged.
JUNE	Friday 19	All classes terminate except where otherwise arranged.

Classes will be closed on Public Holidays during the session (viz. 27 October, 17 March, 1 June) and on Church Holidays except where otherwise arranged.

NOTE:- (a) This Calendar is subject to alteration during the session.

(b) 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, or the terms thereof, between the College and a student or any third party.

# FÉILIRE

COISTE GAIRM-OIDEACHAIS CHATHAIR BHAILE ÁTHA CLIATH

INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH

COLÁISTE TEICNEOLAÍOCHTA

SRÁID CAOIMHÍN BAILE ÁTHA CLIATH 8

Guthán

Príomh-Oide

CITY OF DUBLIN VOCATIONAL EDUCATION COMMITTEE

DUBLIN INSTITUTE OF TECHNOLOGY

COLLEGE OF TECHNOLOGY

KEVIN STREET DUBLIN 8

Telephone: 757541-6

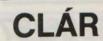
Principal: F. M. Brennan,

DipEE CEng MIEI MIERE AMIEE

1986/87

# CONTENTS

Calendar Inside	Front Cove
Acknowledgement	S
City of Dublin Vocational Education Committee	
The Dublin Institute of Technology	
Academic Council — Dublin Institute of Technology	DISTE GA
Guide to Courses in the Dublin Institute of Technology	NA THAM
A LECTION ALTERNATION ALTERNAT	HUITITE
Stair an Choláiste	
College Council	DIAISTE
College Executive Board	1
Guide to Courses offered by the College	ATA BUILE
General Information and Regulations	2
Tuition and Examination Fees	3
Post-Graduate Studies	3
Overseas Development Aid	3
Courses: (a) Applied Science, Health Science, Food Science, Mathematics & Com	puting 3
(b) Engineering	10
(c) Languages	13
(d) For Electrical Apprentices and Craftsmen and Draughtsmen	13
(e) Physical Education	15
External Examiners	15
Graduates of the College 1985	15
Prizewinners 1985	16
Staff	17
Map of Dublin with the Colleges of The Dublin Institute of Technology	Back Cove



### ACKNOWLEDGEMENT

The College wishes to extend its thanks to Mr. Liam C. Martin for permission to use a election of his drawings and to J. B. Malone for permission to use some of his texts.

Sources: Liam C. Martin's Dublin Sketch Book © 1962 and 'Know Your Dublin – A Visual Guide' © 1969 by J. B. Malone and Liam C. Martin.

Our thanks also to Mr. Geoff White for the Cover design.



THE ARMS OF DUBLIN

BUÍOCHAS

#### CITY OF DUBLIN VOCATIONAL EDUCATION COMMITTEE

The College operates under the City of Dublin Vocational Education Committee. The CDVEC is assisted by a number of committees, including a Governing Body for the Dublin Institute of Technology, College Councils for each of its six Colleges, a joint Academic Council, an Apprentice Education Board and a Buildings Committee.

#### Members:

Councillor Liam Fitzgerald, T.D., (Chairman), 117 Tonlegee Road, Raheny, Dublin 5. Councillor Michael Donnelly (Vice-Chairman), 33 Glendoher Avenue, Rathfarnham, Dublin 16.

Councillor Andrew Callaghan, 52 Adelaide Road, Dublin 2.

Councillor Patrick Carey, 69 Bourne View, Ashbourne, Co. Meath.

Mr. Michael Cotter, 51 Sefton, Rochestown Avenue, Dun Laoghaire, Co. Dublin.

Mr. Patrick Donegan, 121 Shanard Road, Dublin 9.

Mr. Barry Early, 161 Sutton Park, Dublin 13.

Mr. Peter Graves, College of Marketing and Design, Parnell Square, Dublin 1. Councillor Mary Hanafin, B Simmonscourt Castle, Ballsbridge, Dublin 4. Mr. Seán Lyons, 30 Coolmine Woods, Clonsilla, Blanchardstown, Dublin 15. Alderman Tomás MacGiolla, T.D., 49 St. Laurences Road, Chapelizod, Dublin 20. Councillor Charles McManus, 12 Walkinstown Drive, Dublin 12 Councillor Michael O'Halloran, 141 Ardlea Road, Dublin 5.

Séamus Uas Puirséil, 16 Hampton Cove, Baile Brígin, Co. Átha Cliath.

#### Offices:

W. J. Arundel, Chief Executive Officer, City of Dublin VEC. Town Hall, Ballsbridge. Dublin 4.

COISTE GAIRM-OIDEACHAIS CHATHAIR BHAILE ÁTHA CLIATH

#### THE DUBLIN INSTITUTE OF TECHNOLOGY

In 1978 the Dublin Institute of Technology was established by the City of Dublin Vocational Education Committee by placing its six Colleges under a single Governing Body. The Colleges of Technology in Bolton Street and Kevin Street are the largest of the Colleges, the other constituent Colleges being the College of Commerce, the College of Catering, the College of Music and the College of Marketing and Design. Its work and awards have attained national and international recognition by academic, professional and industrial Institutions.

Over 1,500 teaching staff are primarily concerned with teaching 24,000 students attending wholetime and part-time third level and apprentice courses. The Institute is also involved in research and development, and there is a growing demand for advisory and consultative services from institutions in developing countries, as well as in Ireland. 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.

### INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH

### **GOVERNING BODY**

Mr. Michael Cotter (Chairman)
Councillor Liam Fitzgerald, T.D.
Councillor Andrew Callaghan
Councillor Patrick Carey
Councillor Michael O'Halloran
Séamus Uas Puirséil
Mr. Michael O'Donnell (Director)

Mr. Tom Fitzpatrick Mr. Gerry Shanahan Mr. Colman Roche

Mr. Wolfgang Truetzschler

### BÓRD STIÚRTHA

#### ACADEMIC COUNCIL - DUBLIN INSTITUTE OF TECHNOLOGY

O. McNulty, CEng FIEI ARTCS MIStructE (Chairman)

W. J. Arundel, BComm HDipEd

E. de Burca, FRICS FCIOB

F. M. Brennan, DipEE CEng MIEI MIERE AMIEE

R. Burns, BSc MSc

J. T. Cotter, MSc

J. Creagh, MA ANCA ATC MSDI

T. Dalgic, BA MBA PhD

Elish Farrell, BMus MMus

V. Farrington, BA BComm HDipEd DPA

J. C. Fisher BA BAI HDipEd PhD

G. Fitzpatrick, BA BComm FCA

P. R. Flood, BComm MPA FMII MIITM

K. Fox, BArch FRIAI ARHA

B. Goldsmith, BSc MSc DPhil

C. L. Grant, MA MEd MLitt BComm HDipEd MInstM Móna Hearn, MEd BSocSc DipDomSc HDipEd PhD

J. Hegarty, MEd DipHtlMgt MIHCI

F. Heneghan, BE BMus CEng MIMechE FTCL LRIAM

P. J. Henry, BComm MBA

J. S. Hickey, MSc BA

M. Hussey, BE MS PhD CPhys FinstP CEng MIEE

F. Lane, BA DipAppPsych

G. L. Latchford, BE BSc CEng MIEI

R. Lawlor, BA MBA MIHCI

D. McGuinne, BFA MSDI

F. McMahon, BComm MBA MIHCE

T. Madden, BComm FIMA FIIF MMII MIITM

M. Murphy, DipEng MSc MIMechE

C. Nutty, BA MPA FMS

B. J. O'Connor, CEng MIERE

M. O'Donnell, MEconSc BE BComm CEng MIProdE FIEI

J. J. O'Keeffe, BArch FRIAI

M. O'Sullivan-Farrell, BMus DipMus LTCL

Alice Prendergast, BComm HDipEd Marlene Proctor, MSc MIFSTI MIHCI

E. J. Rothery, BSc CChem FRIC FICI MIBioII

Brid Ann Ryan, BSc MSc CBiol MIBiol DipIndMicrob

K. Sullivan, DipEng MSc MIEI

P. Sullivan, BA HDipEd

J. K. Taaffe, BSc MSc CPhys MInstP MBA HDipEd DipProd Barrister-at-Law Kathleen M. Tierney, MA

Academic Register: T. Duff BSc MIProdE

Education Officer: E. P. Tuffy, BSc CPhys MInstP MEd CGLI(FETC)

### COMHAIRLE ACADÚIL INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH

### GUIDE TO COURSES IN THE DUBLIN INSTITUTE OF TECHNOLOGY

ange of courses availa studied in conjunction	e are not exhausitve but give some idea of the able in DIT. Some of the topics mentioned are n with other subjects. Course duration and final or further information contact the relevant	Bolton St.	Cathal Brugh	Kevin St.	Parnell Sq.	Rathmines	Col. of Music
	Analytical and Applied Science			0			
Natural and Applied	Applied Mathematics			•			
Science	Applied Physics			•			
19/19	Aquatic Biology		-				
	Biochemistry						
	Biology			•			
0 0	Biotechnology			•			
1000	Botany						
	Chemical Technology						
0 0	Chemistry			•			
	Computer Science/Programming					•	
	Environmental Science						
9 0	Fine Chemicals and Pharmaceuticals						
	Food Technology					P	
	Food Science						
THE PROPERTY OF	Genetics				-		
	Mathematics						
	Mathematical Physics						
	Nautical Studies			•			
	Microbiology						
	Oceanography			•			
	Pharmacology			•			
10	Physics			•			
	Physiology						
	Polymer Science						
9	Science of Materials						
	Statistics			•			Г
	Systems Analysis			•			
101-10	Zoology			•			
	Animal Nursing			•			Ī
	Dentistry/Dental Technology	1	1	•	1	1	1
Medical and Health	Dietetics						
Related Science	Environmental Health		•				
	Health Science			•			10
	Human Nutrition			•		77	
	Medicine						
	Medical Laboratory Sciences						
	Ophthalmic Optics			•			
	Sciences for Nurses						

TREOIR DO CÚRSAÍ SAN INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH

range of courses avail	re are not exhaustive but give some idea of the lable in DIT. Some of the topics mentioned are ion with other subjects. Course duration and final for further information contact the relevant	Bolton St.	Cathal Brugh	Kevin St.	Parnell Sq.	Rathmines	Col. of Music
Law	Legal Studies					O	
Social Sciences	Community Care		•				
	Child Care		0				L
	Social Science/Sociology					0	-
Arts	Communication Studies			•		•	
	Drama Studies						
	Economics						
	English/Use of English					•	
	Ethics			•			
	European Studies						
	French			•			
	Geography						
	German			•			
	Irish			•			
	Irish Studies						
	Italian						1
	Journalism						
	Linguistics/Applied Linguistics			•			
	Music						1
	Philosophy						I
	Political Science						I
	Psychology						I
	Regional Studies						
	Russian						I
	Social Studies						I
	Spanish						I
	Tourism						I
	Translation		I		L		1
Fine and Applied	Antique Furniture Restoration/Furniture Tech.	H	+	+	•	t	t
Arts	Art/Painting, Sculpture, Print						T
71110	Art Education						T
	Craft/Ceramic Design						T
	Design			100			T
	Fine Arts				1		T
	Graphic and Reproduction Technology					T	T
	History of Art						T
	Industrial/Product Design	1					T
	Model Making		T				T
	Photography						1
	Retail Display	1	1				1
	Visual Communication		1	-			1

range of courses avai studied in conjunction	ere are not exhaustive but give some idea of the lable in DIT. Some of the topics mentioned are on with other subjects. Course duration and final for further information contact the relevant	Bolton St.	Cathal Brugha	Kevin St.	Parnell Sq.	Rathmines	Col. of Music
Commercial and	Accountancy						
Business	Administrative Systems/Secretarial Studies		1	F-SER.		79	
Administration	Advertising				100		
THE PERSON NAMED IN	Agri-Business						
	Auctioneering					11	
	Business Administration	TOW					
	Business Studies/Commerce						
	Company Secretaryship						
	Construction Economics						
	Distribution Management						
	Environmental Economics	•					
	Environmental Management	-					
	Hotel and Catering Management			-	170		
	Management Finance			•		$\overline{}$	
	Marketing						
	Public Administration						
	Public Relations	-				Q	
Cally of the other has	Work Study	+				•	
Engineering and	Agricultural Engineering				V .	100	
Architecture	Agricultural Engineering			1			
	Building Management	0					
	Chemical Engineering						
	Civil Engineering						
	Computer Engineering						
	Construction Studies						
	Electrical Engineering						
	Electronic Engineering			ŏ			
	Engineering Draughtsmanship			ŏ			
	Engineering Science			Ö	11000		
	Building Services Engineering						
	Geo-Surveying		11.11				
	Industrial Engineering						
	Instrumentation and Control			•			
	Marine Engineering			lo.	10	16	
	Manufacturing Technology		17/			Off	
	Materials and Production Engineering				sol i		
	Mechanical Engineering	•					
	Mechanical and Production Engineering		241				-
	Mining Geology/Mineral Engineering						
	Motor Industry Management						
	Plastic Engineering						
	Printing					1	
	Production Engineering						
	Telecommunications/Radio Electronics			•	1		
	Site Management			16			
	Structural Engineering	•					
	Surveying					-	

### STAIR AN CHOLÁISTE

Léiríonn stair na gColáistí Teicneolaíochta i mBaile Átha Cliath fás agus forbairt oideachas teicneolaíochta in Éirinn. I rith 1886/1887 agus de bharr agallaimh idir Choiste Sealadach agus Bardas Atha Cliath aontaíodh scoil teicneolaíochta a thógaint i Sr. Chaoimhín. D'oscail an scoil i nDeireadh Fomhair 1887 le 10 múinteoirí, 78 micleinn agus 12 abahair teagaisc. D'oscail Scoil na gCeard imeasc titim mhór ins an tionsclaíocht tairgaíochta i mBaile Átha Cliath agus i Sasain féin. Ins an naoiú-aois déag tháinig bagairt ar thionscalaíocht i Sasain tré mhéadú mór san dubhshlán ón Mhór-Roinn agus sna Stait Aontaithe. I Sasain chonacathas an dainséir agus bunaíodh Coimisiúm Ríoga in 1881 le modhanna oideachais teicneolaíochta a phlé. De bharr a gcuid fiosrúcháin reachtaíodh Act Teagasc Teicneolaíochta in 1889 a chuir curam ar an oideachas ar chomhairlí Áitiúla. In Éirinn níor bunaíodh comhairlí áitiúla go dtí gur tháinig an Acht Rialtas Aitiúil (Éire) isteach in 1898.

Ní h-iontach mar sin go raibh deacrachtaí airgid ag baint le forbairt scoile Sráid Chaoimhín ins na blianta roimh 1891 mar a reachtaíodh Acht Teagasc Teicneolaíochta (1891) in Éirinn. D'aineoin na deacrachtaí bhí 513 macleinn ar na rollaí san Seisiúin 1891—1892. Ó 1893, nuair a chuir Bardas Átha Cliath an Acht i bhfeidhm, bhí deontaisí le fáil le treallamh saoirtharlainne a leathnú agus le cúrsaí nua a stiúiriú. Chonachtas méadú mhór ar tinreamh na scoile in 1895 de bharr na forbairte seo agus tógadh teach, 37, Sr. Chaoimhín (treasna an bhothair ón scoil) ar cíos leis an bhreis a fhreastail. Chuir an teach seo sé seomraí ranga ar fáil ach faoi 1897 agus le 925 michleinn ar na rollaí bhí foirgneamh nua ag teastáil. Tosnaíodh an tógáil i Lúnasa 1899 agus osclaíodh an scoil nua i 1901.

Faoi 1904 bhí brú arís as spás do na ranganna agus tógadh 12, Cearnóg Rutland (anois Cearnóg Parnell) ar cíos; freisin Osclaíodh an scoil i Sráid Bolton i 1911.

Le bunú Saorstát Éireann i 1922 lean stiúiriú na scoile faoin sean Acht, ach i 1924 athraíodh curam teagaisc teicneolaíochta on Roinn Talmhaíochta to dtí an Roinn Oideachais. I 1930 tháinig an Acht Ghairm-Oideachais (1930) i bhfeidhm agus is ó shin i leith atá stiúiriú teagasc teicneolaíochta faoi réir na gCoistí Gairm-Oideachais ar fúd na tíre.

Idir an dá chogadh domhanda ní mór an méadú a tháinig ar an scoil i Sr. Chaoimhín agus ní mór an áthrú a tháinig ar raon na gcúrsaí. Ag deireadh 1938 afach, bhí breis agus 2,000 michleinn (idir daltaí lae agus oiche) ar na rollaí agus bhí brú mór spáis aris ann. Aistríodh cuid de na cúrsaí go scoileanna eile sa chathair leis an brú a mhaolú agus san seisiún 1941/42 cuireadh leis na saotharlainn innealtóireachta.

Le tús an tarna chogaidh tháinig éileamh mhór ar chúrsaí nua. I 1940 bunaíodh cúrsa ar Sheirbhís Radio, cúrsaí reamh-Ollscoile ins na hAbhair Eargna; i 1942 bunaíodh cúrsa trí bliana in Innealtóireacht Radio, cúrsaí don Radharceolaíocht, Poiticeoreacht agus Raidgrafadóireacht. Bunaíodh fresin cúrsaí Céime B.Sc. d'Ollscoil Londain agus cé nach raibh ach beirt ar an gcúrsa i 1940, bhí 17 faoina bhun i 1949. Ins na blianta seo a tháinig crut Institiúide triú leibhéil ar an gColáiste.

I dtús an chogaidh ní raibh ach seisear foirne seasmhach sa Choláiste, an Príomh-Oide san aireamh ach faoi 1950 mheadaigh an uimhir seo go 22. San am seo bhí breis agus 2,000 machleinn ar na rollaí le 350 acu lánaimsireach. Bhí brú spáis arís ann.

I 1955 ceannaíodh dhá acra i Rae Port Chaoimhín, i 1959 bhí na pleananna do Choláiste nua críochnaithe agus i 1963 thosnaigh an tógáil ar an bhfoirgneamh atá inniú ann.

Osclaíodh an Coláiste nua go hOifigiúil i mí Mheithimh 1968.

Is fada an t-am é ó 1955 go 1968 agus i rith na treimhse sin tháinig athrú mhór ar chúrsaí an Choláiste. Faoi 1960 bhí 38 foirne seasmhach sa Choláiste agus bhí 21 cúrsaí lan-aimsireach dá reachtáil. I rith an ama seo freisin bunaíodh cúrsaí speisialta teagaisc do theicneoirí — teicneoirí innealtóireachta i 1960 agus 1962, teicneoirí saotharlainne leighis i 1963 agus 1965 agus teicneoirí eargna i 1969. Tar-éis 1968 thosnaigh an Coláiste ag bronnadh a chuid teastaisí féin agus le blianta beaga anuas tá ceangail acadúil idir an Choláiste agus Coláiste na Trionóide mar a bronntar céimeanna ollscoile san Eargna agus san Innealtóireacht ar mhicleinn a bhaineann Dioploma an Choláiste amach.

I 1978 aontaíodh na sé Coláistí i mBaile Átha Cliath mar Institiúid amháin Teicneolaíochta faoi riar an Choiste Ghairm-Oideachais. Tugadh Institiúid Techneolaíochta Bhaile Átha Cliath air agus is Coláiste den Institiúid é an ceann i Sráid Chaoimhín a bhaineann le h-eargna agus le h-innealtóireacht leictreach agus leictreonach agus le cúrsaí gar-leighis.

I mbliana, 1985/86 tá 200 d'fhoireann acadúil seasmhach sa Choláiste, 350 d'fhoireann pháirtaimsireach agus breis is 4,500 macleinn. Tá 70 cúrsaí fó-cheimeach le fáil maille le aiseanna agus cúrsaí proifisiúnta agus iar-cheimeacha. Tá taighde iar-cheimeach agus iar-dhochtúireachta idir lámhaibh faoi dheontaisí ó eagraisí in Éirinn, on Roinn Oideachais, ón EEC agus ó ionadaithe eagsúla seachtracha eile.

Le méadú mhór ó 1980 anonn tá ar íis brú ar spás orainn, agus i rith an seisiúin chaite tosnaíodh clár tógála in aice an Choláiste atá le feiceáil inniú. Beidh an foirgneamh nua réidh chun úsáide i 1987.

### COLLEGE COUNCIL

Councillor Liam Fitzgerald, T.D. NT BA HDipEd (Chairman)
Councillor Michael Donnelly BComm FCA (Vice-Chairman)
Michael Cotter NT BA MEd
Patrick Donegan
Francis Brennan DipEE CEng MIEI MIERE AMIEE (Principal)
Seán Hanratty FIMLS (Industry)
Patrick McCarthy BSc PhD CChem MRSC FICI (Industry)
Ken O'Reilly (Industry)
Patrick Laffin (D.C.T.U.)
Raymond Hatton MTC(Dept of Ed) MIEI (Staff Representative)

COMHAIRLE AN CHOLÁISTE

### **COLLEGE EXECUTIVE BOARD**

The College Executive Board helps in co-ordinating the work of the College and its academic programmes. It comprises the Principal, Vice-Principal, Heads of Departments and the Secretary/Registrar. It has responsibility for approving and monitoring of courses 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.

### PRINCIPAL:

F. M. Brennan, DipEE CEng MIEI MIERE AMIEE

### VICE-PRINCIPALS:

G. L. Latchford, BE BSc CEng MIEI

J. K. Taaffe, BSc MSc CPhys MInstP MBA HDipEd DipProd Barrister-at-Law

### **DEPARTMENT HEADS:**

**Biological Sciences:** 

Brid Ann Ryan, BSc MSc CBiol MIBiol DipIndMicrob

### Chemistry:

E. J. Rothery, BSc CChem FRSC FICI MIBiol I

### **Electrical Engineering:**

J. C. Fisher, BA BAI HDipEd PhD

### Electrical Installation:

Desmond McManus, FTC(EEP)CGLI FINAL(EEP)Dept. of Ed.

### **Electronic and Communications Engineering:**

B. J. O'Connor, CEng MIERE

### Languages and Industrial Studies:

Kathleen M. Tierney, MA

### Mathematics, Statistics and Computer Science:

B. Goldsmith, BSc MSc DPhil

### Physics:

M. Hussey, BE MS PhD CPhys FInstP CEng MIEE

### SECRETARY/REGISTRAR:

D. C. Spring

## BÓRD FEIDHMIÚCHÁIN AN CHOLÁISTE

# COURSES IN APPLIED SCIENCE, HEALTH SCIENCE, FOOD SCIENCE, MATHEMATICS AND COMPUTING

WHOLETIME DEGREE/PROFESSION	NAL COURSES		Dimebuat
Did to the Applied Coloners		Ref.	Page
Diploma in Applied Sciences  B.Sc (Applied Sciences)  Diploma in Dietetics and Nutrition	Wholetime	WSAD	36
B.Sc (Human Nutrition)	Wholetime	WBD	40
Diploma in Ophthalmic Optics	Wholetime Black-Release	WSO WAML	42 45
Diploma in Medical Laboratory Sciences Graduate Diploma in Food Science and Technology of the Institute of Food	Diack-nelease	WAIVIL	VICE-PRI
Science and Technology (UK)	Wholetime	WSFS	46
Don't Care to the service or which the	H ASM Taniff MEA	ENT HEADS:	A K THE
PART-TIME PROFESSIONAL COUR	SES		
Graduateship of the Institute of Biology Graduateship of the Royal Society of	Part-time	PSIB	48
Chemistry Graduate Diploma in Food Science and Technology of the Institute of	Part-time	PSIC	50
Food Science and Technology (UK) Fellowship of the Institute of Medical	Evening Block-Release	S6.3	52
Laboratory Sciences	or Evening	S10	54
Diploma in Applied Physics	Part-time (or full-time)	PSAP	56
Membership of the Institute of Statisticians Certificate in Mathematics/Licentitateship of the Institute of Mathematics and its	Evening	M6	58
Applications Diploma in Mathematics/Graduateship of the Institute of Mathematics and its	Evening	M4	60
Applications Membership of the British and/or Irish	Evening	M7	61
Computer Society	Evening	M8	62
Diploma in Food Science	Evening	S6	63

CÚRSAI SAN EARGNA FHEIDHMEACH, GAR LEIGHIS, BIAEOLAÍOCHT, MATAMAITIC AGUS RÍOMHAIREACHT

# COURSES IN APPLIED SCIENCE, HEALTH SCIENCE, FOOD SCIENCE, MATHEMATICS AND COMPUTING

WHOLETIME TECHNICIAN COURS	E5	Ref.	Pag
Technician Diploma in Applied Science			
(Biology, Chemistry, Physics)	Wholetime	WAS	6
Technician Diploma in Computer Science	Wholetime	WMT	6
Certificate in Medical Laboratory Sciences Diploma in Bakery Production and	Wholetime	WML	ni anu
Management	Wholetime	WBT	7
Certificate in Optical Dispensing	Wholetime	WSTO	7
Pleasured Federal March Barry   British S	Europa Di	CODO PERSONA	DI SETU
ART-TIME AND EVENING TECHN	IICIAN COLIRS	Computation	
	IIOIAN COOMS	862	
Cechnician Certificate in Applied Science			
(Biology, Chemistry)	Part-time	PAS	
Technician Diploma in Applied Science (Biology, Chemistry)	Part-time	PAS 5 & 6	
Science Laboratory Technicians' Diploma	Part-time	PSL 4 & 5	
echnician Diploma in Dental Technology	Part-time	PSDT	
Hotographic Technicians' Certificate	Part-time	PSPT	
echnician Certificate in Medical Physics			
and Physiological Measurement	Evening	PBE	
		THE DESCRIPTION OF THE PARTY OF	
VHOLETIME FECHNICIAN COUR	SES		
THER SCIENCE AND MATHEMAT	ICS BASED CO	URSES	
Pertificate in Professional Photography	Part-time	PSP	
Advanced Certificate in Professional	i di t-tiillo	1 01	
Photography	Part-time	PSP 4 & 5	
- 9. april			
Certificate in Sciences for Nurses Course in Plastics	Block-Release	PSN PCP	

CÚRSAÍ SAN EARGNA FHEIDHMEACH, GAR LEIGHIS, BIAEOLAÍOCHT, MATAMAITIC AGUS RÍOMHAIREACHT

of Brewing

Evening

PBA

91

# COURSES IN APPLIED SCIENCE, HEALTH SCIENCE, FOOD SCIENCE, MATHEMATICS AND COMPUTING

### OTHER SCIENCE AND MATHEMATICS BASED COURSES (Contd.)

Course for Registered Nursing Auxiliaries of		Ref.	Page
the Royal College of Veterinary Surgeons	Evening	S9	92
Course for the Institute of Meat	Evening	S11	93
Course in Medical Records Administration	Evening	S12	94
Course in Mathematics for Engineering	Evening	M1	96
Course in Mathematics for			
Telecommunications	Evening	M2	97
Course in Computing for the Electrical			
Contracting Industry	Evening	M3	98
Course in Mathematics on a Microcomputer	Evening	M5	99
Course in Cobol Programming	Evening	M9	100
Course in Computing for Engineering	Evening	M10	101

### PART-TIME AND EVENING BAKERY COURSES

Bakery Practice	Part-time	PSB	102
Confectionery Decoration Intermediate	Evening	B1.2	103
Confectionery Decoration Advanced	Evening	B1.3	103

CÚRSAÍ SAN EARGNA FHEIDHMEACH, GAR LEIGHIS, BIAEOLAÍOCHT, MATAMAITIC AGUS RÍOMHAIREACHT

### **COURSES IN ENGINEERING**

Honours Diploma in Electrical/Electronic		Ref.	Page
Engineering BSc (Engineering)	Wholetime	SEE	104
Course for the Engineering Council Part II  Examination	Wholetime	WCE	107
PART-TIME PROFESSIONAL COUR	RSES	sectionics for El cronics and Micr	nduprial E
Course for the Engineering Council			
(Electrical Engineering) Part I Examination Course for the Engineering Council (Electrical Engineering) Part II	Evening	EE1	108
Examination	Evening	EE2	109
WHOLETIME TECHNICIAN ENGIN	EERING COUR	SES	-
WHOLETIME TECHNICIAN ENGIN	EERING COUR	SES	14
Technician Engineering Diploma — Electrical Engineering	EERING COUR Wholetime	SES	110
Technician Engineering Diploma —			110
Technician Engineering Diploma — Electrical Engineering Technician Engineering Diploma —	Wholetime Wholetime	WEET	7771
Technician Engineering Diploma — Electrical Engineering Technician Engineering Diploma — Telecommunications & Electronics  WHOLETIME TECHNICIAN COURS Technician Diploma in Electronic	Wholetime Wholetime	WEET	7771
Technician Engineering Diploma — Electrical Engineering Technician Engineering Diploma — Telecommunications & Electronics  WHOLETIME TECHNICIAN COURS Technician Diploma in Electronic Engineering	Wholetime Wholetime SES Wholetime	WEET WRTT	113
Technician Engineering Diploma — Electrical Engineering Technician Engineering Diploma — Telecommunications & Electronics  WHOLETIME TECHNICIAN COURS Technician Diploma in Electronic Engineering Technician Certificate in Electronics Telecommunications and Electronic	Wholetime Wholetime	WEET	113
Technician Engineering Diploma — Electrical Engineering Technician Engineering Diploma — Telecommunications & Electronics  WHOLETIME TECHNICIAN COURS Technician Diploma in Electronic Engineering Technician Certificate in Electronics Telecommunications and Electronic Technicians	Wholetime Wholetime Wholetime Wholetime Wholetime	WRTT  WRS WRCE WRAL	113 115 117
Technician Engineering Diploma — Electrical Engineering Technician Engineering Diploma — Telecommunications & Electronics  WHOLETIME TECHNICIAN COURS Technician Diploma in Electronic Engineering Technician Certificate in Electronics Telecommunications and Electronic	Wholetime  Wholetime  Wholetime Wholetime	WEET WRTT	113

## CÚRSAÍ SAN INNEALLTÓIREACHT

### **COURSES IN ENGINEERING**

### PART-TIME AND EVENING TECHNICIAN COURSES

		Ref.	Page
Electrical Technicians Certificate	Part-time	PET	123
Electronic Servicing	Part-time	PRM	125
Electronic Equipment Maintenance	Evening	R1	126
Telecommunications Technicians	Evening	R6	127
Industrial Electronics for Electricians	Evening	R7	128
Digital Electronics and Microprocessors	Evening	R8	129
Electrical Technicians	Evening	ET	130



CITY HALL

### CÚRSAÍ SAN INNEALLTÓIREACHT

#### LANGUAGE COURSES

WALL DESIGNATION IN MARKET STREET, STR		Ref.	Page
Certificate in European Languages/			mad Class
Business Studies	Wholetime	WLBS	131
Post-Graduate Diploma in Applied Linquistic	s Evening	PLAL	133
Translator's Diploma	Evening	PDT	134
Modern Languages (Practical use)	Evening	PCLL	135
Modern Languages for specialist purposes	Evening	PCLS	137

### CÚRSAÍ SAN TEANGEALAÍOCHT

# COURSES ORGANISED BY THE DEPARTMENT OF ELECTRICAL INSTALLATION FOR ELECTRICAL APPRENTICES AND CRAFTSMEN AND DRAUGHTSMEN

The same of the sa	amplify the State of	and the second	99
Electrical and Electronic Draughting	Wholetime	ESED	138
Certificate Course for Electricians in the		and the residence	the Landson of the
Aircraft Industry	Sandwich	SEAL	139
Certificate Course in Electrical Installation			
and Maintenance	Block Release	SEM	140
Certificate Course in Electrical Installation			
Work	Block-Release	BESB	142
Certificate Course in Electrical Installation Work	Disab Dalassa	CEAC	440
Certificate Course in Electrical Installation	Block-Release	SEAS	143
Work	Block-Release	PAA	144
Certificate Course in Electrical Installation	DIOCK-Helease		144
Work	Block Release	SESB	145
Certificate Course in Electrical Installation			140
Work	Day Release	PEI	145
Craft Board Technician Certificate in	and the second second second		
Electrical Installation Technology	Evening	T3	147
Evening Course for Updating in Electrical			
Installation Technology	Evening	T4.1/2	148
Evening Course in Electrical Installation Work	Evening	T1	149

### CÚRSAÍ EAGRAITHE AG AN ROINN INSTEALLABHÚ LEICTREACH DO PHRINTÍSIGH, DO CHEARDAITHE LEICTREACHA AGUS DO DHREACHTÓIRÍ

COURSES IN PHYSICAL EDUCATION	150
-------------------------------	-----

## CURSAI SAN CORP OIDEACHAIS

### GENERAL INFORMATION AND REGULATIONS

### METHOD OF APPLICATION

### (a) Degree Level Courses in C.A.O. Scheme

The following degree level courses are in the CAO scheme. Graduates of these courses are awarded DIT Diplomas. They are also eligible for degree awards of the University of Dublin (Trinity College).

College Code	CAO Code	Course Description	Min. Pts. A
SEE	FT 21	Honours Diploma in Electrical/Electronic Engineering	38
WSAD	FT 22	Diploma in Applied Sciences	31
*WBD	FT 23	B.Sc. (Human Nutrition)	-

<sup>\*</sup>This course is administered jointly by the Dublin Institute of Technology (College of Technology, Kevin Street) and the University of Dublin (Trinity College).

See note on selection procedures.

Applicants for the above degree level courses in the CAO scheme should apply directly

to:-

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

It is essential that applicants adhere to the procedures described in the CAO Handbook.

CAO Closing Date: Irish Applicants - 1st February 1986 (5.30 p.m.)

#### Note:

- (i) There will be a period of grace for the receipt of Irish applications during which such applications may be accepted at a fee of IR£25.00. This period will last from February 2nd to March 1st inclusive.
- (ii) 'Re-applications' will not be accepted in respect of College degree level courses in CAO scheme.
- (ii) Applicants should note some specific exclusions from the CAO scheme on page 14 of the CAO Handbook e.g. mature and overseas students, together with students applying for the second or subsequent years of a degree course. These should apply direct to the Dublin Institute of Technology.

### (5) Technician and other Wholetime Courses

Application for admission to technician and other wholetime courses listed below, which are not in the CAO system should be made to the Dublin Institute of Technology on the standard form. Packs containing the necessary Part I Application Form, Bank Giro Form and D.I.T. Handbook are available on request.

# EOLAS AGUS RIALACHÁIN GINEARALTA INSTITÍUID TEICNELOAÍOCHTA BHAILE ÁTHA CLIATH

College Course Code	Course Description	Min. Pts.△
WML	Certificate in Medical Laboratory Sciences	01 0011101
WMT	Technician Diploma in Computer Science	35
WAS	Technician Diploma in Applied Science	35 27
WSO	Diploma in Ophthalmic Optics	-
WBT	Diploma in Bakery Production and Management	-
WEET	Technician Engineering Diploma/Electrical Engineering	28 32 32
WRTT	Technician Engineering Diploma/Telecommunications & Electronics	32
WRS	Technician Diploma in Electronic Engineering	32
WRCE	Technician Certificate in Electronics	22
WLBS	Certificate in European Languages/Business Studies	-

<sup>△</sup>See note on selection procedures.

The DIT applications procedure for 1986/87 session is divided into two parts:—

Part I: This involves the submission of a completed Part I DIT application form accompanied by Section A of the BANK GIRO duly stamped to certify that the appropriate application fee, as shown below, has been lodged.

These should be forwarded to:

The Admissions Office,
Dublin Institute of Technology,
Avondale House,
189-193 Parnell Street,
Address

For session 1987/88 to 14 Upper Mount St., Dublin 2.

to reach there not later than 15th February 1986 (1st March on payment of higher fee). Applications will be acknowledged within one month of their arrival. Applicants who have not received an acknowledgement within that time should write to the DIT Admissions Office, preferably on a postcard.

**DIT Application Fee:** 

Part II: Applicants other than transferee, mature and overseas applications (see page 6) will be sent Part II of the DIT application form during the week commencing 28th July, 1986 to the permanent home address given on their Part I DIT application forms.

The date by which the Part II DIT application form must be returned to the Institute will be clearly shown on it when issued. It is likely that this will be the 22nd August, 1986.

The Part II form requires applicants to notify the Institute of their 1986 Department of Education Leaving Certificate results. It is recognised that some applicants may wish to change the order of and/or replace any or all of their original course preferences at this stage in the light of their 1986 school leaving examinations or new career plans. The Part II form is intended to facilitate this in so far as it is possible.

The return of the Part II DIT application form is an essential part of the application procedure. Candidates not returning it to the DIT Admissions Office by the specified closing date will not be considered further by the Institute. These applications will be deemed to have lapsed.

Note: The application procedure for Course ESED is indicated on Page 00 of this booklet.

### (c) Part-Time and Evening Courses

It is not necessary to make application for admission to part-time and evening courses in advance of the enrolment date for the course.

Enrolment will commence on 15th September 1986 and intending applicants should report in person to the College during the scheduled enrolment hours.

### SELECTION PROCEDURES (WHOLETIME COURSES)

Applicants are placed in order of merit in accordance with the following points system allocated to the best results in six subjects (including Mathematics and English) obtained in one or more school leaving examinations having regard to the relevant course entry requirements. In the case of some courses, applicants may be called for interview. The results of interviews may be combined where appropriate with the total points scored in the best six subjects referred to above. Interviews are normally held in late August or early September. As a guide only, the minimum number of points which obtained places in 1985, are indicated in the list of courses above (where interviews did not take place). It cannot be taken as being the position for 1986.

### POINTS FOR DIFFERENT GRADES

Dainte	Leaving (	Certificate	N.U.I.	T.C.D.	Matric	G.0	C.E.
Points	Higher	Ordinary	Matric	Maths	Other	A Level	O Level
9	А	100 - 100 mg	us vi—	-	etion Fe	Α	a -
7	В	OFFI THE	1	BT (Tewys	d bull-score	В	A-
6	С	-	TOTAL PROPERTY.		1628	С	Bu-140
5	and-long	А	11	del Elon	А	D	Maria Poly
4	D	-	-		-1000	i mussic	90 -
3		В	111	0	В	E	A
2	er itenio	С	IV	Р	С	11/200	В
1	0 la-1990	D	muho-obno	-	D	0	С

NOTE: Special weighting factors are effected on these points for some courses. Details of the weightings are provided later in this booklet.

#### **Special Cases**

The following types of applicants are treated as special cases and are processed separately from the main stream of candidates.

### (a) 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 entrance requirements for courses in the College 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 is an acceptable equivalent.

### (b) Mature Students

A mature student who is 24 years of age or over at the time of enrolment and who does not meet the normal minimum admission requirements may be considered for admission to appropriate courses after attending in person for interview and satisfying the College Authorities as to his/her ability to benefit from the proposed course. Such applicants may be required to sit and pass an entrance test or a suitability test before admission.

- (c) Holders of N.C.E.A. National Certificates and Diplomas or Similar Level Awards
  Applicants should request the College where they have studied for these awards to
  forward in confidence to the Admissions Office a full transcript of results (including
  subjects studied and grades obtained) not later than July 31st. The application will
  not be processed until this has been received. Only candidates with a very high level
  of attainments have prospects of gaining admission because of the limited number of
  places available.
- (d) Applicants Seeking Exemptions from one or more years of a Course
  As in (c) such applicants should ask their former College to forward in confidence to
  the 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.

### (d) Overseas Students

Overseas students seeking admission to the College should apply not later than February 1st using the standard application forms 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. Further information regarding immigration, financial matters, aliens regulations, money and exchange controls is available on request to foreign students from the Irish Council for Overseas Students, (ICOS), 41 Morehampton Road, Dublin 4.

### GRANTS AND SCHOLARSHIPS

#### (a) Local Authority Grants

Students who register for the professional or degree level courses conducted by the College are eligible to apply to the Local Authority, within whose jurisdiction 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 to DIT Certificate or Diploma awards are 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.

### (c) ESF Training Grants

ESF (European Social Fund) training grants may be available to Irish students aged between 16 and 25 years while they are pursuing the first two years of certain 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 in the 1985/86 session were Course Ref. WRCE and Course Ref. ESED.

### **FURTHER INFORMATION**

#### Admission and Enrolment

- 1. In the session 1986-87, the latest date for admission of students to classes commencing in the first term is 16th October, 1986. Only in exceptional circumstances will applicants be admitted after that date and a late entry fee will be payable (in session 1985-86 this fee was £30). Under no circumstances will such applicants be admitted after 31st December, 1986.
- 2. Intending students should note the statement on Entry Requirements for admission to the College on page 31. Before acceptance of an application for admission to classes or courses, the applicant may be required to attend in person for interview and the College must be satisfied as to his/her ability to benefit from the proposed classes or courses. Approval in this respect must be endorsed on the enrolment form by the Principal, Vice-Principal, appropriate Head of Department or the member of staff designated for the purpose. The College may require an applicant to submit to and pass an entrance test and/or a suitability test before admitting him/her to any class or course.
- 3. Fees must be paid in full on enrolment and may be paid by cash, bankers draft or money order. Cheques will only be accepted when written on production of a Bank Cheque Card.

- 4. 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 class teacher on first attendance at each class of the course. Teachers are authorised to refuse admission to any student who does not show his/her Official Receipt.
- 5. Fees are not refundable except where a class or course does not form.
- 6. On the first enrolment new students will be issued with an Identity Card. For this purpose and for the College records students must provide, at their own expense, three copies of a recent photograph (not returnable), of passport type and size. Students who were enrolled in the College in previous sessions must present the Identity Card previously issued to them for re-endorsement for the new session.

Where Identity Cards have been lost or are no longer usable, three copies of a recent photograph must again be provided as in the case of first enrolment. Students should note that a charge of £2 will be made for replacement of Identity Cards.

The Identity Card is the property of the College and may be demanded by the College or its officers at any time. Students are therefore required to carry their Identity Cards with them while in College or whenever they may be required to identify themselves as students of the College.

- 7. Overseas students must have achieved a standard in English sufficient to enable them to pursue the course of study in their chosen field successfully. In all cases these students must make application through their Embassy accredited in Ireland.
- 8. Change of address or place of employment should be reported to the Secretary/Registrar immediately.
- 9. The Vocational Education Committee may change any or all of the syllabus, the day and time of any class and may cancel classes where the enrolment or attendance is considered inadequate, or where College resources are deemed inadequate. If for some urgent reason a teacher cannot attend, classes may be cancelled without notice.
- 10. No exchange of classes may be made after enrolment without the written consent of the Principal, on the recommendation of the Head of Department.

Attendance, etc., at classes and courses

1. Day classes will normally be held between 09.00 and 18.00 hrs. each weekday except Saturday. Evening classes will normally be held between 18.00 and 22.00 hrs.

- 2. The Vocational Education Committee may expel any student without refund of fees, for irregular or unpunctual attendance or for any other reason which, in the opinion of the College Council, justifies expulsion. Three successive absences from any class may lead to suspension from the entire course, unless a satisfactory written explanation is submitted to the Principal.
- 3. Students must provide themselves with such books, instruments and equipment (including special clothing) as their classes may, in the opinion of the College, require. In particular, protective clothing must be worn by all students using the Chemistry or Biology Laboratories or the College Workshop. Safety spectacles must be worn in all Chemistry Laboratories.
- 4. Students are required to keep such notebooks and record books, and to undertake and submit regularly such homework, project work or other assigned work as may be prescribed by members of the teaching staff. Unreasonable failure in this respect may lead to suspension or expulsion.
- 5. Apprentices and employers are asked to note particularly that since 1st September 1976 details of the employment and the attendance of all apprentices enrolled in release courses are being made available to AnCO, the Industrial Training Authority, whether or not the apprentices are registered with AnCO.

#### **Examinations**

- 1. Progress from one year of a course to the next will be permitted only to students whom the College deems to have satisfactorily completed the earlier year and passed the required external and/or internal examinations.
- 2. Students should note that a full attendance at classes in all subjects of their course is expected, and a minimum average attendance of 75% in each subject of their course is required.

Students who fail to comply with this requirement without satisfactory explanation will be refused permission to sit College examinations, and endorsement of their entries for external examinations will similarly be refused.

3. Examinations may be set by the College at the end of any year, or at any other point of any course, whether or not external examinations are undertaken at the same point.

- 4. Students preparing for examinations of external bodies are required to acquaint themselves with the current Regulations of those bodies. Insofar as it is possible the College will advise and assist students regarding the procedure they should adopt in respect of the external examining bodies with which they are concerned.
- 5. The College is a recognised centre for many external examinations including 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 the College Notice Boards. Applications after the relevant closing dates will be accepted only on payment of a Late Entry Fee as stipulated by the regulations of the examining body concerned. (It should be noted that the City and Guilds of London Institute do not consider late entries for their examinations.) Where students are in doubt regarding examination arrangements they should make enquiry through the Secretary/Registrar's Office.
- 6. (i) Each student on a course having mandatory College examinations must make application on or before Friday, 20th February, 1987 to sit the appropriate Summer examinations and pay the appropriate examination fee, where applicable, when making such application. Where supplemental examinations are held a similar application must be made on or before July 20th, 1987 and a similar fee paid by students who wish to sit the Supplemental examinations. Courses to which this regulation is applicable are identified in the Course descriptions commencing on page 36.
- (ii) Students should note that the sole proof that an application has been received by the College is the official receipt issued by the College.
- (iii) The fees for the College Examinations for the session 1985/86 were: £20 for all Certificate and Diploma Examinations or any part thereof.
- (iv) Applications for entry to examinations received after 20th February, 1987 in the case of Summer examinations and after 20th July, 1987 in the case of Supplemental examinations, will be considered by the College only where they are accompanied by a Late Entry Fee of £20. Under no circumstances will applications for entry to examinations be considered if received later than 31st March, 1987 in the case of Summer Examinations or 5th August, 1987 in the case of Supplemental Examinations.

- (v) Students will be admitted to the Examination Hall only on production of the Identity Card issued by the College in addition to the appropriate admission ticket which is issued when and if an application to sit the examination is approved by the College.
- 7. Students on courses having mandatory College examinations who do not take their sessional examinations at the Summer sitting will not be permitted to sit the Supplemental Examination, unless the College is satisfied that good and sufficient reason (e.g. serious illness) existed for not taking the Summer sitting.
- 8. Students on courses having mandatory College examinations are required to pass the sessional examinations on their course at the Summer sitting, or, at latest, at the Supplemental sitting (if any) immediately following each year of study. Those who do not pass at these examination sittings will not normally be re-admitted to the course or permitted to resit the examination in later years, except with the special permission of the College Authority. Where such special permission is granted it shall extend to the following Summer and/or Supplemental sitting of the same examination only.

## It should be noted that no Supplemental Examinations are held for the Final year of any College Certificate or Diploma Course.

- 9. It is the responsibility of each student to ascertain the dates, times and venues of examinations by consulting the appropriate timetables published on the College notice boards. The College does not undertake to provide notices or reminders regarding examinations to individual students. In the case of any uncertainty with regard to examination arrangements enquiries should be made as early as possible in the Examinations Office.
- 10. Where illness prevents a student from sitting an examination or any part of an examination of the College a Medical Certificate must be submitted to the College Secretary/Registrar not later than the 4th day following the first occasion on which the sudent is absent. Medical Certificates received later than this will not normally be accepted.

## Illness will not be accepted as an excuse for absence from examination unless certified as specified above.

- 11. Students wishing for a recheck of an examination result should make written application to the Principal within seven days of the issue of their results, specifying the grounds on which the request is made.
- 12. Appeals against examination results (as distinct from rechecks) must be lodged with the Principal within two weeks of the issue of provisional results. Applicants should complete the Official Form, available from the Examinations Office and pay the prescribed fee (non-returnable).

### Degrees from Dublin University

Students who obtain the Diploma in Electrical/Electronic Engineering (Course SEE) or the Diploma in Applied Sciences (Course WSAD) are eligible for the award to the appropriate BSc. Degree from Dublin University. A fee is payable to Dublin University by those who present themselves for the degree award. All communications in respect of the award of the above degrees should be addressed to: The Proctor's Office, West Theatre, Trinity College, Dublin 2. The BSc. (Human Nutrition) course is administered jointly by the Dublin Institute of Technology (College of Technology, Kevin St.) and University of Dublin (Trinity College).

#### General

- 1. Students must at all times obey the lawful instructions of lecturers and other members of the College Staff. Misconduct in the College or its grounds may lead to suspension or expulsion. All lecturers are authorised to enforce immediate disciplinary measures in respect of students whom they find violating the regulations of the College or otherwise misconducting themselves.
- 2. Students are liable for the cost of repair or replacement of College property damaged by them.
- 3. Students are not permitted to smoke in the College Classrooms, Laboratories, Lecture theatres, workshops, library, gymnasium, swimming pool changing rooms or Examination Hall.
- 4. Students are not permitted to wear overcoats etc., into the College Classrooms, Laboratories, Lecture Theatres, workshops, gymnasium or library. Locker accommodation is available for a considerable number of students on payment of a fee of £15 per session. This includes a deposit of £10, returnable only if the locker is vacated within seven days of the expiry of the period for which it has been granted, and the official receipt is returned when seeking the refund.
- 5. Parking of bicycles is permitted only in the space provided by the College. Students are not permitted to bring cars into the College grounds. Motor cycles may be parked only in the space provided behind the Church Lane building.
- 6. Students are permitted to use the facilities of the College and particularly of the Gymnasium and Swimming Pool, only on the understanding that they do so at their own risk.
- 7. Though all reasonable care is taken, the College accepts no liability for student property lost, stolen or damaged on the College premises or 'grounds.

#### Office Hours

The Office will be open for enrolment of students as follows:— Monday — Thursday: 09.30/12.00; 14.00/16.00. Friday: 11.00/12.00; 15.00/16.00 and at special periods of the year at times which will be posted on the notice board. Except during enrolment periods, members of the staff will not be available for interviews or consultations except by prior appointment.

#### The Library

The College Library presently holds a stock of about 25,000 volumes, to which it adds about 3,000 volumes per year. The Library also subscribes to over 350 journal titles, and a selection of current abstracts and indices. In circumstances where the Library stock may not meet specific requiements, an excellent inter-lending service from libraries in Ireland and abroad is available.

During term time the Library is open from 09.30 hr. until 21.30 hr. Monday to Friday, and from 9.30 hr. to 17.30 hr. most Saturdays. During vacation the opening hours are 9.30 hr. to 17.30 hr. Monday to Friday only.

All Library users are required to complete a membership card and to abide by the Library Regulations, a copy of which is available on the first visit.

Guidance on the use of all Library materials is available from the Library staff.

#### **Student Services**

Since September 1981, a centralised Student Services Office has provided support services to the students of all third level courses in the Dublin Institute of Technology in the areas of welfare, sporting and social activities. The Office operates under a Student Services Council, consisting of the College Principals (or their nominees) and the Students' Union Presidents. The Council is assisted by three working parties, representative of staff and students, to oversee the day to day work in these three areas and it has a pool of information and expertise available to any student in the colleges of the Dublin Institute of Technology who feels that he/she needs advice or assistance.

From late August every year, a comprehensive list of boarding house accommodation is available from the Student Services Office. There are separate lists for the Northside and the Southside, and while boarding houses predominate, there is also some information available on a number of flats and bed sittingrooms.

More detailed information can be had from the Student Services Office, 14 Upper Mount Street, Dublin 2, telephone 766584 or 762652 (temporarily re-located until 1st June 1986 at Avondale House, Parnell Street, Dublin 1, Tel. 734344) or from the College Students' Union. The Office plans to produce a regular news-sheet, the 'Student Services Bulletin', during the year to keep students up to date on its activities.

#### Entry Requirements

In general terms, the minimum academic requirements for future entry to courses will be as follows:

(a) For Diploma Course in Applied Sciences: Grade C or higher in two subjects taken at Higher Level (one of which must be Mathematics or Applied Mathematics or a Science Subject) in the Leaving Certificate Examination. A minimum of Grade B in Ordinary Level Mathematics will be required from session 1987/88 onwards.

Pass levels in four other subjects in the Leaving Certificate Examination (English and Mathematics must be among the subjects passed in all cases).

(b) For the Honours Diploma Course in Electrical/Electronic Engineering: Grade C or higher on Higher Level Papers in both Mathematics and Physics.

Pass levels in four other subjects in the Leaving Certificate Examination including English.

- (c) For the BSc (Human Nutrition), Leaving Certificate with passes in at least six subjects including English and Mathematics. Grade C or higher in at least THREE higher papers which must include Chemistry.
- (d) For Certificate in Medical Laboratory Sciences (from session 1988/89 onwards): Grade C or higher in two subjects taken at Higher Level (one of which must be Biology or Chemistry or Physics or Chemistry and Physics) in the Leaving Certificate Examination.

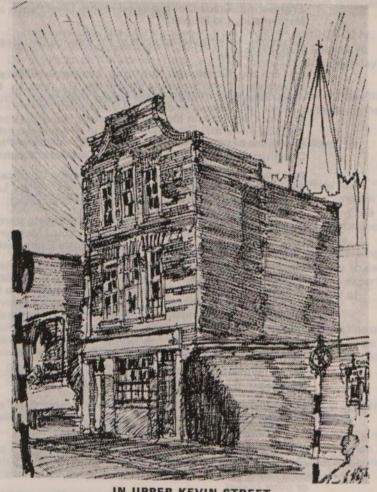
Pass levels in four other subjects in the Leaving Certificate Examination (Mathematics, with at least a Grade C on the Ordinary Level paper and English must be among the subjects passed in all cases).

- (e) For other courses requiring Leaving Certificate standard for entry: Pass in English, Pass in Mathematics (or Applied Mathematics, Pass in three other subjects in the Leaving Certificate Examination.
- (f) Students holding the Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a Science subject will satisfy the entrance requirements for courses in the Dublin Institute of Technology which specify a pass in the Leaving Certificate Examination as the entrance requirement. Where endorsements 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.
- (g) Attainment which the College regards as equivalent to those specified in (a), (b), (c), (d) and (e) will be acceptable.
- (h) Applicants may be required to undergo Selection Tests, and admission will be dependent on satisfactory results in these tests and on satisfactory interviews as well as the foregoing.
- (i) In some cases the College may demand a pass, or a particular grade of pass, in specific subjects additional to those set out above, particularly where such subjects are required by external examining or other bodies.

Where the entry requirement to a particular course is other than as stated in (a) to (f) above, such requirement will be found under the relevant course heading.

The attention of all students is directed to the General Regulations for Schools and Classes operating under the Authority of the City of Dublin Vocational Education Committee which are displayed in the College.

ALL COURSE AND EXAMINATION FEES QUOTED ARE FOR SESSION 1985/86 AND ARE SUBJECT TO REVISION.



IN UPPER KEVIN STREET

### TUITION AND EXAMINATION FEES SESSION 1985–86

(These fees are subject to revision for session 1986–87)	Fee per
Leading of the control of the contro	Academic
WHOLETIME COURSES	Year
SEE:	£640.00
WBD (2nd, 3rd and 4th years: £730):	£835.00
WSAD: WCE: WSO (WSO 4th year: £345):	£510.00
WAS: WMT: WBT: WSTO: WEET: WRS: WRCE: WRTT: WLBS:	£337.00
WML (WML 3rd year: £156):	£337.00
WAML:	£156.00
WRR: WRO: WRAL:	£317.00
tal aldo la constante de la co	vilendilibble
PART-TIME COURSES	
PSIB: PSIC: PSAP: PAS: PSL: PET:	£136.00
PSPT: PSP:	£220.00
Corroganie Distriction of the Corroganie of the	Head of the s
BLOCK RELEASE COURSE	
PSN (2nd and 3rd years: £40):	£50.00
	Scheme, This
EVENING COURSES	
M8: S6.3: PBE: PCP: PBA:	£136.00
M1: M2: M3: M4: M6: M7: M9: S6: S9: S11: S12: FF.1: FF.2:	2.00.00
91.2: B1.3: R1: R6: R7: R8: FT:	£98.00
1: T2: T3: T4: PCLL: PCLS:	£98.00
310 (1 week block f110):	£360.00
PLAL: PDT:	£170.00
	2170.00

NOTE:

The fee indicated for all wholetime courses included the College examination fee (where applicable) for Summer examinations 1986.

College Examination Entry Fee (see note above):	£20.00
Late Registration Fee:	£30.00
Tuition Fees for Overseas Students (non-EEC Countries):	£1,640,00

# TÁILLÍ TEAGAISC AGUS TÁILLÍ SCRÚDAITHE

### **POST-GRADUATE STUDIES**

In addition to its undergraduate programmes, the College also welcomes applications from well-qualified candidates wishing to undertake research leading to higher degrees (M.Sc. and Ph.D.). At present such research may be undertaken in the departments of Biological Sciences; Chemistry; Electrical Engineering; Electronics and Communications Engineering; Mathematics, Statistics and Computer Science; and Physics. Successful candidates will be assigned a supervisor from the appropriate discipline and arrangements (usually with the University of Dublin) will be made to register students for the appropriate degree. Financial support in the form of a limited amount of teaching duties may be provided to particularly well-qualified candidates.

Additionally students with an upper second-class honours degree or better are eligible for Department of Education Post-Graduate Scholarships. Specialized research awards e.g. Flora Research Fellowship in Human Nutrition may also, in some cases, be tenable in the College. Prior to formal application, intending candidates should seek advice from the Head of the appropriate Department.

The College also participates in the Department of Education's Post-Doctoral Fellowship Scheme. This scheme enables recently qualified graduates at the PhD level to pursue research in the College (usually in collaboration with a member of staff). Further details of this and the post-graduate programmes may be obtained from:—

Mr. J. K. Taaffe, Vice-Principal

or

Dr. B. Goldsmith, Chairman, Research Committee.

STADÉIR IAR-CHÉIMEACH

### OVERSEAS DEVELOPMENT AID

The College is co-operating with the Department of Foreign Affairs on the Medical Laboratory Training Programme in Lesotho. College staff have been seconded to Lesotho to work on this programme and the Dublin Institute of Technology gives an External Certificate to the successful graduates of that programme.

Staff have been seconded to other Development Aid Programmes at the request of HEDCO and the Department of Foreign Affairs.

The College is represented on the Executive Committees of HEDCO and the Irish Council for Overseas Students by Ms. B. A. Ryan and Mr. J. K. Taaffe respectively.



### CABHAIR FORBARTHA THAR-SAILE

### COURSES IN APPLIED SCIENCE, HEALTH SCIENCE, FOOD SCIENCE, MATHEMATICS AND COMPUTING

### WHOLETIME DEGREE/PROFESSIONAL

**DIPLOMA IN APPLIED SCIENCE** 

College Code:

WSAD

CAO Code:

FT 22

**Duration:** 

Four years wholetime.

Description of Course:

This course has been designed to cover those areas of Physics, Chemistry and Mathematics, which will be of the widest application in Industry. Being a course in combined sciences, it 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 terms of the techincal options studied for the final three years of the course as follows:

Physics and Chemistry Physics and Mathematics Chemistry and Mathematics.

In the final year a research/development project is undertaken by each student on 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.

Minimum Entry Requirements:

(a) Irish Leaving Certificate in six subjects, including Mathematics and English, with grade C or higher in two subjects on higher level papers, one of which must be Mathematics, Applied Mathematics or a Science subject i.e. Physics, Chemistry, Physics with Chemistry or Biology.

or

(b) Such qualification as the College may deem equivalent.

Note: It must be emphasised that the above are the minimum entry requirements for the course. Becasue of the large numbers seeking entry a much higher standard is necessary in practice to gain a place. From Session 1987/88 onwards a minimum of Grade B in Ordinary Level Mathematics will be required.

### Application Procedure:

Applicants should apply on the standard C.A.O. application form to the:

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

Closing Date:

1st February.

### Course of Study:

#### First Year:

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

Mathematics - Calculus and Linear Algebra, Computing, Mechanics.

Chemistry — Inorganic Chemistry, Physical Chemistry, Organic Chemistry.

Management Studies.

Language - French or German.

### Second Year:

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

Mathematics — Linear Algebra, Numerical Analysis, Statistics 1 & 2, Analysis, Differential Equations.

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

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

Management Studies.

Language - French or German.

In the second or subsequent year students take two out of three major science subjects (Physics, Mathematics and Chemistry).

#### Third Year:

Physics — Atomic and Nuclear Physics, Solid State Physics, Electromagnetism and Applied Optics, Electronics, Microprocessors, Topics from Applied Bio-physics.

Mathematics — Mathematical Methods of Classical Mechanics, Mathematical Methods for Quantum Science, Numerical Analysis, Complex Analysis, Algebraic Structures and Metric and Topological Spaces.

Chemistry — Applied Physical Chemistry, Analytical Chemistry, Applied Inorganic Chemistry, Applied Organic Chemistry.

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

Management Studies.

Language - French or German.

#### Fourth Year:

Physics — Solid State Physics, Thermodynamics and Statistical Physics, Electrical and Electronic Instrumentation, Modern Applied Optics, Radiation and Nuclear Physics, Acoustics, Lasers, Opto-electronics and Applied Holography, Topics from Applied Bio-physics.

Students take the first four subjects and two of the last four subjects. All combinations of the latter will not necessarily be offered in any given year.

Mathematics — Ordinary Differential Equations, Boundary Value Problems, Operator Theory for Quantum Science, Linear Programming, Applied Mathematics for the Physical Sciences, Mathematical Statistics or Applied Statistics and Numerical Analysis.

Students take the first four subjects and one of the last four options. Only one of the subjects Mathematical Statistics and Applied Statistics will be available in any one year.

Chemistry – Applied Organic Chemistry, Applied Physical Chemistry, Applied Inorganic Chemistry.

Awards:

Project — all students will undertake and complete a Project.
Graduates of this course are eligible for the following awards:
Diploma in Applied Sciences (Dublin Institute of Technology)
BSc (Applied Science) from the University of Dublin with grades of Pass, Second Class Honours or First Class Honours as appropriate.

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 such post-graduate work here in Ireland and abroad, in France, Germany, Canada and the United States. Some have gone into private industry both at home and abroad, while others have gone into the public service, hospitals, electricity supply and telecommunications. Some have embarked on careers in education.

For further Information:

Dr. D. C. Hickey, Department of Physics. Telephone: 757541 ext. 336.



### DIPLOMA IN DIETETICS AND NUTRITION

**BSc (Human Nutrition)** 

College Code: WBD

CAO Code: FT 23

Duration: Four years wholetime.

Description of Course:

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

(Trinity College).

This 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.

### Minimum Entry Requirements:

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

or

(b) Such qualification as the College may deem equivalent.

Note: It must be emphasised that the above are the minimum entry requirements for the course. Because of the very large numbers seeking entry a minimum of Grade C or higher on five higher level papers will be required in practice before an applicant would be called for interview.

Application Procedure:

Applicants should apply on the standard C.A.O. application form to the:

Central Applications Office,

Tower House, Eglinton Street, Galway.

Closing Date:

1st February.

Course of Study:

First Year:

Mathematics, Physics, Chemistry, Biology, Food Science,

Communication Studies, Technical French.

#### Second Year:

Biochemistry, Physiology, Nutrition Dietetics, Medicine, Food Services, Microbiology, Statistics and Computation, Communication Studies, Technical French.

#### Third Year:

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

#### Fourth Year:

Nutrition, Dietetics, Communication Studies and Management Studies.

#### Awards:

Graduates of this course are eligible for the following awards: Diploma in Dietetics & Nutrition (Dublin Institute of Technology). B.Sc. (Human Nutrition) (University of Dublin). with grades of Pass, Second Class Honours and First Class Honours as appropriate.

### 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 the 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 slowly 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.

# For Further Information:

Ms. Mary Moloney, Department of Biological Sciences. Telephone: 757541 ext. 314.

### DIPLOMA IN OPHTHALMIC OPTICS

College Code:

WSO

**Duration:** 

Four years wholetime.

Description of Course:

This is a course leading to a Diploma in Ophthalmic Optics and providing the education and training statutorily required for entrants to the profession by the 'Opticians' Act, 1956, and the Rules made thereunder. The course is approved by Bord na Radharcmhastóirí (the Opticians' Board) which is the Registration Authority set up under the Act. Holders of the Diploma in Ophthalmic Optics must also satisfy the Council of the Association of Ophthalmic Opticians, Ireland, on their clinical competence.

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. On return to the College for the completion of this final year, students are assigned an investigative project which helps to relate some of the theoretical aspects of the course to the clinical skills acquired.

### **Entrance** Requirements:

(a) Irish Leaving Certificate in six subjects with Grade C or higher in at least two higher level papers; subjects must include Mathematics and English at either level.

Weighting Factors Applied

Mathematics and Physics 1.5 English, Chemistry, Physics with

Chemistry, Biology 1.3

### Points awarded for grades, taking account of weighting factors applied.

Processor strictly did.	A calculo	Irish Leaving Cert.								IUI	TCD Matric			
Jerospal	НА	НВ	нс	HD	OA	ОВ	ОС	OD	1	11	Ш	IV	0	P
English	12	9	8	5	7	4	3	1	9	7	4	3	_	-
Mathematics	14	11	9	6	8	5	3	2	11	8	5	3	5	3
Engineering	12	9	8	5	7	4	3	1	_	_	_	_	_	-
Physics	14	11	9	6	8	5	3	2	11	8	5	3	_	-
Chemistry	12	9	8	5	7	4	3	1	9	7.	4	3	_	-
Biology	12	9	8	5	7	4	3	1	9	7	4	3	_	-
Physics/Chemistry	12	9	8	5	7	4	3	1	_	_	_	_	-	-
Other Subjects	9	7	6	4	5	3	2	1	7	5	2	2	3	2

or

(b) Such aualification as the College may deem equivalent. Some qualified applicants will be called for interview.

*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.

Application Procedure:

Applicants should apply on the standard D.I.T. Applicaion Form to:

The Admissions Office, Dublin Institute of Technology, 14, Upper Mount Street, Dublin 2.

**Closing Date:** 

15th February.

Course of Study:

First Year;

Mathematics, Chemistry, Physics, Biology, Technical German, Management Studies, Workshop Practice.

Second Year:

Statistical Methods, Anatomy and Physiology, Biochemistry, Geometrical and Physical Optics, Optical Dispensing, Visual Optics, Technical German, Management Studies.

Third Year:

Visual Optics and Instruments, Bio Contact Lenses, Optical Dispensing, Technical German, Abnormal Ocular Conditions, Ophthalmic Practice, Physiology of Vision, Law and Ethics, Binocular Vision, Management Studies.

Fourth Year:

Six months supervised practice followed by a return to College for Abnormal Ocular Conditions, Ophthalmic Practice, Contact Lenses, Environmental Optics, Technical German, Management Studies, Project.

Awards:

Graduates of the Course are eligible for the following awards:

Diploma in Ophthalmic Optics (Dublin Institute of Technology).

with the grades of Pass, Second Class Honours or First Class Honours as appropriate.

Graduates who have passed the examination of the Association of Ophthalmic Opticians, Ireland, may, if elected to Membership, be awarded the:—

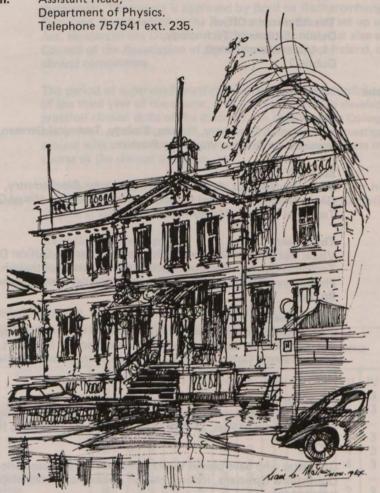
Fellowship of the Association of Ophthalmic Opticians, Ireland (F.A.O.I.)

Career Opportunities:

The majority of Ophthalmic Opticians are in individual private practice. Some are in partnership with Colleagues and a few find employment in the larger practices. Their primary purpose is the examination and assessment of the visual function and advising and prescribing for visual defects. Practitioners may also choose to specialise in the fields of contact lenses, environmental vision or the care of the partially sighted.

For Further Information:

Mr. K. P. Culliton, Assistant Head, Department of Phy



THE MANSION HOUSE, DAWSON STREET

### **DIPLOMA IN MEDICAL LABORATORY SCIENCES**

College Code:

WAML

Duration:

Two-year block-release of twelve weeks duration in each year.

Description of Course:

A course for students of Medical Laboratory Sciences who have obtained the Certificate in Medical Laboratory Sciences and who are employed in approved medical or veterinary laboratories.

Entrance Requirements:

The Certificate in Medical Laboratory Sciences or equivalent.

Application Procedure:

Applicants should apply on the standard DIT application form to:
The Registration Section.

College of Technology, Kevin Street.

Dublin 8.

Closing Date:

31st August.

Course of Study:

Students will study all coare subjects and select one specialist option.

**Core Subjects:** 

Chemistry, Biochemistry, Physiology, Physics, Management Studies.

**Specialist Subjects:** 

Microbiology, Histopathology, Haemathology and Blood Transfusion,

Clinical Chemistry.

Further Study:

The Diploma is a requirement for entry to the Fellowship Course of the

Institute of Medical Laboratory Sciences.

Award:

Students are examined at the end of both years 1 and 2 in all the core subjects and in their chosen specialist subjects.

Graduates of this course are eligible for the following award:—

Diploma in Medical Laboratory Sciences (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

This Diploma is recognised by the Institute of Medical Laboratory Sciences (London) for the award of Associateship of the Institute (AIMLS).

For Further Information:

Mr. L. Lawlor, FIMLS,

Assistant Head,
Department of Biological Sciences,

Telephone 757541 ext. 215.

# GRADUATE DIPLOMA IN FOOD SCIENCE AND TECHNOLOGY OF THE INSTITTUTE OF FOOD SCIENCE AND TECHNOLOGY

College Code:

WSFS

**Duration:** 

One year wholetime.

Description of Course:

This course is designed to assist candidates prepare for the Graduate Diploma in Food Science and Technology of the U.K. The standard sought in this examination by the Institute of Food Science and Technology (U.K.) equals that of an Honours Degree.

Qualifications for Admission:

BSc or equivalent.

Application Procedure:

Applications should be made on the standard DIT application form to:

The Registration Section, College of Technology, Kevin Street,

Dublin 8.

**Closing Date:** 

14th September.

Course Aim:

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 of Study:

### 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.

### **Examinations:**

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

### For Further Information:

Mr. John McEvoy,
Department of Biological Sciences,
College of Technology,

Kevin Street, Dublin 8.

Telephone: 757541 ext. 314.

Note: This Course will be offered in session 1986/87 subject to demand and if the necessary College resources are deemed adequate.

### COURSES IN APPLIED SCIENCE, HEALTH SCIENCE, FOOD SCIENCE, MATHEMATICS AND COMPUTING

### PART-TIME PROFESSIONAL COURSES

GRADUATESHIP OF THE INSTITUTE OF BIOLOGY

College Code: P

PSIB

Duration: Three years, one afternoon and two evenings per week.

Description of Course:

This is a three year part-time course leading to the Graduateship of the Institute of Biology Part II examination. Graduateship of the Institute of Biology is recognised as being equivalent to an Honours Degree.

Entrance Requirements: Part I:

An approved Diploma in Biology, Chemistry, Medical Laboratory Sciences or Food Technology. A suitable BSc(General) Degree may be

considered for exemptions from the Part I course.

Part II:

A pass in the Part I Examination of the Institute of Biology or an appropriate BSc General Degree or Fellowship of the Institute of

Medical Laboratory Sciences.

Application Procedure:

Applicants should apply on the standard DIT application form to:

The Registration Section, College of Technology,

Kevin Street, Dublin 8

Closing Date:

23rd September.

Course of Study:

The course consists of two parts:-

Part I:

Comprises the first year during which two thirds of the time is given to Principles of Biology. This syllabus, writen and examined by the Institute is a broad review of biology, covering General Principles, Energetics, Physiology of animals and plants, Genetics, Environmental Biology and Statistics. The aim throughout is to encourage the student to read widely and to recognise that biology is a quantitative science.

The remaining time during the first year is used to study enzymes and the structural aspects of carbohydrates, lipids, nucleic acids and proteins.

#### Part II:

Comprises the second and third years of the course. During the second year, 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 final year of the course takes a more applied approach, and builds on the knowledge of the previous two years. Subject areas covered include, Applied Aspects of Microbial and Plant Biochemistry, an Introduction to Biotechnological Engineering, Commercial Aspects of Enzyme and Animal Products, Applications of Cell Biology, Genetic Engineering and Radioisotopes.

Also included in the 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 of the investigation. The project is carried out under the supervision of a member of staff, and if performed at the student's place of work, a supervisor at the place of work is also required who will certify that the project is not simply part of the student's normal daily work. 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."

### **Examinations:**

Part I of the Graduateship of the Institute of Biology examination taken at the end of the first year, consists of two papers in Principles of Biology and one in Biochemistry. Assessments and essays contribute to the final mark.

Year 2 — College based sessional examinations which will contribute to the assessment component of the final examination, and which will be used to regulate a student's progress into the final year of the course.

Part II of the Graduateship of the Institute of Biology Examinations consist of four papers in Biochemistry, the Project and Assessment Components. An oral examination, carried out by members of the Institute is also included. Honour gradings only are given in these examinations which require a pass mark of 50%.

# For Further Information:

Dr. Patrick J. Davey,
Department of Biological Sciences
College of Technology,
Kevin Street,
Dublin 8.
Telephone: 757541 ext. 239.

# GRADUATESHIP OF THE ROYAL SOCIETY OF CHEMISTRY

Course Code:

PSIC

Duration:

A course over four years, comprising one full day (or two half-days) and two evenings per week.

Description of Course:

Graduateship of the Royal Society of Chemistry is equivalent to a good honours degree qualification in chemistry and is universally recognised as such e.g. it is recognised by the Department of Education for the honours degree allowance for teachers and by universities for entry to PhD research programmes.

Entry Requirements: Entry to the course is subject to the approval of the Royal Society of Chemistry. Usually an NCEA certificate obtains entry to the first year, and a general science degree or a Technician's Diploma in Applied Science (Chemistry option) gains exemption from Part I.

Curriculum:

The first two years of the course lead to Part I and the last two years to Part II.

Course of Study:

Part I:

The course comprises organic, inorganic and physical chemistry lectures together with practical sessions which are to illustrate and, in some cases, expand the lecture material. The practical also emphasises the use of instrumentation in the chemical laboratory.

Part II:

This extends the basic material in the three main branches of chemistry covered in Part I. There is an added topic in Part II viz applied chemistry. This comprises chemical engineering, technical economics, history and patents, safety and the study of a large volume and low volume chemical process. Students who have been exempted from Part I are also required to pass a practical examination which is usually taken at the end of the first year of Part II.

A special aspect of Part II is communications, and each student is required to carry out a literature search and write an essay on two topics. The first of these topics also forms the basis of a fifteen minute oral presentation which each student is required to give in the second term of the first year of Part II.

**Examinations:** 

Promotion from the first to second years of Part I and II is subject to satisfactory performance in a College examination. At the end of the second year of Part I students sit three theory papers (organic, inorganic and physical chemistry) and a practical examination. These examinations are set by the College and assessed by the Royal Society of Chemistry. Promotion to Part II is subject to passing the theory examinations.

At the end of the second year of Part II the student must pass all four theory papers (organic, inorganic, physical and applied) and have a satisfactory assessment.

For Further Information:

Mr. S. Hamill,
Department of Chemistry,
College of Technology,
Kevin Street,
Dublin 8.
Telephone: 757541 ext. 324.



OLD CAMDEN STREET

### GRADUATE DIPLOMA IN FOOD SCIENCE AND **TECHNOLOGY**

College Code:

S6.3.

**Duration:** 

1 year, two evenings per week.

Description of Course:

This course is designed to assist candidates prepare for the Graduate Diploma in Food Science and Technology of the Institute of Food Science and Technology of the U.K. The standard sought in this examination by the Institute of Food Science and Technology (U.K.)

equals with that of an Honours Degree.

Qualifications for Admission: Diploma in Food Science from the Dublin Institute of Technology (Ref. S6) or Degree in Food Science or equivalent.

Application Procedure:

Applications should be made on the standard DIT application form to: The Registration Section,

College of Technology,

Kevin Street. Dublin 8.

Closing Date:

23rd September.

Course Aim:

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

- (a) the composition, structure, chemical and biochemical reactions of foods.
- (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 treatments on the qualities of foods.

Course of Study:

- (a) Chemistry, Biochemistry and Properties of Foods.
- (b) Microbiology.
- (c) Human Nutrition.
- (d) Principles of the production and distribution of food.

(a), (b) and (c) are essentially the same as those syllabuses described in the Diploma in Food Science (Ref. S6). During this year, emphasis is placed on integrating the knowledge obtained during the Diploma in Food Science course

The Principles of the production and distribution of food cover the following main areas:-

(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.

Examinations:

The Graduate Diploma of the Institute of Food Science and Technology of the U.K.

For Further Information:

Mr. John McEvoy,

Department of Biological Sciences. Telephone: 757541 ext. 314.



In 1794 O'Connell Bridge (named Carlisle Bridge then) was built, in the old steep and narrow style. In 1880, O'Connell Bridge was rebuilt, removing the hump and almost doubling the width of the bridge to 155 feet so that it is almost exactly as wide as it is long.

### FELLOWSHIP OF THE INSTITUTE OF MEDICAL LABORATORY SCIENCES

College Code: S.

S.10

**Duration:** 

Two years part-time.

Description of Course:

An advanced course in Medical Laboratory Sciences for students taking

the Special Fellowship Examination of the Institute of Medical Laboratory Sciences. Courses are offered subject to sufficient

enrolment.

Entrance
Requirements:

Associateship of the Institute of Medical Laboratory Sciences and

Diploma in Medical Laboratory Sciences or equivalent.

Application Procedure: Applicants should apply on the standard DIT application form to:

Registration Section, College of Technology,

Kevin Street, Dublin 8.

**Closing Date:** 

31st August.

Course of Study:

The course is based on the study guide published by the IMLS and is provided as a Part-time Day/Evening Course or as a Block Release Course for students outside the greater Dublin area. All students will study Bio-Medical Science and one specialist subject. The following specialist options are available subject to adequate enrolment.

Bacteriology

Blood Group Serology and Transfusion

Clinical Chemistry Haematology Histopathology Immunology

Project:

A practical project must be carried out and thesis presented (2,500 to

3,000 words).

**Examinations:** 

Continuous assessment and multi-choice multi-part essay questions will

be set during the two years.

Awards:

Final examination: Special Fellowship of the Institute of Medical Laboratory Sciences. The College is recognised as a centre for the new

approved course of the Institute of Medical Laboratory Sciences.

Further Study:

A limited number of places are available for graduates to proceed for MSc degrees in Irish Universities. Graduates may apply for exemption

of the Part I examinations of the Institute of Biology.

### Career Opportunities:

The Fellowship of the Institute of Medical Laboratory Science is the required qualification for Technologist and Chief Technologist posts in the Medical Laboratory services.

Other areas of employment include Veterinary, Pharmaceutical and Research Laboratories. A small number choose to work in Industry and Education. There are an increasing number of career opportunities in developing countries for short term and long term assignments of experienced Medical Laboratory scientists.

### For Further Information:

Mr. Thomas G. Scott, FIMLS, FAMLS Department of Biological Sciences, College of Technology, 24's present array of red validation Kevin Street, Dublin 8.

Telephone: 757541 ext. 320.



### **DIPLOMA IN APPLIED PHYSICS**

College Code: PSAP

Duration: A course over two years, comprising two afternoons and two evenings

per week.

Description of Course:

This Course leads to a Diploma in Applied Physics (with honours classification). It replaces the Graduateship of the Institute of Physics Examinations which have terminated. The Institute of Physics has recognised this course as satisfying the academic requirements for Corporate Membership of the Institute.

Entrance Requirements: Applicants will be required to satisfy an Interview Board regarding their suitability for the course. In general, those who are admitted must possess a BSc(Gen) in either two or three subjects, one of which must be Physics

or

The Technicians' Diploma in Applied Science (Physics Option) with Credit or Distinction of the Dublin Institute of Technology. Applicants with qualifications and/or experience other than those specified above, may be specially considered.

Application Procedure: Applicants should apply on the standard DIT application form to:

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date: 23rd September.

Class Attendance Two afternoons and two evenings per week for two years. Requirements:

Course of

First Year:

Study:

Mathematics Optics, Thermal Physics, Solid State Physics, Atomic and Nuclear Physics, Electromagnetism and Electronics, Physics practical.

Second Year:

Core subjects: Atomic and Nuclear Physics, Applied Optics, Statistical Thermodynamics, Solid State Physics.

Optional subjects (two to be chosen): Opto-electronics, Electronics, Acoustics, Medical Physics, Topics in Mathematical Physics.

Project: All students will be required to complete a Project.

Examinations: Examinations will be held in the six subjects at the end of the first year.

The practical assessment will also count as one paper. Students whose progress during the first year of the course is unsatisfactory, will not be permitted to enter second year.

The Diploma Examination at the end of the second year will consist of two core papers, two optional papers and the project.

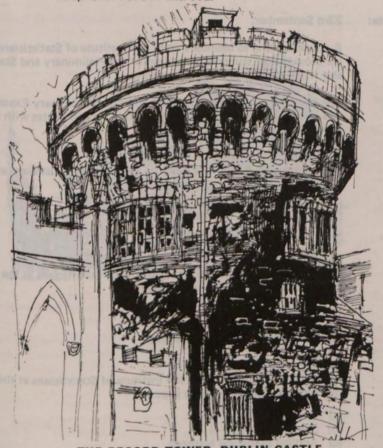
Award:

Graduates of this course are eligible for the following award:

Diploma in Applied Physics (Dublin Institute of Technology)
with grades of Pass, Second Class Honours or First Class Honours as appropriate.

For Further Information:

Mr. F. E. FitzSimons, Department of Physics, Telephone: 757541 ext. 332.



THE RECORD TOWER, DUBLIN CASTLE

### MEMBERSHIP OF THE INSTITUTE OF STATISTICIANS

M6 College Code:

**Duration:** 

Four years (evenings).

Requirements:

Class Attendance Four years: Three evenings (9 hours) per week in the second year, and two evenings (6 hours) per week in the first, third and fourth years.

Application **Procedure** 

Applicants should apply on the standard DIT application form to:

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

Course of Study:

A course leading to Membership of the Institute of Statisticians, Classes are provided for students preparing for the Preliminary and Stages, I, II and III of the Institute's Examinations.

The Institute may grant exemption from the Preliminary Examination and in certain cases the Part I examination, to candidates with suitable qualifications.

### First Year:

The Preliminary Examination of the Institute of Statisticians at the end of the first year involving three papers.

- (a) Collection and compilation of data
- (b) Calculation
- (c) Presentation of results.

#### Second Year:

The Stage I Examination of the Institute of Statisticians at the end of the second year involving three papers:

- (a) Mathematics
- (b) Elements of Statistical Theory
- (c) Elements of Statistical Methods

### Third Year:

The Stage II Examination of the Institute of Statisticians at the end of the third year involving three papers:

- (a) Statistical Theory I
- (b) Statistical Theory II
- (c) Applied Statistical Methods.

### Fourth Year:

The Stage II Examination of the Institute of Statisticians at the end of the fourth year involving three papers:

- (a) Sample surveys and experimental design
- (b) Special subject A chosen from four options
- (c) Special subject B chosen from four further options.

For Further Information:

Mr. I. A. Kinsella, Department of Mathematics, Statistics and Computer Science, Telephone 757541 ext. 334.



CUFFE STREET

CERTIFICATE IN MATHEMATICS/LICENTIATESHIP OF THE INSTITUTE OF MATHEMATICS AND ITS APPLICATIONS

College Code: M4.

Duration: Three years: evenings.

Description A course designed to cover Mathematics with a minimum of Grade B of Course: on a lower level paper in Leaving Certificate or such other qualifications

as the College may deem equivalent.

Class Attendance Three years: one evening (3 hours) per week in first year and two

evenings (6 hours) per week in subsequent years. Requirements:

Applicants should apply on the standard DIT application form to: Application Procedure:

The Registration Section, College of Technology.

Kevin Street, Dublin 8.

23rd September. Closing Date:

Course of First Year: Study:

The first year is a preliminary course provided for candidates who may wish to brush up their knowledge. No formal examination is provided.

Second Year:

The course consists of two topics:

(i) Mathematical Methods and Analysis; (ii) Computer Science and Programming.

Third Year:

The course consists of two topics:

(i) Mathematical Methods and Analysis:

(ii) Algebra.

College examinations will be set in the Autumn and candidates will Awards:

normally sit examinations at the end of each year.

Successful candidates will be eligible for the Licentiateship of the Institute of Mathematics and its Applications. The content should be particularly useful to teachers of Mathematics at second-level.

For Further Dr. T. Ambrose, Information: Assistant Head.

Department of Mathematics, Statistics and Computer Science,

Telephone: 757541 ext. 221.

# DIPLOMA IN MATHEMATICS/GRADUATESHIP OF THE INSTITUTE OF MATHEMATICS AND ITS APPLICATIONS

College Code: M7.

Duration: Two years (evenings).

Entry The Certificate in Mathematics of the Dublin Institute of Technology Requirements: or Licentiate Membership of the Institute of Mathematics and its

Applications or a university degree with Mathematics at the General

Degree level or its equivalent.

Class Attendance Two years: two evenings per week.

Requirements:

Application Applications should apply on the standard DIT application form to:

The Registration Section.

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date: 23rd September.

Course of The course consists of four topics three of which will be compulsory.

Study: Examinations will be held in Autumn and candidates will normally sit examinations at the end of each year.

First Year:

(i) Mathematical Methods:

(ii) Mathematical Control Theory.

Second Year:

(i) Modern analysis and Topology;

(ii) Optional Topic from an approved list.

In addition candidates will be expected to present a short project on

an agreed topic.

Award: A Diploma in Mathematics of the Dublin Institute of Technology. This

Diploma will be accepted by the Institute of Mathematics and its

Applications for Graduate Membership.

For Further Dr. T. Ambrose, Information: Assistant Head,

Department of Mathematics, Statistics and Computer Science,

Telephone 757541 ext. 221.

### MEMBERSHIP OF THE BRITISH AND/OR IRISH COMPUTER SOCIETY

College Code: M8.

**Duration:** Four years (evenings).

Applicants should already be in suitable employment in the Computer Entry Requirements: Industry.

Class Attendance Four years: two evenings (3 hours) per week. Requirements:

Applicants should apply on the standard DIT application form, Application

Procedure: enclosing a curriculum vitae, to:

The Registration Section, College of Technology.

Kevin Street, Dublin 8.

**Closing Date:** 10th June.

A course in computer science covering the examination requirements of Course of Membership of both the British and Irish Computer Societies. Study:

The examinations are set and examined by the British Computer **Examinations:** Society Students would sit the Part I Examinations after two years

and the Part II Examinations after a further two years. The examination

standard of Part II papers is that of an Honours Degree.

Part I:

Four Papers: Two compulsory general papers and two papers chosen

from a list of options.

Part II:

Three papers chosen from a list of options.

For Further Information: Dr. B. O'Shea, Assistant Head,

Department of Mathematics, Statistics and Computer Science,

Telephone: 757541 ext. 221.

### **DIPLOMA IN FOOD SCIENCE**

College Code: S6.

Duration: Two years, two evenings per week.

Description of Course:

A course for science or engineering graduates who require special knowledge of food science. It is ideally suited for those wishing to make a career in various technical areas within the food industry e.g. quality control, product development, process control, research etc.

Entrance Requirements:

BSc or equivalent.

Application Procedure:

Applicants should apply on the standard DIT form to:-

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

Course of Study:

The course deals with the chemistry, microbiology and nutrition as appropriate to the food processing industry. The subjects of the course are:—

### 1. Food Chemistry

- (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 state 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.

Examinations:

All three subjects are examined at the end of each year of the course. At the end of the second year, the two years' work will be examined.

Awards: Graduates of this course are eligible for the following award:-

Diploma in Food Science (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

For Further Information:

Mr. John McEvoy,

Department of Biological Sciences, Telephone: 757541 ext. 314.



FROM THE NATIONAL LIBRARY

### COURSES IN APPLIED SCIENCE, HEALTH SCIENCE, FOOD SCIENCE, MATHEMATICS AND COMPUTING

### WHOLE-TIME TECHNICIAN COURSES

### TECHNICIAN DIPLOMA IN APPLIED SCIENCE

College Code:

WAS

Duration:

Three years wholetime.

Description of Course:

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

Entrance Requirements: (a) Pass in English, Pass in Mathematics (or Applied Mathematics), Pass in three other subjects in the Leaving Certificate examination

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 College regards as equivalent to those specified in (a) or (b) will be acceptable.

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.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:

The Admissions Office,

Dublin Institute of Technology,

14 Upper Mount Street,

Dublin 2.

Closing Date:

15th February.

Course of Study:

First Year:

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

Second Year:

Industrial Studies, Technical French or Technical 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, Photography and Workshop Practice. (This option is limited to 12 students in Year 2 and Year 3.).

**Applied Chemistry Option:** 

Physical Chemistry, Inorganic Chemistry, Organic Chemistry and Industrial Chemistry. (This option is limited to 20 students in Year 2 and Year 3).

**Applied Physics Option:** 

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

Third Year:

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

**Applied Biology Option:** 

Biochemistry, Microbiology, Biotechnology, Cell Biology, Food Science (including Instrumentation) or Biomedical Science (Haematology and Histology).

**Applied Chemistry Option:** 

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

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, Credit 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 the graduates in a wide range of production and service industries, such as the hospitals, higher education, electronics, chemicals and pharmaceuticals, computers, food industry and others. The 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.

For Further Information:

Re: entry to First Year, contact: Mr. S. E. O'Flatharta.

Department of Physics.

Re: Applied Biology Option, contact:

Dr. Ray Ryan,

Department of Biological Sciences.

Re: Applied Chemistry Option, contact:

Mr. P. Ashall,

Department of Chemistry.

Re: Applied Physics Option, contact:

Mr. J. E. Guy,

Department of Physics. Telephone: 757541.

### TECHNICIAN DIPLOMA IN COMPUTER SCIENCE

College Code:

WMT.

**Duration:** 

Three years wholetime.

Description of Course:

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.

Entrance Requirements: (a) Irish Leaving Certificate in five subjects with Grade B or higher in Ordinary Level Mathematics; subjects must include Mathematics and English at either level.

Weighting Factors Applied

Mathematics

1.5

English, Physics, Applied Mathematics, Engineering

1.3

Points awarded for grades, taking account of weighting factors applied.

		Irish Leaving Cert.									NUI Matric				
	НА	НВ	НС	HD	OA	ОВ	ОС	OD	1	11	111	IV	0	P	
English	12	9	8	5	7	4	3	.1	9	7	4	3	_	-	
Mathematics	14	11	9	6	8	5	-	_	11	8	5	-	5	-	
Applied Maths.	12	9	8	5	7	4	3	1	9	7	4	3	_	-	
Engineering	12	9	8	5	7	4	3	1	-	-	_	-	_	-	
Physics	12	9	8	5	7	4	3	1	9	7	4	3	_	-	
Other Subjects	9	7	6	4	5	3	2	1	7	5	2	2	3	2	

or

(b) The Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a Science subject. Where endorsement subjects are 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 College 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.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:

The Admissions Office,

Dublin Institute of Technology,

14 Upper Mount Street,

Dublin 2.

Closing Date:

15th February.

Course of Study:

First Year:

Computer Programming and Computer Systems, Statistics and Business Mathematics, Mathematics, Physics, Business Studies, Technical

German, Keyborad Skills.

Second Year:

Computer Programming, Algorithms and Data Structures, Hardware and Operating Systems, Statistics, Mathematics, Numerical Methods, Business Studies, Technical German.

business Studies, reci

Third Year:

Advanced Computer Programming, Microprocessors, Hardware and Data Transmission, Information Systems and Systems Analysis or

Techniques, Numerical Methods, Business Studies.

Awards:

Graduates of this course are eligible for the following award:

Technician Diploma in Computer Science (Dublin Institute of Technology) — with grades of Pass, Credit or Distinction as appropriate.

Career

Opportunities:

The course is designed to train students for the positions of programmer or programmer/analyst in the commercial and technological areas. The course content is sufficiently wide to encourage upward mobility to more senior positions in the computer

industry within a few years.

For Further Information:

Dr. Brendan O'Shea, Assistant Head,

Department of Mathematics, Statistics and Computer Science,

Telephone: 757541 ext. 221.

## CERTIFICATE IN MEDICAL LABORATORY SCIENCES

College Code:

WML.

**Duration:** 

Three years wholetime.

Description of Course:

This course provides education in the appropriate Sciences and Technology for those seeking a career as Technicians in Medical or Veterinary Laboratories. Students of the course may apply for student membership of the Institute of Medical Laboratory Sciences.

The third year of the course is an in-service training year, during which students attend a designated training hospital laboratory for practical experience in Bacteriology, Blood Transfusion Technique, Clinical Chemistry, Haematology and Histopathology. Students are continuously assessed on their performance during the third year and 50% of the total marks in the sessional examination are allocated to the continuous assessment component. Students return to College for a number of weeks before sitting the sessional examination.

#### Entrance Requirements:

(a) Irish Leaving Certificate in six subjects with grade C or higher in ordinary level Mathematics. Subjects must include English and a suitable science subject i.e. Physics, Chemistry, Physics with Chemistry or Biology.

Weighting Factors Applied

Mathematics, Physics, Chemistry 1.5 English 1.3

Points awarded for grades, taking account of weighting factors applied.

Sweepleges as holes	Irish Leaving Cert.								NUI Matric				TCD Matric	
To mode	НА	НВ	НС	HD	OA	ОВ	ОС	OD	1	11	111	IV	0	P
English	12	9	8	5	7	4	3	1	9	7	4	3	_	-
Mathematics	14	11	9	6	8	5	3	-	11	8	5	3	5	3
Applied Maths.	12	9	8	5	7	4	3	1	9	7	4	3	_	-
Engineering	12	9	8	5	7	4	3	1			_	_	_	-
Physics	14	11	9	6	8	5	3	2	11	8	5	3	-	-
Chemistry	14	11	9	6	8	5	3	2	11	8	5	3	_	-
Other Subjects	9	7	6	4	5	3	2	1	7	5	2	2	3	2

or

(b) Such qualification as the College 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.

From Session 1988/89 onwards, the minimum entry requirements will be:

Grade C or higher in two subjects taken at Higher Level (one of which must be Biology or Chemistry or Physics or Chemistry and Physics) in the Leaving Certificate Examination.

Pass levels in four other subjects in the Leaving Certificate Examination (Mathematics, with at least a grade C on the Ordinary Level paper and English must be among the subjects passed in all cases).

Application Procedure:

Applicants should apply on the standard DIT Application Form to:-

The Admissions Office.

Dublin Institute of Technology,

14 Upper Mount Street,

Dublin 2.

Closing Date:

15th February.

Course of Study:

First Year:

Medical Laboratory Science, Biology, Chemistry, Physics, Mathematics,

Technical German.

Second Year:

Medical Laboratory Science, Physiology, Chemistry/Biochemistry,

Physics, Statistics and Data Processing, Technical German.

Third Year:

Medical Laboratory Sciences.

Further Study:

The Certificate is a requirement for entry to the Diploma course in

Medical Laboratory Sciences.

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.

Career Opportunities:

The Certficiate is the required qualification for basic grade technician posts in the Medical Laboratory Services. Other areas of employment include Veterinary and Research Laboratories. Career opportunities

also exist for Medical Laboratory Scientists in developed countries and

third world countries.

For Further Information:

Mr. Colm P. O'Rourke, FIMLS, Department of Biological Sciences,

# DIPLOMA IN BAKERY PRODUCTION AND MANAGEMENT

College Code:

WBT.

Duration:

Three years wholetime.

Description of Course:

This course is designed to meet the needs of students who wish to attain supervisory status or a position of responsibility in a bakery business where an understanding of the scientific principles involved, coupled with wide knowledge of the bakery industry is essential.

The course offers an opportunity to both large and small bakery owners to have students trained in this country in all aspects of Bakery Production and Organisation.

The course covers the technology of baking together with practice in all aspects of modern Bakery Production. The sources, handling, storage and control of all raw materials coupled with an extensive programme of raw materials testing are also studied as well as Hygiene and Microbiology, Bakery Equipment, Machine and Modern Plant and Production Systems are also standard. The financial side of operating a bakery business, including the study of Financial Control, Marketing, Stock and Quality Controls, Business Administration, Production Planning and Human Relations are all covered in the course. Final year students are encouraged to sit for the City and Guilds of London Institute Examination in Production (Certificate No. 126) in addition to the Dublin Institute of Technology Diploma Examinations.

## Entrance Requirements:

(a) Irish Leaving Certificate in five subjects including Mathematics and English at either level and a minimum of six months practical experience in a bakery.

or

(b) City and Guilds Advanced Craft Certificate (No. 120 Part 2)

or

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

Students holding craft certificates will be exempted from the practical bakery instruction portion of the course, and will be eligible to apply for a reduction of the course fee.

# Application Procedure:

Applicants should apply on the standard DIT Application Form to: The Admissions Office, Dublin Institute of Technology, 14 Upper Mount Street.

Dublin 2.

Closing Date:

15th February.

Course of Study:

First Year:

Applied Science, Bakery Technology, Industrial Studies, Bread Production (Methods and Techniques), Flour Confectionery (Methods

and Techniques).

Second Year:

Applied Science, Bakery Technology, Industrial Studies, Bread Production (Methods and Techniques), Flour Confectionery

(Production Methods and Techniques).

Third Year:

Applied Science, Bakery Technology, Microbiology and Hygiene, Marketing, Business Administration and Financial Control, Bread Production (Methods and Techniques), Flour Confectionery (Production Methods and Techniques), Raw Materials Testing,

Production Planning and Human Relations.

Awards:

Graduates of this course are eligible for the following award:— **Diploma in Bakery Production and Management** (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

Career

Opportunities:

Graduates of the course are to be found in every facet of the bakery and allied industries and include General Managers, Production Managers, Technical Representatives, Test Bakers, Bakery Technologists, Product Development Technicians and Bakery

Supervisors.

For Further Information:

Mr. D. T. Carey, Bakery Section,

### CERTIFICATE IN OPTICAL DISPENSING

College Code: WSTO.

Duration: Two years wholetime followed by a period of three months supervised

practice before the final examination.

Description of Course:

This is a course leading to a Certificate in Optical Dispensing and providing the education and training required for entrants to the profession required by the Opticians Act, 1956 and the Rules made thereunder. The course is approved by Bórd na Radharcmhastóirí (the Opticians Board) which is the Registration Authority set up under the Act. Holders of the Certificate must also satisfy the Council of the Association of Ophthalmic Opticians, Ireland as to their competence in practice in order to be eligible for Registration.

Entrance Requirements: (a) Irish Leaving Certificate in five subjects which must include Mathematics and English 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 Examination of the Department of Education will be an acceptable equivalent.

or

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

It must be emphasised that the above are the minimum entry requirements for the course.

Application Procedure:

Applicants should apply on the standard DIT application Form to:

The Admissions Office,
Dublin Institute of Technology.

14 Harris Marie Connology

14 Upper Mount Street,

Dublin 2.

**Closing Date:** 

15th February.

Course of Study:

First Year:

Experimental Physics, Mathematics, Chemistry, Biology, Drawing, Management and Related Studies, German,

#### Second Year:

Anatomy & Physiology, Physical and Geometric Optics, Optical Dispensing, Visual Optics and Instruments, Ophthalmic Practice, Contact Lenses, Law & Ethics and Management and Related Studies, Supervised Clinical Practice.

Award:

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

Career Opportunities:

The main area of employment for graduates of this course is in dispensing chemists and dispensing opticians establishments.

For Further Information:

Mr. K. P. Culliton, Assistant Head. Department of Physics, Telephone 757541 ext. 235.

Note: This course will be offered in session 1986/87 subject to demand and if the necessary College resources are deemed adequate.



THE OLD BRAZEN HEAD

# COURSES IN APPLIED SCIENCE, HEALTH SCIENCE, FOOD SCIENCE, MATHEMATICS AND COMPUTING

# PART-TIME AND EVENING TECHNICIAN COURSES

# TECHNICIAN CERTIFICATE IN APPLIED SCIENCE

College Code

PAS.

**Duration:** 

Four years part-time.

Description of Course:

This course is designed to meet the requirements of those students seeking a basic 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 two years this course may offer two options depending on the number of applicants.

# Applied Biology and Applied Chemistry.

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

#### Entrance Requirements:

(a) Pass in English, Pass in Mathematics (or Applied Mathematics), Pass in three other subjects in the Leaving Certificate examination

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 Examination of the Department of Education will be an acceptable equivalent.

or

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

Class Attendance 1 day and 2 evenings per week (15 hours). Requirements:

Application Procedure:

Applicants should apply on the standard DIT Application Form to:

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

Course of Study:

First and Second Years:

Physics, Chemistry, Biology, Mathematics, Industrial Studies, Drawing

Assignments, Technical French or Technical German or Irish.

Third and Fourth Years:

Industrial Studies, Technical French or Technical German or Irish are common to all options. Subjects taken in Years 3 and 4 are detailed below in respect of each option available.

**Applied Biology Option:** 

Biochemistry, Microbiology, Biotechnology, Cell Biology, Mathematics (including Computer Studies), Language, Business Studies, Quality Control and Workshop Practice.

**Applied Chemistry Option:** 

Physical Chemistry, Inorganic Chemistry, Organic Chemistry and Industrial Chemistry.

Award:

It is envisaged that graduates of this course will be eligible for the

following award:-

Technician Certificate in Applied Science (Option Specified)
(Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

Dist

For Further Information:

Dr. Marie Keating,

Department of Chemistry, Telephone: 757541 ext. 324.

## TECHNICIAN DIPLOMA IN APPLIED SCIENCE

College Code

PAS 5 and 6.

Duration:

Two years part-time.

Description of Course:

This course is designed to meet the requirements of those students who hold a Technician Certificate in Applied Science and who seek further 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.

This course offers two options:-

# Applied Biology and Applied Chemistry

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

#### Entrance Requirements:

(a) Technician Certificate in Applied Science with Credit or Distinction

or

(b) Technician Certificate in Applied Science with Pass and suitable work experience.

(c) A qualification which the College considers to be equivalent to (a) or (b).

Application Procedure:

Applicants should apply on the standard DIT Application Form to: The Registration Section,

College of Technology.

Kevin Street. Dublin 8.

Closing Date:

23rd September.

Course of Study:

Both Years:

Industrial Studies is common to each option.

Applied Chemistry Option:

Physical Chemistry, Inorganic Chemistry, Organic Chemistry,

Analytical Chemistry, Industrial Chemistry.

Applied Biology Option:

Biochemistry, Microbiology, Biotechnology, Cell Biology, Business Studies, Food Science (including Instrumentation) or

Biomedical Science (Haematology and Histology).

Award: It is envisaged that graduates of this course will be eligible for the

following award:-Technician Diploma in Applied Science (Option Specified) (Dublin Institute of Technology) with grades of Pass, Credit or

Distinction as appropriate.

Career Opportunities:

Applied aspects of the sciences are the major theme in the options. Consequently career opportunities are available to the graduates in a wide range of production and service industries, such as the hospitals, higher education, chemicals and pharmaceuticals, computers, food industry and others. The 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.

For Further Information:

Dr. Marie Keating, Department of Chemistry, Telephone: 757541 ext. 324.



### SCIENCE LABORATORY TECHNICIANS' DIPLOMA

PSL 4 and 5. College Code:

Duration: 2 years part-time (one day and two evenings per week).

Description: This part-time course is designed to cater for persons in full-time

employment in suitable laboratories. Suitable laboratories include University research and teaching laboratories, those run by the Institute for Industrial Research and Standards and other Semi-State bodies and industrial research, development and quality control laboratories.

Entry Requirements: Science Laboratory Technicians' Certificate from the Dublin Institute

of Technology or equivalent qualification.

Application Procedure:

Application should be made on the standard DIT Application Form to:

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

Course of Study:

This consists of two years of study after the Certificate and leads to the award of a Science Laboratory Technicians' Diploma. It is designed to extend the knowledge of Certificate holders to a considerable depth in their chosen field of specialisation. The emphasis during this stage of the course is on understanding the theoretical and quantitative aspects

of laboratory practice.

Award: Graduates of the course are eligible for the award of:

Science Laboratory Technicians' Diploma from the Dublin Institute of Technology, with grades of Pass, Credit or Distinction where appropriate.

For Further

Dr. Marie Keating,

Information: Department of Chemistry, Telephone: 757541 ext. 324.

# TECHNICIAN DIPLOMA IN DENTAL TECHNOLOGY

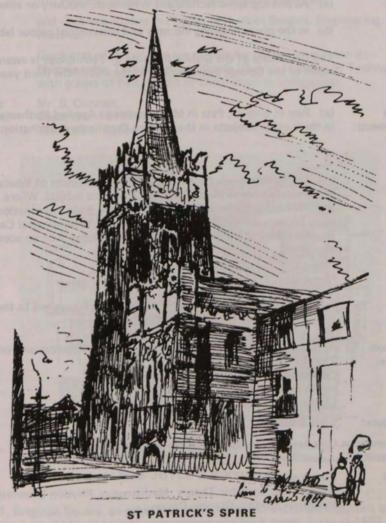
College Code:

PSDT.

Description of Course:

This course is currently at the design stage and is intended to replace the course for Dental Craftsmen.

Information on the revised arrangements may be had on application to the Secretary, Department of Physics.



# PHOTOGRAPHIC TECHNICIANS' CERTIFICATE

College Code:

PSPT.

**Duration:** 

Three years part-time.

Description of Course:

This course is intended to meet the requirements of students who are employed:

- (a) As photographic technicians in research, industry or allied fields.
- (b) in the photofinishing industry and commercial colour laboratories.

The Certificate of the Dublin Institute of Technology is awarded on the result of the College examinations at the end of the third year of the course.

Entrance Requirements: (a) Pass in English, Pass in Mathematics or Applied Mathematics, Pass in three other subjects in the Leaving Certificate examination.

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 College regards as equivalent to those specified in (a) or (b) will be acceptable.

Application Procedure:

Applicants should apply on the standard DIT Application Form to: The Registration Section,

College of Technology,

Kevin Street, Dublin 8.

Closing Date: 23rd September.

Class Attendance One day and three evenings per week for three years. Requirements:

Course of Study:

First Year:

General Photographic Theory, Mathematics, Physics, Chemistry, Industrial Studies, Graphic Design.

#### Second Year:

General Photographic Theory, Physics, Chemistry, Industrial Studies, Engineering Pracitce, Graphic Design.

#### Third Year:

In the third year of the course, the student will follow a specialised course in one of the following:—

- (a) Applied Photography or
- (b) Photofinishing and Colour Laboratory Practice.

and continue studies in Physics, Industrial Studies, Engineering Practice.

#### Award:

Graduates of this course are eligible for the following award:—

Photographic Technician Certificate (Dublin Institute of Technology)
with grades of Pass, Credit or Distinction as appropriate.

# For Further Information:

Mr. S. Coonan, Department of Physics. Telephone: 757541.



JAMES JOYCE'S BIRTHPLACE

Number 41, Brighton Square, an otherwise undistinguished Victorian suburban brick house, carries a small plaque to indicate that here was born James Joyce in 1882.

# TECHNICIAN CERTIFICATE IN MEDICAL PHYSICS AND PHYSIOLOGICAL MEASUREMENT

College Code: PBE.

Duration: Three years (three eveings per week).

Description of Course:

This is a course for those who work in Medical Physics, or are engaged in various aspects of physiological measurement or bioengineering. It will be of interest to those working in hospitals, research and certain types of veterinary, pharmaceutical and agricultural work. The course in the first year deals with the basic sciences and in subsequent years with the general range of Physiological Measurement, Bio-engineering and Radioisotope Techniques normally used in these situations.

Entrance Requirements: (a) Pass in English, Pass in Mathematics (or Applied Mathematics), Pass in three other subjects in the Leaving Certificate examination or an equivalent qualification.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

**Closing Date:** 

23rd September.

Course of Study:

First Year:

Physics, Chemistry and Biology, Introduction to Electricity, Physiology and Data Presentation.

Second Year:

Electricity and Electrical Measurement, Human Physiology and Biochemistry, Radiation Physics, Physical Principles of Instrumentation

and Data Interpretation.

Third Year:

Physiology, Physiological Measurement Techniques, Biophysics, Bioengineering Techniques, Radioisotope Techniques, Computation Techniques.

Award:

Graduates of this course are eligible for the following award:—
Technician Certificate in Medical Physics and Physiological
Measurement (Dublin Institute of Technology)
with grades of Page Credit or Distinction

with grades of Pass, Credit or Distinction as appropriate.

For Further Information

Dr. M. Hussey,

Head,

Department of Physics, Telephone: 757541 ext. 265.

# COURSES IN APPLIED SCIENCE, HEALTH SCIENCE, FOOD SCIENCE. MATHEMATICS AND COMPUTING

# OTHER SCIENCE AND MATHEMATICS BASED COURSES

# CERTIFICATE IN PROFESSIONAL PHOTOGRAPHY

College Code:

PSP.

Duration:

Three years part-time.

Description of Course.

This is a part-time course in Photography with admission restricted to students already employed professionally as assistant or trainee photographers.

Entrance Requirements: (a) Pass in English, Pass in Mathematics (or Applied Mathematics), Pass in three other subjects in the Leaving Certificate examination.

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 Examination of the Department of Education will be an acceptable equivalent.

or

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

Application Procedure:

Applicants should apply on the standard DIT application form to:

The Registration Section, College of Technology,

Kevin Street. Dublin 8.

Closing Date:

23rd September.

Requirements:

Class Attendance One day and three evenings per week for three years.

Course of Study:

First Year:

Photographic Theory and Practice, Chemistry, Physics, Technical

German, Industrial Studies, Graphic Design.

Second Year:

Photographic Theory and Practice, Physics, Technical German, Industrial Studies, Graphic Design.

#### Third Year:

Photographic Theory and Practice (including Colour Work), Physics, Technical German, Industrial Studies, Visual Studies.

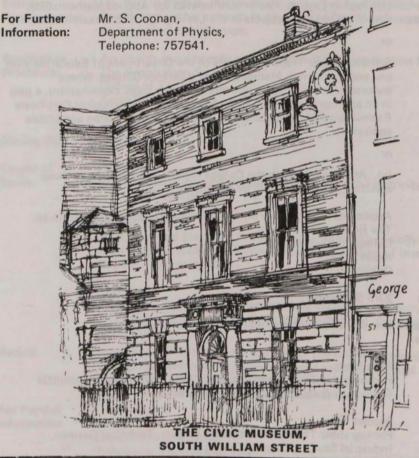
The final examination for the Dublin Institute of Technology Certificate in Professional Photography is taken at the end of the third year.

Students are required to sit and pass the College examinations at the end of each year of the Course.

Award:

Graduates of this course are eligible for the following award:—

Certificate in Professional Photography (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.



## ADVANCED CERTIFICATE IN PROFESSIONAL PHOTOGRAPHY

College Code:

PSP 4 and 5.

Duration:

Two years part-time.

Description of Course:

The Advanced Certificate Course in Professional Photography is intended for the student who has obtained the Certificate in Professional Photography. The course aims to increase the student's depth of photographic knowledge and to prepare him for a considerable degree of personal responsibility, both in the organisation, planning and execution of his work as a Photographer and in the supervision of others. Considerable emphasis is placed on developing an awareness of the economic factors affecting the operation of the photographic business or establishment.

Requirements:

Entrance (1) DIT Certificate in Professional Photography.

(2) An Award which the College considers an equivalent of (1).

Class Attendance One day and three evenings per week for two years. Requirements:

Course of Study:

First Year:

Photography Theory and Practice, Management and Industrial Studies.

Law, Visual Studies.

Second Year:

Photography Theory and Practice, Management and Industrial Studies

and Visual Studies.

Award:

Graduates of this course are eligible for the following award:-Advanced Certificate in Professional Photography (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

For Further Information:

Mr. D. H. Davison, Department of Physics, Telephone: 757541.

### CERTIFICATE IN SCIENCES FOR NURSES

College Code:

PSN.

**Duration:** 

Three years, block-release or two evenings per week for one year.

Description of Course:

This course is organised by two of the Colleges of the Dublin Institute of Technology; College of Commerce, Rathmines and the College of Technology, Kevin Street. Block-release attendance is organised in conjunction with the Nursing Schools of a number of Dublin hospitals.

Entrance Requirements: 1. As required by the Nursing Schools participating but not less than

(a) for those by Block-release

(a) Irish Leaving Certificate in six subjects, including Mathematics and taking the Course English, with Grade C or higher in two subjects on Higher Level papers.

or

- (b) Attainment which the College regards as equivalent to that specified in (a) will be acceptable.
- Prospective students who seek to undertake the course by blockrelease are also required to be members of a Hospital Nursing School which has an agreement with the Dublin Institute of Technology in relation to this course.

Entrance Requirements: (b) For those taking the Course (a) over 1 year:

- Hold a qualification which enables one to qualify for State Registration as a nurse.
- Block-release option.

Application Procedure:

The standard DIT application form should be completed by each student. Application will then be made on behalf of the applicants by the Nursing School in which they are registered.

(b) One year (evenings) option. Applicants should apply before 4th June, on the standard DIT application application form to: The Registration Section, College of Technology. Kevin Street. Dublin 8.

Class Attendance Three years with a block-release in each year or two evenings per week Requirements: for one year.

Course of Study:

First Year: Physics, Chemistry, Psychology and Law.

(a) (3 year Block

Release Option): Second Year:

Biophysics, Boichemistry, Psychology, Social Science and Law.

Third Year:

Biophysics, Biochemistry, Psychology, Social Science and Law.

(b) One Year (Evening) Option:

Physics, Chemistry, Psychology, Social Science and Law.

Award:

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

For Further Information:

Mr. K. P. Maher,

Department of Physics, Telephone: 757541.

# COURSE IN PLASTICS

College Code:

PCP.

**Duration:** 

1 year part-time.

Description of Course:

A part-time course for trainee technicians, foremen, supervisors and trainee managers in the plastics processing industry. The course is designed to give a broad education in plastics processing and includes a study of material science, extrusion technology, film production. blow moulding, injection moulding and pipe-extrusion.

Course Duration: One year - one week full-time in September followed by one afternoon and evening per week during the remainder of the academic year.

Qualifications for Admission: (a) Pass in English, Pass in Maths (or Applied Maths), Pass in three other subjects in the Leaving Certificate examination.

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 College regards as equivalent to those specified in (a) or (b) will be acceptable.

Application Procedure:

Application should be made on the standard DIT application form to:

The Registration Section, College of Technology,

Kevin Street. Dublin 8.

**Closing Date:** 

23rd September.

For Further Information: Dr. Noel Russell, Assistant Head,

Department of Chemistry, Telephone: 757541 ext. 220.

# COURSE FOR THE ASSOCIATESHIP OF THE INSTITUTE OF BREWING

College Code:

PBA.

Duration:

2 years part-time.

Description of Course:

A part-time day course for technical staff employed in the Brewing and Distilling Industry. The course structure has been approved by the Institute of Brewing.

Qualifications for Admission: (a) Pass in English, Pass in Maths (or Applied Maths), Pass in three other subjects in the Leaving Certificate examination.

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 College regards as equivalent to those specified in (a) or (b) will be acceptable.

Application Procedure:

Application should be made on the standard application form to:-The Registration Section,

College of Technology,

Kevin Street. Dublin 8.

Closing Date:

23rd September.

Course Content: First Year:

Chemistry, Physics and Botany

Second Year:

Biochemistry, Microbiology, Fermentation Science.

Examinations:

Students will be expected to sit the Examination for Associateship of

the Institute of Brewing at the end of the second year.

For Further

Mr. John McEvoy,

Information:

Department of Biological Sciences,

# COURSE FOR REGISTERED NURSING AUXILIARIES OF THE ROYAL COLLEGE OF VETERINARY SURGEONS

College Code: S9.

Duration: Two years: two evenings per week.

Description of Course:

This part-time course is designed to meet the needs of students who are employed in approved veterinary clinics and wish to study for the examinations for Registered Nursing Auxiliaries of the Royal College

of Veterinary Surgeons.

Entrance Requirements: Irish Leaving Certificate in five subjects including Mathematics and English or equivalent.

and

employment in an approved veterinary clinic.

Application Procedure: Application should be made on the standard application form to:-

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

Course of

Year 1:

Study:

Anatomy and Physiology, First Aid, Theory and Practice of Nursing

including Dietetics, Management, Hygiene and Feeding.

Year 2:

Diagnostic Aids, Medical and Surgical Nursing, Radiography,

Obstetrical and Paediatric Nursing.

Awards:

At the end of Year 1 students sit Part I of the Registration examination for Registered Nursing Auxiliaries of the Royal College of Veterinary Surgeons. At the end of Year 2 they may complete Part II of this examination thus qualifying as Registered Animal Nursing Auxiliaries

(R.A.N.A.).

For Further

Ms. B. A. Ryan,

Information: Head, Department of Biological Sciences,

### COURSE FOR THE INSTITUTE OF MEAT

College Code:

S11.

Duration:

2 years evenings.

Description of Course:

A course leading to the Certificate of the Institute of Meat. This course is designed for supervisory personnel in the Meat industry and the evening classes are supplemented by on-the-job training in the relevant meat factories. Students are therefore required to be in appropriate employment.

Entry Requirements:

(a) Pass in English, Pass in Mathematics (or Applied Mathematics), Pass in three other subjects in the Leaving Certificate Examination.

10

(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 in the Elementary Technological Certificate Examinations of the Department of Education will be an acceptable equivalent.

or

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

Application Procedure:

Application should be made on the standard DIT application form to:— The Registration Section, College of Technology,

Kevin Street,
Dublin 8.

Closing Date:

23rd September.

For Further Information:

Mr. John McEvoy,

Department of Biological Sciences, Telephone: 757541 ext. 314.

## COURSE IN MEDICAL RECORDS ADMINISTRATION

College Code: S12.

Duration: One year: two evenings per week.

Description of Course:

This one year course has two primary aims:-

(i) To provide a basic training in Medical Records Administration and
 (ii) To prepare students for the certificate examination of the Institute of Hospital and Health Service Administrators.

The course is specifically aimed at and intended to meet the needs of clerical and secretarial staff working in medical records, medical secretarial, admissions, out-patients, radiology, pathology and other medical support departments.

Entrance Requirements: Academic attainment as stated and in addition students must register with the Institute of Hospital and Health Service Administrators before presenting themselves for enrolment on the course.

To become a registered student, a person is required to:-

- (a) Be employed in a hospital or branch of the health service or in a health agency.
- (b) Have passed the leaving certificate examination or its equivalent in at least five subjects including English and Mathematics. Applications will be considered from mature students.
- (c) Apply to the Institute on the prescribed form accompanied by the appropriate registration fee.

Application forms for registration may be obtained from:— The Director of Education.

Institute of Hospital and Health Service Administrators,

c/o Hume Street Hospital,

Dublin 2.

Telephone: 766935 (mornings only).

Application Procedure:

Applicants should apply on the standard DIT application form to:

Registration Section,

Dublin Institute of Technology,

Kevin Street, Dublin 8.

Closing Date:

Enrolment and first class meeting 17th September, Room 304.

Course of Study:

Lectures are held on two evenings per week — Tuesday and Thursday, from 18.00 hrs. to 21.00 hrs. and cover the following subjects:

Patient Administration.

Patient Records.

Medical Terminology, Anatomy and Physiology. Principles of Organisation and Management.

Social & Public Administration.

Communications.

Further Study:

Students who apss the certificate examination on completion of this course and who wish to pursue the Diploma of the Institute in Hospital and Health Service Administration may be granted exemption in the following subjects:

Medical Records.

Principles of Organisation & Management.

Social & Public Administration.

Award:

Students must sit the Certificate Examination of the Institute of Hospital and Health Service Administration at the end of the course. Only registered students of that Institute who comply with its regulations are eligible to sit for the Certificate Examination.

For Further Information:

Mr. L. Lawlor, FIMLS Assistant Head,

Department of Biological Sciences, Telephone: 757541 ext. 215.

## COURSE IN MATHEMATICS FOR ENGINEERING

College Code:

M1.

Duration:

Two stages each of 1 year - evenings.

Description of Course:

A two stage course covering the requirements for the Intermediate Stage and Advanced Technological Examinations of the Department of

Education.

Requirements:

Class Attendance Stage 1: one evening (3 hours) per week for 1 year; Stage 2: one evening (3 hours) per week for 1 year.

Application

Applicants should apply on the standard DIT Application Form to:

Procedure:

The Registration Section, College of Technology,

Kevin Street. Dublin 8.

Closing Date:

23rd September.

**Examinations:** 

The Intermediate Stage Examination in Mathematics of the Departmen of Education at the end of the first year; the Advanced Technological

Certificate Examination in Mathematics of the Department of

Education at the end of the second year.

For Further Information: Dr. T. Ambrose, Assistant Head,

Department of Mathematics, Statistics and Computer Sciences.

# COURSE IN MATHEMATICS FOR **TELECOMMUNICATIONS**

College Code:

M2.

Duration:

4 years: evenings.

Requirements:

Class Attendance Four years: one evening per week (11/2 hours per week for the first year: 2 hours per week in the second, third and fourth years).

Application Procedure:

Applicants should apply on the standard DIT application form to:-

The Registration Section. College of Technology.

Kevin Street. Dublin 8.

Closing Date:

23rd September.

Course of Study:

A range of mathematical topics appropriate to the Telecommunications

Technician Coures of the City and Guilds of London Institute.

Award:

City and Guilds of London Institute Telecommunication Technicians' Course examinations in Practical Mathematics at the end of the first year and in Mathematics A, B and C at the end of the second, third and

fourth years, respectively.

For Further Information:

Dr. T. Ambrose, Assistant Head,

Department of Mathematics, Statistics and Computer Science,

# COURSE IN COMPUTING FOR THE ELECTRICAL CONTRACTING INDUSTRY

College Code: M3.

Duration: 1 year: evenings.

Entry Requirements: Applicants should have completed an apprenticeship and be working in the Electrical Contracting Industry. The Department of Education Senior Trades Certificate in Electrical Installation Work is desirable.

Course Description:

An introduction to computer architecture and processing, BASIC programming and the use of software packages appropriate to the

electrical contracting industry.

Class Attendance One evening (3 hours) per week. Requirements:

Application Procedure:

Applicants should apply on the standard DIT application form to:-

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

For Further

Ms. M. Maguire,

Information:

Department of Mathematics, Statistics and Computer Science,

Telephone: 757541 ext. 334.

## COURSE IN MATHEMATICS ON A MICROCOMPUTER

College Code:

M5.

Duration:

1 year: evenings.

Entry

Applicants should have some knowledge of programming in BASIC.

Requirements:

Course Description:

A course designed to introduce and explore important mathematical concepts with the aid of a microcomputer. The concepts introduced

and techniques used may be of special interest to teachers of mathematics at first and second level but not exclusively so.

Requirements:

Class Attendance One evening (3 hours) per week.

Application Procedure:

Applicants should apply on the standard DIT application form to:-

The Registration Section, College of Technology,

Kevin Street. Dublin 8.

For Further Information:

Dr. B. O'Shea, Assistant Head.

Department of Mathematics, Statistics and Computer Science,

## COURSE IN COBOL PROGRAMMING

College Code: M9.

Duration: One year: one evening per week.

Entry This is a one year course providing an introduction to Cobol Requirements: programming for candidates who have already some experience

programming in another language. No formal examination or

qualification is provided.

Application Applicants should apply on the standard DIT Application form to:-

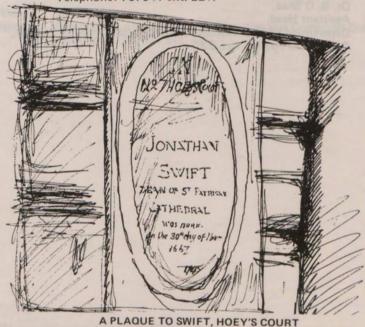
Procedure: The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date: 23rd September.

For Further Dr. B. O'Shea, Assistant Head,

Department of Mathematics, Statistics and Computer Science,



## COURSE IN COMPUTING FOR ENGINEERING

College Code: M10.

Duration: 1 year: evenings.

Course An introduction to the Pascal programming language (with applications

Description: to engineering) and to microprocessing software.

Class Attendance One evening (3 hours) per week.

Requirements:

Application Applicants should apply on the standard DIT application form to:

Procedure: The Registration Section,

College of Technology, Kevin Street, Dublin 8.

Closing Date: 23rd September.

Entry Candidates must possess a pass in Mathematics at grade C or higher in

Requirements: the Leaving Certificate Examination or equivalent.

For Further Dr. B. O'Shea, Information: Assistant Head,

Department of Mathematics, Statistics and Computer Science,

## PART-TIME AND EVENING BAKERY COURSES

## COURSE IN BAKERY PRACTICE

College Code: PSB.

Duration: 4 years part-time.

Description of Course:

A part-time course in Breadmaking and Flour Confectionery for Bakery

Apprentices.

Entry Requirements: Prospective students must be apprenticed to the Breadmaking and Flour Confectionery trades and pass an entrance examination. Students

holding a pass Leaving Certificate are exempt from entrance

examination.

Class Attendance One day for four years. Requirements:

Application Procedure:

Applicants should apply on a standard DIT application form to:-

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

Course of Study:

A Course of Study in Bakery Practice, Bakery Technology, Raw Materials, Bakery Science and English is given over the four years

of the Course.

Awards:

Internal examinations are set by the College. Students may also sit examinations of the City and Guilds of London Institute. Students who pass the London City and Guilds Certificate No. 120 with credit are eligible to apply for a place on the Wholetime Diploma Course in

Bakery Production and Management.

For Further Information:

Mr. Daniel T. Carey, Bakery Section,

# COURSE IN CONFECTIONERY DECORATION

College Code: B1.2 and B1.3.

Duration: 2 years: one evening per week.

A part-time evening course in cake design, icing and piping. Description:

of Course:

Students must be qualified Bakers or Confectioners, employed in the Entry

Requirements: Bakery Trade.

Applicants should apply on a standard DIT application form to:-Application

Procedure: The Registration Section, College of Technology,

> Kevin Street. Dublin 8.

Closing Date: 23rd September.

Course of 1st Year: (Intermediate Course)

Practice in icing and piping of simple designs. Study:

> 2nd Year: (Advanced Course) Advanced, icing, piping and figure piping. Advanced design work.

Run Out Work, Modelling.

No formal examinations are provided but students may enter the Awards:

London City and Guilds No. 121 examinations.

For Further Mr. Daniel T. Carey, Information:

Bakery Section,

### COURSES IN ENGINEERING

## NHOLETIME DEGREE/PROFESSIONAL

# HONOURS DIPLOMA IN ELECTRICAL/ELECTRONIC ENGINEERING

College Code:

SEE.

CAO Code:

FT 21.

**Duration:** 

Four years wholetime.

Description of Course:

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 and Instrumentation Electronics, Communication and Computers.

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 options. At the beginning of the third year students commence their specialist option which extends over the final two years.

# Minimum Entry Requirements:

(a) Passes in six subjects in the Irish Leaving Certificate including English and Mathematics, with Grade C or higher on higher level papers in both Mathematics and Physics.

The following scores are awarded to grades A to C on the higher Leaving Certificate paper in Mathematics. A-14, B-12, C-10.

The following scores are awarded to grades A to C on the higher Leaving Certificate papers in Physics, Chemistry, Physics with Chemistry, Applied Mathematics and Engineering: A-11, B-9, C-7.

These scores are awarded for higher Leaving Certificate papers only.

or

(b) Such qualification as the College 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.

Application Procedure:

Applicants should apply on the standard C.A.O. application form to:

The Central Applications Office,

Tower House, Eglinton Street,

Galway.

Closing Date:

1st February.

Course of Study:

Year I:

Mathematics, Applied Mechanics, Physics, Properties of Materials, Electricity, Electronics Systems, Engineering Practice, Business and Management Studies, Language (French/German).

#### Year II:

Mathematics, Physics, Field and Circuit Theory, Signal and System Theory, Electronics, Computer Systems, Electrical Machines, Measurements and Instrumentation, Business and Management Studies, Language (French/German).

#### Year III:

Subjects common to all Options:

Mathematics, Business and Management Studies, Language (French/German)

**Electrical Power Option:** 

Circuit Theory, Field Theory, Applied Thermodynamics, Electrical Power, Control Systems and Instrumentation, Electronics.

**Control Systems and Instrumentation Option:** 

Circuit Theory, Field Theory, Electronics, Signal and System Theory, Control Systems I, Control Systems II.

**Electronics, Communications and Computer Option:** 

Circuit Theory, Field Theory, Signal and System Theory, Electronics, Computer Systems, Communications Engineering.

#### Year IV:

Subjects common to all Options:

Mathematics, Business and Management Studies.

**Electrical Power Option:** 

Circuit Theory, Electronics, Electrical Power, Control Systems and Instrumentation, Project.

**Control Systems and Instrumentation Option:** 

Circuit Theory, Electronics, Control Systems I, Control Systems II, Project.

**Electronics, Communications and Computer Option:** 

Signal and System Theory, Electromagnetic Field Theory, Electronics,

Computer Engineering, Communications Engineering, Project.

Awards: Graduates of this course are eligible for the following awards:

Diploma in Electrical/Electronic Engineering (Dublin Institute of

Technology)

BSc(Engineering) from the University of Dublin

with grades of Pass, Second Class Honours or First Class Honours

as appropriate.

They are also eligible for Membership of the Institution of Engineers

of ireland.

Career Graduates of the course are employed in all areas of Electrical/ Opportunities:

Electronic Technology, including Computer Engineering, Electronics,

Telecommunication, Automatic Control and Electrical Power.

For Further Dr. J. C. Fisher,

Information: Head, Department of Electrical Engineering.

# COURSE FOR THE ENGINEERING COUNCIL PART II EXAMINATION

College Code:

WCE.

Duration:

Five wholetime academic terms.

Description of Course:

This course covers certain subjects of the Engineering Council's Part 2 Examination (previously the CEI Part 2 Examination) for students who have completed an approved Technician Engineer Diploma course.

Entrance Requirements: Intending Students must have successfully completed an approved Technician Engineer Course, and must have passed or obtained exemption from the Engineering Council's Part 1 Examination.

Course of Study:

Mathematics, Electromagnetic Fields and Networks, Electronic Engineering, Computer Engineering, Communication Engineering, The Engineer in Society, Project. Laboratory practical work is included where appropriate.

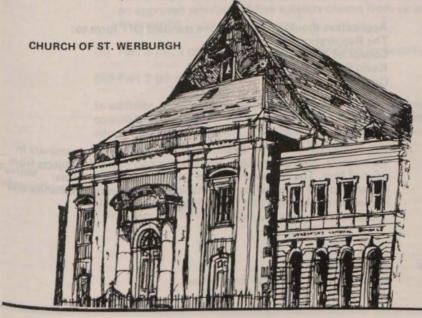
Examination:

The Engineering Council's Part 2 Examination in the following subjects. The Engineer in Society; Mathematics; Fields and Circuits; Electronic Systems Engineering, Communication Systems Engineering; Computer System Engineering.

For Further Information:

Mr. B. J. O'Connor,

Head, Department of Electronic and Communications Engineering,



### **COURSES IN ENGINEERING**

### PART-TIME PROFESSIONAL COURSES

COURSE FOR THE ENGINEERING COUNCIL (ELECTRICAL ENGINEERING) PART I EXAMINATION

College Code: EE1

Duration: Two years, three or four evenings per week.

Description of Course:

This is a two-year evening course leading to the Engineering Council's Part 1 Examination. The scope and standard of this examination is not less than that of an examination set at a point about one third

through a full-time engineering degree course.

Entrance Requirements:

Applicants must have successfully completed an approved Certificate or Technician course in the electrical/electronic field

or

be in possession of a qualification which the College deems to be equivalent to the above.

Application Procedure: Application should be made on the standard DIT form to:

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

Course of Study:

Candidates for the Part 1 Examination must satisfy the examiners in six subjects, four compulsory subjects and two optional subjects from a list of four. The course covers the four compulsory subjects:

Presentation of Engineering Information, Mathematics, Mechanics and

Properties of Materials and two of the optional subjects

Electrotechnics and Electronics.

For Further Information:

Mr. J. J. Farrell, Assistant Head,

Department of Electrical Engineering,

# COURSE FOR THE ENGINEERING COUNCIL (ELECTRICAL ENGINEERING) PART II EXAMINATION

College Code:

EE2.

Duration:

Two years, three or four evenings per week.

Description: of Course:

This is a two-year evening course leading to the Engineering Council's Part 2 Examination. The minimum pass standard of this examination is set to be not less than that of a full-time engineering degree.

Entrance Requirements:

Applicants must have passed, or have gained exemption from the Engineering Council's Part I Examination.

Application Procedure:

Application should be made on the standard DIT application form to: The Registration Section, The College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

Course of Study:

The Part 2 Examination is in three parts:

- (i) Part 2 (a), in which the candidate must satisfy the examiners in an approved selection of five subjects chosen from various fields of engineering.
- (ii) Part 2 (b), a compulsory paper, The Engineer in Society.
- (iii) Part 2 (c), a project.

In addition, candidates show the examiners that they have satisfactorily completed laboratory and/or course work appropriate to the subjects which they have attempted. The College offers courses in nine of the subjects for Part 2 (a) and a course for Part 2 (b).

Further Information:

Mr. J. J. Farrell, Assistant Head, Department of Electrical Engineering,

### **COURSES IN ENGINEERING**

### WHOLETIME TECHNICIAN ENGINEERING COURSES

# TECHNICIAN ENGINEERING DIPLOMA—ELECTRICAL ENGINEERING

College Code:

WEET.

**Duration:** 

Three years wholetime.

Description of Course:

In the final two years of the course students may specialise in Electrical Power, or Control and Instrumentation which includes microprocessor applications. The course has been approved by the Institute of Engineers of Ireland and holders of the Diploma are eligible for election to the grade of Affiliate. They are also granted exemption from Part I of the Engineering Council Examination. Students who obtain a grade of Distinction in the Diploma examination are eligible to apply for entry into the third year of the Honours Diploma Course in Electrical/Electronic Engineering (Ref. SEE).

# Entrance Requirements:

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

**Weighting Factors Applied** 

Mathematics 1.5

English, Physics, Applied Mathematics, Engineering 1.3

Points awarded for grades, taking account of weighting factors applied.

and to some in preside	Irish Leaving Cert.									ווטו	TCD Matric			
A List of	НА	НВ	нс	HD	OA	ОВ	ОС	OD	1	11	111	IV	0	P
English	12	9	8	5	7	4	3	1	9	7	4	3	-	-
Mathematics	14	11	9	6	8	5	-	-	11	8	5	-	5	-
Applied Mathematics	12	9	8	5	7	4	3	1	9	7	4	3	_	-
Engineering	12	9	8	5	7	4	3	1	_	_	_	_	_	-
Physics	12	9	8	5	7	4	3	1	9	7	4	3	_	-
Other Subjects	9	7	6	4	5	3	2	1	7	5	2	2	3	2

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 College 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.

### Application Procedure:

Applicants should apply on the standard DIT Application Form to: The Admissions Office,
Dublin Institute of Technology,
14 Upper Mount Street,
Dublin 2.

### Closing Date:

15th February.

### Course of Study:

### Year I:

Mathematics, Applied Mechanics, Physics, Engineering, Drawing, Mechanical Workshop, Principles of Electricity, Electronics, Electrical Power, Edonomics, Technical French or Technical German.

#### Year II: Electrical Power Option:

Mathematics, Materials, Hydraulics, Thermodynamics, Field and Circuit Theory, Electronics, Electrical Measurement and Instrumentation, Electrical Power, Economics, Technical French or Technical German.

### Year III:

Mathematics, Circuit Theory, Electronics, Control Systems, Electrical Power, Project, Economics, Technical French or Technical German.

### Year II: Control and Instrumentation Option

Mathematics, Materials, Hydraulics, Thermodynamics, Field and Circuit Theory, Electronics, Electrical Measurements, Control and Instrumentation, Economics, Technical French or Technical German.

#### Year III:

Mathematics, Circuit Theory, Electronics, Control Systems, Microprocessors in Instrumentation and Control, Economics, Technical French or Technical German.

Awards: Graduates of this course 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 up employment in a wide range of activities such as Electrical Supply, Instrumentation and

Control, Computing and Consulting.

For Further Information:

Mr. J. J. Farrell, Assistant Head,

Department of Electrical Engineering,



# TECHNICIAN ENGINEERING DIPLOMA – TELECOMMUNICATIONS & ELECTRONICS

College Code:

WRTT.

Duration:

Three years wholetime.

Description of Course:

This course is designed to provide a broad and thorough education for students intending to pursue careers as technician engineers in telecommunications and electronics.

This course has a strong analytical content, the overall emphasis is applied, and is design oriented.

Graduates are granted exemption from Part 1 of the Engineering Council Examination (previously the Council of Engineering Institutions Examination). Students, who obtain a grade of Distinction in the Diploma examinations are eligible to apply for entry into the third year of the Honours Diploma Course in Electrical/Electronic Engineering (Ref. SEE).

### Entry Requirements:

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

### Weighting Factors Applied

Mathematics 1.5

English, Physics, Applied
Mathematics, Engineering 1.3

Points awarded for grades, taking account of weighting factors applied.

Paris March 107 (102)		Irish Leaving Cert.									NUI Matric			
English Mathematics Applied Mathematics Engineering Physics Other Subjects	HA 12 14 12 12 12 12 9	HB 9 11 9 9 9 7	HC 8 9 8 8 8 6	H 5 6 5 5 5 4	OA 7 8 7 7 7 5	OB 4 5 4 4 4 3	OC 3 - 3 3 3 2	OD 1 - 1 1 1 1 1	1 9 11 9 - 9 7	II 7 8 7 - 7 5	111 4 5 4 - 4 2	IV 3 - 3 - 3 2	0   5   -   3	P 2

or

<sup>(</sup>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 College may deem equivalent.

Note: It must be emphasised that the above are 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.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:-

The Admissions Office,

Dublin Institute of Technology,

14 Upper Mount Street,

Dublin 2.

Closing Date:

15th February.

Course of Study:

First Year:

Mathematics, Mechanics, Physics, Electricity, Electronics, Computer Programming, Engineering Drawing, Electronic Components and Materials, Electronic Workshop Practice, Industrial Studies, Technical French or Technical German.

### Second Year:

Mathematics, Physics, Electricity, Circuit Theory, Analogue and Digital Electronics, Electronic Measurements, Communications Engineering, Industrial Studies, Electronic Draughting, Technical French or Technical German.

### Third Year:

Mathematics, Physics, Circuit Theory, Analogue and Digital Electronics, Microprocessor Systems, Communications Engineering, Computer Programming, Integrated Circuit Design and Fabrication, Industrial Studies, Technical French or Technical German.

Awards:

Graduates of this course are eligible for the following award:—
Technician Engineering Diploma — Telecommunications & Electronics
(Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

Career
Opportunities:

Graduates have career opportunities over the full extent of the electronics, telecommunications and computer industry in a very wide

range of positions.

For Further Information:

Mr. C. Cowley, Assistant Head,

Department of Electronic and Communications Engineering,

### **COURSES IN ENGINEERING**

### WHOLETIME TECHNICIAN COURSES

# TECHNICIAN DIPLOMA IN ELECTRONIC ENGINEERING

College Code:

WRS.

Duration:

Three years wholetime.

Description of Course:

The theoretical and practical content of this course is designed to provide a sound technical education for students preparing for careers as technicians in the production testing, installation and maintenance of electronic equipment.

The subjects covered on the course include Mathematics, Engineering Sciences, Analogue and Digital Electronics, Communications Engineering and Computer Systems, but Measurements, Measuring Methods and Instruments form the unifying core for the different areas of study.

Entry Requirements: (a) Irish Leaving Certificate in five subjects with grade C or higher in ordinary level Mathematics. Subjects must also include English at either level.

Weighting Factors Applied

Mathematics

1.5

English, Physics, Applied Mathematics, Engineering

1.3

### Points awarded for grades, taking account of weighting factors applied.

Application Application	Irish Leaving Cert.										NUI Matric			
English Mathematics Applied Mathematics Engineering Physics Other Subjects	HA 12 14 12 12 12 12 9	HB 9 11 9 9 7	HC 8 9 8 8 8 6	HD 5 6 5 5 5 4	OA 7 8 7 7 7 5	OB 4 5 4 4 4 3	OC 3 3 3 3 3 2	OD 1 - 1 1 1 1 1	1 9 11 9 - 9 7	II 7 8 7 - 7 5	III 4 5 4 - 4 2	IV 3 3 3 - 3 2	0 - 5 3	P - 3 2

(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 College may deem equivalent.

Note: It must be emphasised that the above are 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.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:—The Admissions Office,

Dublin Institute of Technology,

14 Upper Mount Street,

Dublin 2.

Closing Date:

15th February.

Course of

First Year:

Study:

Mathematics, Mechanics, Physics, Electricity, Electronics, Computer Programming, Electrical Draughting, Electronic Workshop Practice, Industrial Studies, Technical French or Technical German.

### Second Year:

Mathematics, Physics, Electricity, Circuit Theory, Analogue and Digital Electronics, Electronic Measurements, Communications Engineering, Industrial Studies, Electronic Draughting, Technical French or Technical German.

#### Third Year:

Mathematics, Electronic Circuits, Analogue and Digital Electronics, Microprocessor Systems, Communications Engineering, Industrial Studies, Technical French or Technical German.

Awards:

Graduates of this course are eligible for the following award:—

Technician Diploma in Electronic Engineering (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

Career Opportunities:

Because of the breadth of coverage provided, career opportunities for the technician graduate are correspondingly wide, covering the whole electronics production industry, radio and television broadcasting, computer manufacture and maintenance, medical electronic equipment, communications and navigation systems.

For Further Information:

Mr. C. Cowley, Assistant Head,

Department of Electronic and Communicatinos Engineering,

### TECHNICIAN CERTIFICATE IN ELECTRONICS

College Code:

WRCE.

Duration:

Two years wholetime.

Description of Course:

This is a broadly based course avoiding any narrow specialisation but with an approach which emphasises the practical/applied aspects of the subjects and utilises a less demanding level of analysis.

The course is organised to provide a qualification at Certificate level for those students who are preparing to work as production or maintenance technicians in the electronics industry.

Entry Requirements: (a) Irish Leaving Certificate in five subjects which must include Mathematics and English 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 College may deem equivalent.

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

Application Procedure:

Applicants should apply on the standard DIT Application Form to:— The Admissions Office, Dublin Institute of Technology,

14 Upper Mount Street,

Dublin 2.

Closing Date:

15th February.

Course of Study:

First Year:

Mathematics, Engineering Science, Electricity, Electronics Workshop, Analogue and Digital Electronics, Electrical Draughting, Workshop Practice, Communication Systems, Computer Programming.

### Second Year:

Mathematics, Electricity, Circuit Theory, Digital and Analogue Electronics, Communication Principles, Computer Systems, Computer Programming.

### Awards:

Graduates of this course are eligible for the following award:—

Technician Certificate in Electronics (Dublin Institute of Technology)
with grades of Pass, Credit or Distinction as appropriate.

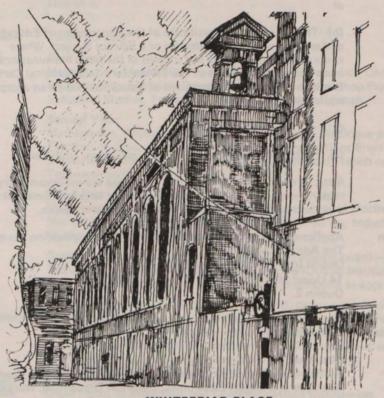
### Career Opportunities:

Graduates of this course are qualified to take up employment across the spectrum of the electronics, communications and computer industry in the production, service and applications sectors.

### For Further Information:

Mr. C. Cowley, Assistant Head,

Department of Electronic and Communications Engineering, Telephone: 757541 ext. 240.



WHITEFRIAR PLACE

# TELECOMMUNICATION & ELECTRONIC TECHNICIANS' COURSE

College Code:

WRAL.

Duration:

Two years wholetime.

Description of Course:

This course is designed to prepare students who are employed as trainee technicians in the Electronics/Telecommunications industry for selected subjects in the City & Guilds of London Institute (Course 271) Telecommunications Technician Certificate examinations. The course curriculum is such as to provide a broad coverage of the

Telecommunications and Electronics field extending beyond the examination requirements of the City & Guilds. A significant

laboratory content is included in the course.

In addition to the formal course subjects detailed below a period of time is available each week to enable a specialist input to be provided by the employer. This facility is provided to enable the employer to maintain contact with the student during the academic year and to provide specialist lectures appropriate to the industry concerned.

Entry Requirements: Applicants must be employed as trainee technicians in the electronics

industry.

Examinations:

Students are required to take the following examinations of the City & Guilds of London Institute at the end of the first year:

Mathematics T1, Physical Science T1, Telecommunications Systems T1 and Communications Studies T1 together with Mathematics T2,

Electrical Principles T2, Electronics T2 and Radio and Transmission Systems T2.

At the end of the second year students will take the following examinations of the City & Guilds of London Institute:

Part 1 T2 Examination in Microelectronic Systems together with the Part 2 T3 Examinations in Mathematics, Electrical Principles, Electronics, Radio and Microelectronic Systems.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:-

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

For Further Information:

Mr. B. J. O'Connor,

Head, Department of Electronic and Communications Engineering,

### MARINE RADIO-ELECTRONIC OFFICERS COURSE

College Code: WRO.

Duration: One year wholetime.

Description of Course:

This is a course to prepare students, who have completed successfully the Certificate Course in Electronics (Ref. WRCE, page 117), for the Marine Radiocommunication General Certificate Examinations conducted by the Department of Communications. This certificate (MRGC) is required for employment as a Radio Officer in the

International Mercantile Marine Service.

Entry Requirement: Technician Certificate in Electronics, or equivalent qualification with adequate Radio Communication content.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:-

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

30th June.

Content:

The course includes Electricity, Analogue and Digital Electronics, Radio Communication, Communications Regulations and Procedures, Telegraphy and Telephony Practice.

7.1

For Further Information:

Mr. B. J. O'Connor, Head,

Department of Electronic and Communications Engineering,

### MARINE RADAR MAINTENANCE CERTIFICATE

College Code:

WRR.

**Duration:** 

Sixteen weeks full-time.

Description of Course:

This wholetime course is designed to satisfy fully the latest requirements of the syllabus of the Board of Trade for the Marine Radar Maintenance Certificate, and it provides comprehensive coverage of the operation and maintenance of Marine Radar equipment. Two courses are conducted each year, one commencing in September and

the other commencing in January/February.

Entry Requirements: Prospective Students are required to hold the Marine

Radiocommunication General Certificate, or show evidence of having

an equivalent standard of knowledge of Electricity and Radio

Communication.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:-

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

30th June for course commencing in September;

30th November for course commencing in February.

Content:

The course provides instruction in the theory and practice of Radar, and practice in the operation and maintenance of Radar equipment.

For Further Information:

Mr. B. J. O'Connor, Head,

Department of Electronic and Communications Engineering,

### POST OFFICE ENGINEERING TECHNICIANS' COURSE

College Code: SRPO.

Duration: Two years block-releast (three periods, each of 10 weeks duration over

the two years).

Description This course is conducted by arrangement with Bórd Telecom Éireann, of Course: providing technical education for technician trainees. The scheme has

the co-operation of the Irish Post Office Engineering Union. Entry to

Trainees from areas outside Dublin City are admitted under special fee arrangements with the Vocational Education Committees of the areas

concerned.

Content: The course provides instruction in Irish, English, Mathematics, Physics,

Electricity, Drawing and Electronics.

For Further Mr. B. J. O'Connor, Head,

Information: Department of Electronic and Communications Engineering.

### **COURSES IN ENGINEERING**

### PART-TIME TECHNICIAN COURSES

### **ELECTRICAL TECHNICIANS' CERTIFICATE**

College Code:

PET.

Duration:

Four years part-time.

Attendance Requirements: One full day and three evenings per week during the first three years: four evenings per week during the final year.

Entrance Requirements: (a) Students must be employed in the Electrical Engineering field and

(b) must have a Pass in English, Pass in Mathematics (or Applied Mathematics) and a Pass in three other subjects in the Leaving Certificate examination.

or

(c) 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

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

Course Content:

The technological subjects include Generation and Transmission, Utilization, Control and Instrumentation, Applied Electronics, Circuit Theory. The course also includes Mathematics, Physics and English.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:— The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

23rd September.

Examinations:

Students will sit College examinations at the end of each session. In addition students may take the Electrical Engineering Practice Examinations of the Department of Education or of City and Guilds of London Institute.

Award: Graduates of this course are eligible for the following award:—

Electrical Technicians' Certificate (Dublin Institute of Technology)

with grades of Pass, Credit or Distinction as appropriate.

For Further Information:

Mr. J. Farrell, Assistant Head,

Department of Electrical Engineering,



BACK LANE

ELECTRONIC SERVICING (Industrial Equipment,
Television and Audio Equipment)

College Code:

PRM.

Duration:

Four yeras part-time (one day and two evenings per week  $-12\frac{1}{2}$  hours)

Description of Course:

This is a part-time day release course designed to prepare students for the Part I, III and III Examinations of the City and Guilds of London Institute Electronic Servicing Course 224 (formerly the Radio,

Television and Electronics Mechanics course).

Entrance Requirements: A pass in the Leaving Certificate of the Department of Education, with Mathematics and English as essential subjects.

Prospective students MUST be employed as trainees or apprentices in the electronics or telecommunicatinos industry.

Application Procedure:

Applicants should attend in person at the College between 18.30 hrs. and 20.00 hrs. on Monday, 15th September, 1986 to enrol.

Closing Date:

19th September.

Content:

The course subjects include Electricity, Electronics, Radio, Television, together with Mathematics and Mechanical Workshop Practice.

A systems approach is used with a strong emphasis on the practical aspects and a restricted use of analysis.

Examinations:

The Part 1 Examination is taken at the end of the first year.

The Part 2 Examination (written) together with a practical Test set by the Radio, Television and Electronics Examination Board are taken at the end of the third year.

The Part 3 Examination is taken at the end of the fourth year.

An internal College examination is set at the end of the second year of the course.

For Further Information:

Mr. T. M. Lawless,

Department of Electronic and Communications Engineering,

### COURSE IN ELECTRONIC EQUIPMENT MAINTENANCE

College Code: R1.

Duration: Two years, evenings.

Description This course is appropriate for those who are employed in industry and who are involved in the maintenance and repair of electronic of Course:

equipment.

The course is designed to provide a broad general introduction to both analogue and digital electronics, and a detailed treatment of the

practical aspects of microcomputer technology.

Attendance at the College is required on two evenings per week. In **Attendance** addition, students will be required to attend for an intensive practical Requirements: session of one week duration towards the end of each year.

Entry to the course is restricted to those who are employed in the Entrance Requirements: maintenance of electronic equipment.

Application Applicants should attend in person at the College between 18.30 hrs. Procedure: and 20.00 hrs. on Monday, 15th September, 1986 to enrol.

Closing Date: 19th September, 1986.

**Examinations:** At the end of the second year students will be eligible to sit for the Part I of the City and Guilds of London Institute's "Microcomputer Technology" (756) certificate examinations. Internal College

examinations are taken at the end of the first year.

For Further Mr. T. W. Lawless, Information: Department of Electronic and Communicatinos Engineering.

# TELECOMMUNICATION TECHNICIANS' COURSE (New Scheme)

College Code:

R6.

Duration:

Five years - evenings.

Description of Course:

This evening course is designed to prepare students for the Part 1, Part 2 and Part 3 examinations of the City and Guilds of London Institute Course 271 (Telecommunication Technicians' Certificate).

The first two years complete the requirements for the Part 1 Examination. A further two years are required to complete the requirements for the Part 2 examination.

Over these four years attendance at the College is required on four evenings (12 hours) per week.

A further year, with attendance on three evenings (9 hours) per week, completes the course requirements for the Part 3 examination.

Entrance Requirements: Irish Leaving Certificate in five subjects which must include
Mathematics and English at either level, or such qualification as the
College may deem equivalent. An entrance selection test may be set.

Examinations:

Part I (T1):

Mathematics T1, Physical Science T1, Telecommunications Systems T1, Communication Studies T1, General Studies.

Part I (T2):

Mathematics T2, Electrical Principles T2, Electronics T2 with either Radio and Transmission T2 or Microelectronic Systems T2.

Part II (T3):

Mathematics T3, Electrical Principles T3, Electronics T3 with either Radio T3 or Microelectronic Systems T3.

Part II (T4):

Mathematics T4, Circuit Theory T4, Electronics T4 with either Radio T4 or Microelectronic Systems T4.

Part III (T5):

Mathematics T5, Circuit Theory and Instrumentation T5 with either Radio T5 and Microprocessor Appreciation T5 or Microprocessor Based Systems T5 and Telecommunications Systems Appreciation T5.

Application Procedure:

Applicants should attend in person at the College between 18.30 hrs. and 20.00 hrs. on Monday, 15th September, 1986 to enrol.

For Further Information:

Mr. M. Gara,

Department of Electronic and Communications Engineering, Telephone 757541 ext. 237.

# COURSE IN INDUSTRIAL ELECTRONICS FOR ELECTRICIANS

College Code: R7.

Duration: Two years, evenings.

Description
of Course:

This course is directed specially towards electricians who require an understanding of industrial electronic principles and equipment. The course provides an introduction to the principles of analogue and digital.

electronics and treats selected industrial applications.

Entry to the course is restricted to those who are employed as Requirements: electricians and who have completed a recognised electrical

electricians and who have completed a recognised electrical apprenticeship, and who hold as a minimum the Senior Trade Certificate of the Department of Education in Electrical Installation

Work.

Application Applicants should attend in person at the College between 18.30 hrs.

Procedure: and 20.00 hrs. on Monday, 22nd September, 1986 to enrol.

Closing Date: 26th September, 1986.

For Further Mr. T. M. Lawless,

Information: Department of Electronic and Communications Engineering,

# COURSE IN DIGITAL ELECTRONICS & MICROPROCESSORS

College Code:

R8.

Duration:

Three years - evenings.

Description of Course:

The first year of the course provides a foundation in Digital Electronics; the second year is a basic course in Microprocessors; the third year deals with more advanced topics in the application of Microprocessors.

Attendance Requirements: In all three years of course attendance is required at the College on two evenings per week.

Entrance Requirements: Entry to the Course is restricted to those who have as a minimum a recognised technician qualification in Electronics.

Direct entry to the second year of the course will be permitted for those who can produce evidence of having successfully completed a course in digital electronics of a level corresponding to that of the First Year.

Application Procedure:

Applicants should attend in person at the College between 18.30 hrs. and 20.00 hrs. on Monday, 15th September, 1986 to enrol.

Closing Date:

19th September, 1986.

For Further Information:

Mr. J. Dalton,

Department of Electronic and Communications Engineering,

### **ELECTRICAL TECHNICIANS' COURSE**

College Code:

ET.

**Duration:** 

Four years — three or four evenings per week.

Description: of Course:

An evening course which prepares students for the Electrical Practice Examinations of the Department of Education and the City and Guilds

of London Institute.

Entrance

Prospective students must:

Requirements:

(i) be employed in the electrical industry;

(ii) have passed the Leaving Certificate with Physics or have an approved alternative qualification in the Electrical Trade.

Course Content: Year One:

Mathematics, Mechanics, Electrical Engineering Principles, Engineering

Graphics.

Years Two and Three:

Mathematics, Mechanics, Field and Circuit Theory, Electrical Power,

Electronics.

Year Four:

Advanced Electrical Technology, Utilisation of Electrical Energy,

Control Systems Engineering.

Laboratory work is included in all years of the Course.

**Examinations:** 

Electrical Engineering Practice (803) of the City and Guilds of London

Institute.

Year 1: Part I

Year 2: Part II with Power option Year 3: Electronics option of Part II

Year 4: Part II with the Utilisation of Electrical Energy and Control

Systems, Engineering options.

Department of Education:

Year 4: Advanced Electrotechnology and Electrical Engineering

Practice (Section B - Advanced Stage).

Application Procedure:

Applicants should apply on the standard DIT Application Form to:-

The Registration Section, College of Technology.

Kevin Street,

Dublin 8.

Closing Date:

23rd September.

For Further Information: Mr. J. Farrell,

Assistant Head,

Department of Electrical Engineering.

### LANGUAGE COURSES

### WHOLETIME

### CERTIFICATE IN EUROPEAN LANGUAGES/ BUSINESS STUDIES

College Code:

WLBS (formerly WLSF).

Duration:

Two years wholetime.

Description of Course:

The theoretical and practical content of this course is designed to provide a sound training in modern languages and in business studies for students preparing for an administrative career in export-oriented businesses

Entry Requirements:

Irish Leaving Certificate in *five* subjects, including English, *either* French or German and Mathematics.

or

such qualification as the College may deem equivalent.

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

Э

Application Procedure:

Applicants should apply on the standard DIT Application Form to:

The Admissions Office.

Dublin Institute of Technology,

14 Upper Mount Street,

Dublin 2.

Closing Date:

15th February.

Course of Study:

First Year:

German or French with either French or German or Spanish, Business

Studies, European Studies, Keyboard Appreciation.

Second Year:

German or French with either French or German or Spanish, Business

Studies, European Studies, Keyboard Skills/Software.

Award: Graduates of this course are eligible for the following award:

> Certificate in European Languages for Business Studies with grades of Pass, Credit or Distinction as appropriate.

Career

The Course is designed to train students to work as personal assistants, Opportunities: executive assistants, commercial translators in many different areas

requiring a thorough language competence and a good knowledge of

business practice.

For Further Information: Ms. M. Broderick, Assistant Head,

Department of Languages and Industrial Studies,



PORTOBELLO HOUSE, PORTOBELLO HARBOUR

### LANGUAGE COURSES

### **EVENINGS**

### POST-GRADUATE DIPLOMA IN APPLIED LINGUISTICS

College Code:

PLAL.

**Duration:** 

One year evening course.

Description:

A post-graduate course in applied linguistics for teachers of modern languages or English as a foreign language, leading to the award of a Post-Graduate Diploma in Applied Linguistics.

This course is primarily intended for experienced graduate teachers of French, German or English. It is designed to allow them to examine and evaluate their language teaching in the light of linguistic theories and is not intended as a practical course in language teaching methodology, except for the component related to the teaching of English as a foriegn language.

Entrance Requirements: (i) A primary degree in a modern European language.

(ii) Minimum two years experience of teaching German or French or English.

Applications will be considered from graduates in other European languages.

Attendance Requirements: Two evenings per week - three hours each evening.

Application Procedure:

Applicants should apply on the standard DIT application form to:-

The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

12th September.

Examinations:

An examination will be held in June. It will consist of three parts:

(i) Paper in General Linguistics.(ii) Paper in Applied Linguistics.

(iii) Dissertation.

Students may also present themselves for an appropriate examination of The Royal Society of Arts.

For Further Information:

Ms. M. Broderick, Assistant Head,

Department of Languages and Industrial Studies,

### TRANSLATORS' DIPLOMA

College Code: PDT.

**Duration:** One year evening course.

**Description:** A course in translation techniques and practice leading to the

Translators' Intermediate Examination offered by the Institute of

Linguists Education Trust.

Entrance Either:

Requirements: (a) A Univerity degree in French, German, Spanish or Italian

or

(b) A recognised equivalent in French, German, Spanish or Italian.

Attendance Requirements:

Two evenings (6 hours) per week.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:-

The Registration Section,

College of Technology, Kevin Street,

Dublin 8.

Closing Date: 12t

12th September.

For Further

Mr. D. Campbell, Assistant Head,

Information: Department of Languages and Industrial Studies,

Telephone: 757541.

### MODERN LANGUAGES (Practical Use)

College Code:

PCLL.

Duration:

One year evening course.

Description:

A course in the practical use of a foreign language, oral proficiency and the background knowledge of the country of the foreign language. Students may sit the Grade 2, the Intermediate or the Final Examination of the Institute of Linguists Educational Trust, or the Examinations of The Royal Society of Arts or a Chamber of Commerce.

Attendance Requirements:

Two evenings (6 hours) per week.

Entrance Requirements:

- (a) For Grade 2: Leaving Certificate or an equivalent in the modern language, French, German, Spanish, Italian or Russian.
- (b) For the Intermediate or the Final Diploma: either (i) a University degree in the modern language, French, German, Spanish, Italian or Russian or (ii) a recognised equivalent in the modern language, French, German, Spanish, Italian or Russian.

Application Procedure:

Applicants should apply on the standard DIT Application Form to:— The Registration Section, College of Technology,

Kevin Street, Dublin 8.

Closing Date:

12th September.

Examinations:

The Grade 2 Certificate Examination consists of 4 parts:

- (i) Oral: A prepared talk, conversation, sight translation into the foreign language.
- (ii) Aural: A summary in English of about 100 words of a passage in the foreign language spoken at a speed of 150 wpm.
- (iii) Comprehension: Translation into English and into the foreign language, and composition.
- (iv) General knowledge of the country.

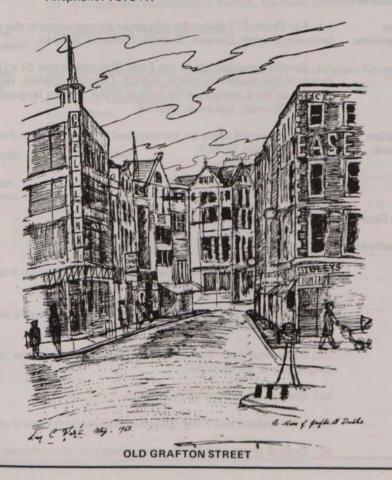
The Intermediate and Final Diploma Examinations consist of:

(i) Oral: A prepared talk, an interpreting test, conversation.

- (ii) An essay or a precis in the foreign language on topics of current and general interest.
- (iii) Translation into the foreign language and into English.
- (iv) General knowledge of the country.
- (v) Special subject, either (a) an essay, (b) technical translation, or(c) general interpreting.

For Further Information:

Mr. D. Campbell,
Assistant Head,
Department of Languages and Industrial Studies,
Telephone: 757541.



MODERN LANGUAGES FOR SPECIALIST PURPOSES

College Code: PCLS.

One year evening course.

A coures in language training for scientists, engineers or business Description:

people. The emphasis will be on language skills relevant to the professional needs of the student groups. Courses will be held in French, German or Spanish; if the demand for other languages is

adequate, courses may be arranged.

Attendance Requirements:

Duration:

Two evenings (4 hours) per week.

Leaving Certificate or equivalent in the modern language, French. Entrance Requirements:

German or Spanish.

Applicants should apply on the standard DIT Application Form to:-Application

Procedure: The Registration Section, College of Technology,

> Kevin Street, Dublin 8.

Closing Date: 12th September.

For Further Mr. D. Campbell, Information: Assistant Head,

Department of Languages and Industrial Studies,

Telephone: 757541.

### COURSES ORGANISED BY THE DEPARTMENT OF ELECTRICAL INSTALLATION FOR ELECTRICAL APPRENTICES AND CRAFTSMEN AND DRAUGHTSMEN

### WHOLETIME

Features:

Procedure:

in Charge:

CERTIFICATE COURSE IN ELECTRICAL AND **ELECTRONIC DRAUGHTING** 

College Code: ESED.

Description: This is a one-year wholetime course designed to prepare students for careers in the drawing offices of consulting engineers, electrical

contractors, and electrical/electronic equipment designers.

manufacturers and assemblers.

Entrance Passes in five subjects in the Irish Leaving Certificate including English Procedure:

and Mathematics, or such qualifications as the college may deem equivalent. In addition, applicants are assessed on their performances

in Aptitude Tests and an Interview.

Course of Electrical Science (including Electronics), Electrical Installation Study: Theory, Electrical Draughting, Engineering Drawing, Laboratory/

Workshop, and project work.

Special This is a broadly-based course on electrical/electronic draughting and

on current drawing-office practice.

Awards: Internal examinations are set by the college. A certificate with PASS. CREDIT, or DISTINCTION, as appropriate, is awarded by the College

to successful students.

As a result of the broad coverage on the course, successful students Career Opportunities:

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.

Application This course is organised under the Special Training Programme of the

European Social Fund. Applications for places on the course are invited in July/August by advertisements placed in the National

newspapers.

Department Electrical Installation.

For Further Mr. J. O'Donnell, Assistant Head, Information:

Department of Electrical Installation,

Telephone 757541.

### COURSE FOR APPRENTICE ELECTRICIANS IN THE AIRCRAFT INDUSTRY

College Code:

SEAL.

Description:

A full-time course providing for the technical education of aircraft

electricians during the first two yeras of apprenticeship.

Course Duartion: Two years: 35-37 weeks (32½ hours per week) per year.

Entrance Procedure: Specified subjects in the Group Certificate or Intermediate Certificate examination of the Department of Education. Prospective students must be apprenticed to the electrical trade in the aircraft industry.

Course of Study:

Year 1:

Electrical Science, Electrical Craft Theory, Practical Installation, Mechanical Workshop, Mathematics, General Studies, French, Technical Drawing, Aeronautical Engineering, Engineering Science.

Electrical Science, Electrical Craft Theory, Mechanical Workshop, Mathematics, Industrial Studies, French, Technical Drawing, Aeronautical Engineering, Engineering Science.

Examinations:

Year 1:

Department of Education Technological Examinations in Elementary A.C./D.C., Mathematics, and Mechanical Drawing. Department of Education Junior Trade Examinations in Electrical Engineering -Electrical Science, Electrical Craft Practice, Electrical Installation Work, Technical Drawing, Mathematics and Craft Calculations.

Year 2:

City and Guilds of London Institute Course 258 - Aeronautical Engineering. Department of Education Technological Examinations in Intermediate A.C./D.C., Mathematics, and Mechanical Drawing. Department of Education Senior Trade Examinations in Electrical Engineering - Electrical Science, Electrical Craft Theory, Mathematics and Craft Calculations.

Application Procedure:

Applicants should apply on the standard College Apprentice Enrolment

The Department of Electrical Installation,

Church Lane,

(Annexe to the College).

For Further Information:

Mr. D. P. McManus, Head,

Department of Electrical Installation,

Telephone: 757541.

# COURSES ORGANISED BY THE DEPARTMENT OF ELECTRICAL INSTALLATION FOR ELECTRICAL APPRENTICES AND CRAFTSMEN AND DRAUGHTSMEN

### **BLOCK-RELEASE AND DAY-RELEASE**

CERTIFICATE COURSE IN ELECTRICAL INSTALLATION AND MAINTENANCE

College Code: SEM.

Description: This course provides technical education for apprentice electricians

in large industrial concerns.

Duration: Two years: Approximately 16 weeks per year.

Entrance Junior Trade Certificate in Electrical Installation Work.

Requirements:

Course of Year 1: Study: SEM 3

SEM 3 — Mathematics, English and General Studies, Planning of Electrical Installations, Practical Installation, Electrical Workshop Projects, Electrical Science, Electrical Craft Practice, Tutorial, Social

Science.

Year 2:

SEM 4 - Mathematics, General Studies, Planning of Electrical

Installations, Electrical Workshop Projects, Electrical Science, Electrical

Craft Practice, Tutorial, Social Science,

Examinations: Year 1:

City and Guilds of London Institute, Course 236, Part II in Electrical

Installation Work, plus House Examinations.

Year 2:

Department of Education Senior Trade examinations in Electrical Engineering — Electrical Science, Electrical Craft Practice, Electrical Installation Work, Planning of Electrical Installations, Mathematics and Craft Calculations. City and Guilds of London Institute, Course C.

in Electrical Installation Work.

Application Procedure:

Applicants should apply on the standard College Apprentice Enrolment

Form to:-

The Department of Electrical Installation,

Church Lane,

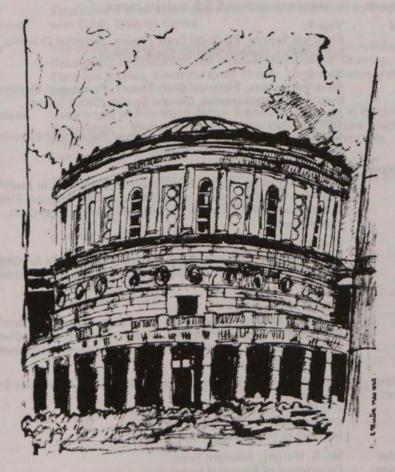
(Annexe to the College).

For Further Information:

Mr. G. Murphy, Assistant Head,

Department of Electrical Installation.

Telephone: 757541.



THE NATIONAL MUSEUM, KILDARE STREET

# CERTIFICATE COURSE IN ELECTRICAL INSTALLATION WORK

College Code: BESB.

Description: This course provides technical and general education for apprentice

electricians during the first three years of apprenticeship. Practical

training is provided at an approved training centre.

Duration: Three years. Block Release, one term of 11 weeks duration in each

year of the course.

Entrance Requirements: Employment as an apprentice electrician with E.S.B., and approved

arrangements with an E.S.B. training centre.

Course of Study:

Year 1:

Electrical Science, Electrical Craft Theory, Technical Drawing,

Mathematics, General Studies, Social Science.

Year 2:

Electrical Science, Electrical Craft Theory, Planning of Electrical Installations, Mathematics, General Studies, Social Science.

Year 3:

Electrical Science, Electrical Craft Theory, Planning of Electrical

Installations, General Studies, Social Science.

Examinations: Year 1:

Department of Education Junior Trade Examinations in Electrical Engineering — Electrical Science, Electrical Craft Practice, Electrical Installation Work, Technical Drawing, Mathematics and Craft

Calculations.

Year 2:

House examinations. In addition, students may also sit for City and Guilds of London Institute, Course 236, Part II in Electrical Installation Work

Year 3:

Department of Education Senior Trade examinations in Electrical Engineering — Electrical Science, Electrical Craft Practice, Electrical Installation Work, Planning of Electrical Installation, Mathematics and

Craft Calculations.

Application Procedure:

Applicants should apply on the standard College Apprentice Enrolment

Form to:-

The Department of Electrical Installation.

Church Lane,

(Annexe to the College).

For Further Information:

Mr. G. Murphy, Assistant Head, Department of Electrical Installation,

## CERTIFICATE COURSE IN ELECTRICAL INSTALLATION WORK

College Code:

SEAS.

Description:

This course provided technical and general education for apprentice electricians during their first year. Practical training is provided at a C.I.E. training centre.

Course Duration: One year: one and a half days and two evenings per week. At the end of the year students transfer to either SESB or PEI or cover the Department of Education Senior Trade Examinations.

Entrance Requirements:

Employment as an apprentice electrician and approved arranagements with C.I.E. Training Centre.

Course of Study:

The course is based on the relevant written examination syllabus of the Department of Education and includes Mathematics, Drawing, Electrical Science, Electrical Craft Theory, General Studies and Social Studies.

Examinations:

Department of Education Junior Trade Examinations in Electrical Engineering — Electrical Science, Electrical Craft Practice, Electrical Installation Work, Technical Drawing, Mathematics and Craft Calculations.

Application Procedure:

Applicants should apply on the standard College Apprentice Enrolment

Form to:-

The Department of Electrical Installation,

Church Lane,

(Annexe to the College).

For Further Information:

Mr. D. P. McManus, Head of Department. Electrical Installation, Telephone: 757541.

CERTIFICATE COURSE IN ELECTRICAL INSTALLATION WORK

College Code:

PAA.

Description:

This course provides technical and general education for apprentice electricians following "OFF THE JOB TRAINING" provided by

AnCO centres.

Practical Training is carried out at the appropriate training centre.

Course Duration: One year. Split block twelve weeks per annum. One week in every three

students attend the College plus one evening per week for twenty-six

weeks.

At the end of the year the students transfer to either SESB or PEI to cover the Department of Education Senior Trade Examination.

Entrance Requirements: Employment as an apprentice electrician and approved arranagements

with a recognised training centre.

Course of Study:

This course is based on the relevant written examination syllabus of the Department of Education and includes Mathematics, Technical

Drawing, Electrical Science, Electrical Craft Theory, Laboratory Work,

General Studies and Social Science.

**Examinations:** 

Department of Education Junior Trade Examinations in Electrical Engineering — Electrical Science, Electrical Craft Practice, Electrical Installation Work, Technical Drawing, Mathematics and Craft

Calculations

Application Procedure:

Applicants should apply on the standard College Apprentice Enrolment

Form to:-

The Department of Electrical Installation.

Church Lane,

(Annexe to the College).

For Further Information: Mr. D. P. McManus, Head of Department, Electrical Installation, Telephone: 757541.

# CERTIFICATE COURSE IN ELECTRICAL INSTALLATION WORK

College Code: SESB (Block), PEI (Day release).

Description: These courses provide full technical education for apprentice

electricians in their first four years of apprenticeship.

Course Duration: Four years. Block Release, SESB: one term (i.e. 11 weeks of 321/2

hours) per year of the course.

Day Release: PEI: one day and three evenings per week. Some fourth-

year students attend on one additional day per week.

Entrance: Specified subjects of the Group Certificate or Intermediate Certificate

Examinations of the Department of Education. Prospective students

must be apprentices to the electrical trade.

Course of Study:

Year 1:

Electrical Science, Electrical Craft Practice, Practical Installations, Technical Drawing, Engineering Science, Mathematics, General Studies, Social Science.

Year 2:

Electrical Science, Electrical Craft Practice, Practical Installation,
Technical Drawing, Engineering Science, Mathematics, General Studies,
Social Science.

Year 3:

Electrical Science, Electrical Craft Practice, Practical Installation, Planning of Electrical Installations, General Studies, Mathematics, Social Science.

Year 4:

Electrical Science, Electrical Craft Practice, Practical Installation, Planning of Electrical Installations, General Studies, Mathematics, Social Science.

Examinations:

Year 1:

House examinations.

Year 2:

House examinations, plus Department of Education Junior Trade Examinations in Electrical Engineering — Electrical Science, Electrical Craft Practice, Electrical Installation Work, Technical Drawing, Mathematics, Social Science.

#### Year 3:

House examinations. In addition, students may also sit for City and Guilds of London Institute, Course 236, Part II Examination in Electrical Installation Work.

#### Year 4:

House examinations plus Department of Education Senior Trade Examinations in Electrical Engineering — Electrical Science, Electrical Craft Practice, Electrical Installation Work, Planning of Electrical Installations, Mathematics and Craft Calculations.

# Application Procedure:

Applicants should apply on the standard College Apprentice Enrolment

Form to:

The Department of Electrical Installation,

Church Lane.

(Annexe to the College).

# For Further Information:

Mr. G. Murphy,

Assistant Head of Department,

Electrical Installation, Telephone: 757541.

# COURSES ORGANISED BY THE DEPARTMENT OF ELECTRICAL INSTALLATION FOR ELECTRICAL APPRENTICES AND CRAFTSMEN AND DRAUGHTSMEN

### **EVENINGS**

CRAFT BASED TECHNICIAN CERTIFICATE IN ELECTRICAL INSTALLATION TECHNOLOGY

College Code:

T3.

**Duration:** 

Three years evening course.

Course Description:

The course is designed to provide the student with a comprehensive knowledge of electrical installation and contracting practice from the planning stage to the commissioning of the completed installation.

Entrance:

Prospective students must have (i) completed at least three years of an approved electrical apprenticeship, (ii) obtained the Department of Education Senior Trade Certificate or approved equivalent, and (iii) satisfy an Interview Board of their ability to benefit from the course.

In exceptional cases, applicants who do not satisfy the above requirements may be accepted on the submission of an acceptable curriculum vitae.

Course of Study:

Year 1:

Electrical Science, Electrical Craft Theory, Mathematics, Marketing,

Laboratory/Workshop.

Year 2:

Electrical Science, Electrical Craft Theory, Computers, Labour

Relations, Laboratory/Workshop.

Year 3:

Electrical Craft Theory, Electrical Draughting and Drawing Office Techniques, Computers, Estimating, Financial and Legal Aspects of

Contracting, Project Work.

**Examinations:** 

College examinations will be held each year and progress from year to year of the course will be contingent on achieving a pass in the previous

examination.

Career:

It is envisaged that graduates of the course would obtain employment as estimators, supervisors, contracts managers, etc. within the Electrical Contracting Industry, or set up their own Electrical Contracting firms.

For Further Information:

Mr. J. T. O'Donnell, Assistant Head,

Department of Electrical Installation,

# EVENING COURSE FOR UPDATING IN ELECTRICAL INSTALLATION TECHNOLOGY

College Code: T4.1/2.

Description: This course is designed to update electrical craftsmen in Electrical

Installation Technology.

Course Duration: Two years: two evenings per week.

Entrance Prospective students must be electrical craftsmen employed in the

Requirements: electrical industry.

Course of Year 1:

Study: Electrical Science, Electrical Craft Theory, Laboratory Work.

Year 2:

Electrical Science, Electrical Craft Theory, Laboratory Work.

In both years emphasis is placed on dealing with recent developments within the field of Electrical Installation Technology — particularly in

relation to light-current developments.

Examination: Year 1: House Examinations.

Year 2: House Examinations.

Application Applicants should apply on the standard College Part-Time Enrolment

Procedure: Form to:-

The Department of Electrical Installation,

Church Lane.

(Annexe to the College).

For Further Mr. J. T. O'Donnell,

Information: Assistant Head,

Department of Electrical Installation,

# EVENING COURSE IN ELECTRICAL INSTALLATION WORK

Course:

T1.

Description:

A course in Applied Electricity and related Sciences. The last two years (T1.3 and T1.4) of the course are designed to assist apprentices in preparing for the Senior Trade Certificate Examination of the Department of Education and the Part II 236 and C Certificate Examinations of the City and Guilds of London Institute.

Course Duration: Four years: four evenings per week.

Entrance Requirements: Prospective students must be in employment in some branch of the electrical industry. Applicants for the first year, T1.1, may be required to sit an entrance examination and for other years of the course, applicants must satisfy the College that they have an acceptable knowledge of the matter covered in the years of the course preceding that for which they apply.

Course of Study:

Year 1:

Electrical Science, Electrical Craft Theory, Mathematics.

Year 2:

Electrical Science, Electrical Craft Theory, Mathematics.

Year 3:

Electrical Science, Electrical Craft Theory, Mathematics.

Year 4:

Electrical Science, Electrical Craft Theory, Project, Mathematics.

Examinations:

Year 1: House examinations.

Year 2: House examinations.

Year 3: House examinations plus city and Guilds of Longon Institute
Course 236 Part II Examination in Electrical Installation Work.

Year 4: House examinations plus City and Guilds of London Institute
Course C Examination in Electrical Installation Work

Application Procedure:

Applicants should apply on the standard College Part-Time Enrolment

Form to:-

The Department of Electrical Installation,

Church Lane,

(Annexe to the College).

For Further Information:

Mr. J. T. O'Donnell, Assistant Head,

Department of Electrical Installation,

### COURSES IN PHYSICAL EDUCATION

The courses are designed to cater for the recreational activities of the students and staff of the College and will include the following Activities:

Swimming Basketball Jogging Aerobics Life Saving Hang Gliding Sub Aqua Volley Ball Chess Water Polo Karate Yoga Sailing Soccer Circuit Training Wind Surfing Gaelic Games Tai Chi Chunn Canoeing Rugby Art Table Tennis Sketching Fencing Darts Hockey (Mixed) Water Colour First Aid **Related Crafts** Badminton Judo Dance Appreciation

The philosophy behind the programme is that students should be educated for living. Skills can be provided whereby leisure time can be spent in a healthy environment. This provides a social interaction between students from various courses, and helps to develop an awareness of one's position in the overall structure of the College. It assists in the integration of students from different departments.

The programme operates as follows:-

- (i) Students whose time-tables permit it, book the Gymnasium at a set time on a regular basis for a planned programme of activities.
- (ii) Each Day at lunch-time, classes are organised in the Swimming Pool and Gymnasium.
- (iii) Each evening from 16.00 hrs. to 22.00 hrs. in the Swimming Pool and from 17.00 hrs. to 22.00 hrs. in the Gymnasium, time is allocated for class and club activities.
- (iv) As the demand increases, and the College facilities become inadequate, facilities are booked at outside venues.
- (v) On the weekend, the outdoor activities are catered for at various centres, such as the V.E.C. Sports Grounds in Terenure, Seapoint and Dalkey Quarry.

College teams are organised in most sports and they participate in the appropriate competitions for Third Level Colleges.

#### EXTERNAL EXAMINERS FOR 1986 EXAMINATIONS

Diploma in Applied Sciences. BSc (Applied Sciences).

Ref: WSAD.

Kenneth Jones BSc PhD CChem FRSC Department of Chemistry, University of Manchester Institute of Science and Technology, England.

Professor L. W. Barr BSc PhD, CPhys FInstP FRSE

Paisley College of Technology, Scotland.

Professor John F. Toland BSc MSc PhD University of Bath, England.

Professor D. M. X. Donnelly DSc PhD MRIA Dublin.

Diploma in Dietetics and Nutrition. BSc (Human Nutrition). Year I (Ref: WBD I). Professor David A. Brown BSc PhD DSc CChem FICI FRSC Dublin

Professor E. Duke BSc PhD DSc Dublin.

Patrick M. O'Leary BSc MSc MA PhD Galway.

Diploma in Dietetics and Nutrition. BSc (Human Nutrition). Year II (Ref: WBD II). Professor D. J. Hingerty, MSc PhD CChem FRSC Dublin.

Professor Ronan G. O'Regan, MD PhD Dublin.

Diploma in Dietetics and Nutrition. BSc (Human Nutrition). Year III and Year IV (Ref: WBD III and WBD IV). Professor J. W. T. Dickerson BSc PhD FIBiol University of Surrey, England.

Pamela J. Brereton SRD
Northwick Park Hospital and Clinical
Research Centre,
Middlesex,
England.

Hubert McDermott BA MA DPhil HDipEd Galway.

SCRÚDAITHEOIRÍ SEACHTARACHA DO SCRÚDAITHE 1986

Diploma in Ophthalmic Optics. Year II and Year IV (Fef. WSO II and WSO IV).

Diploma in Applied Physics. Year I and Year II (Ref. PSAP I and PSAP II)

Diploma in Food Science and Technology Year II (Final) (Ref: S.6 II).

Certificate in Mathematics (Final). (Ref: M7.1).

Professor David Pickwell MSc FBCOHD
DOrth
President, International Optometric & Optical
League,
University of Bradford,
England.

Professor M. G. Harrington MSc PhD FICI FIBiol FIFSTI

Patrick Casey FAOI Ophthalmic Optician Athlone.

Maurice G. Ebison MD MA CPhys FInstP Head of Education, Institute of Physics, London, England.

George A. P. Wyllie, BSc PhD CPhys FInstP FRSE Glasgow University, Scotland.

Professor G. F. Imbusch, BSc MSc PhD DSc MRIA CPhys FinstP CEng FIEE Galway.

Professor Ronal Walker, MRSC CChem PhD F FIFST Division of Food Science and Nutrition, University of Surrey, England.

Maurice O. Moss, BSc PhD DIC ARSC Senior Lecturer, Department of Microbiology, University of Surrey, England.

D. J. G. James, BSc PhD FIMA Department of Mathematics, Lanchester Polytechnic, England.

R. E. Flood BSc MSc PhD Department of External Studies, University of Oxford, England. Diploma in Mathematics. Years 1 and 2. (Ref: M7.2 and M7.3). D. J. G. James, BSc PhD FIMA Department of Mathematics, Lanchester Polytechnic, England.

R. E. Flood, BSc MSc PhD
Department of External Studies,
University of Oxford,
England.

Technicians' Diploma in Applied Science (Applied Biology option) Year II (Ref: WAS II (B)) Professor S. J. Martin, MSc PhD The Queen's University of Belfast.

Technicians' Diploma in Applied Science (Applied Biology option) Year III (Final Third Year) (Ref: WAS III (B))

Professor S. J. Martin, MSc PhD The Queen's University of Belfast.

P. Vivion Tarrant, BSc PhD FICI Dublin.

Patrick Griffin, BAgrSc PhD Ballyfree, Co. Wicklow.

Technicians' Diploma in Applied Science (Applied Chemistry option)
Year III (Final Year) (Ref: WAS III (C))

J. Fenerty, BSc PhD CChem FRSC Liverpool Polytechnic, England.

P. M. Hayden BSc PhD CChem FRSC FICI Dublin.

Technicians' Diploma in Applied Science (Applied Physics option) Year III (Final year) (Ref: WAS III (P)) Henry P. Lynam BSc MSc Dublin.

Kenneth Hillier, BSc PhD, DIC CPhys FInstP MIPM Harrogate, England.

Technicians' Diploma in Computer Science — Year III (Final Year) (Ref: WMT III) Jane B. Grimson BA BAI MSc PhD Dublin.

Kevin Drury, Dublin. Science Laboratory Technicians' Certificate Year III (Final Year) (Ref: PSL III) J. Fenerty, BSc PhD CChem FRSC Liverpool Polytechnic, England.

P. Vivion Tarrant, BSc PhD FICI Dublin.

Professor W. M. Fogarty, BSc PhD FRIC Dublin.

Science Laboratory Technicians' Diploma Year V (Final year) (Ref: PSL V) J. Carroll, BSc MA PhD FICI Dublin.

J. Fenerty, BSc PhD CChem FRSC Liverpool Polytechnic, England.

P. Vivion Tarrant, BSc PhD FICI Dublin.

Professor W. M. Fogarty, BSc PhD FRIC Dublin.

Certificate in Professional Photography Year III (Final year) (Ref: PSP III) Professor Heinz Wedewardt, Diplom Photo-Graphiker DGPh-EUROPHOT-BFF, Fachhochschule Köln.

Rex Roberts, BSc ABIPP Dun Laoghaire, Co. Dublin.

Advanced Certificate in Professional Photography Year V (Final year) (Ref: PSP V)

Professor Heinz Wedewardt, Diplom Photo-Graphiker DGPh-EUROPHOT-BFF, Fachhochschule Köln.

Rex Roberst, BSc ABIPP Dun Laoghaire, Co. Dublin.

Technician Certificate in Medical Physics and Physiological Measurement Year II (Final year) (Ref: PBE III) Graham Manson, MSc CEng MIEE Cork.

Certificate in Sciences for Nurses Year III (Final year) (Ref: PSN III) Roswyn A. Brown BA SNR SCM DN (London) RNT Department of Health Sciences, City of Birmingham Polytechnic, England. Antoinette Kelleher, RGN RSCN RNT Principal Nurse Tutor, Our Lady's Hospital for Sick Children, Dublin.

Diploma in Bakery Production and Management Year III (Final year) (Ref: WBT III) Sam Wilson, FTC (CGLI) MIBB Newtownabbey, Co. Antrim.

Diploma in Medical Laboratory Sciences Year II (Final year) (Ref: WAML II) Professor Ian J. Temperley, MA MD MRCI MCPath FRCPI FRCPath Dublin.

John Cann, BSc FIMLS Dublin.

Derek Cullen, FIMLS Dublin.

Anthony Murray, FIMLS Dublin.

Edwin Wright, FIMLS Dublin.

Gerard McKenna, BSc PhD CBiol MIBiol FIMLS
University of Ulster,
Coleraine.

Professor D. J. Hingerty, BSc PhD Dublin.

E. Tyrrall, BSc MSc CChem FRSC FICI University of Ulster, Jordanstown Campus, Co. Antrim.

Institute of Medical Laboratory Sciences Assessors Roger Hall, FIMLS St. James's University Hospital, Leeds, England.

Robin Francis, FIMLS The London Hospital Medical College, London, England. J. D. Jarvis, FIMLS
The London Hospital,
Whitechapel,
London,
England.

Dennis Kilshaw, CBiol MIBiol, FIMLS
Arrowe Park Hospital,
Merseyside,
England.

Certificate in Medical Laboratory Sciences Year II (Ref: WML II) B. Tobin FIMLS Dublin.

Patrick B. Collins, BSc MSc PhD Dublin.

Professor Moira O'Brien, FRCPI Dublin.

Conor P. O'Toole, BSc MSc CPhys FInstP Dublin.

Professor H. Ridley, MA PhD Dublin.

National Examiner

Thomas Moloney, BA FIMLS Dublin.

Certificate in Medical Laboratory Sciences Year III (Final year) (Ref: WML III) Colette Hatton, MSc FIMLS DipMedLMgt Dublin.

National Examiner

Liam English, FIMLS Dublin.

Honours Diploma in Electrical Engineering Year IV (Final year) (Ref: SEE IV) Professor G. T. Wrixon, BE MSc PhD CEng FIEE MRIA Cork.

Professor R. Cooper, MSc PhD DSc CEng FIEE The University of Manchester, England.

Professor A. M. Rose, BSc MSc PhD FIEE CEng FIEE MIEEE University of Strathclyde, Scotland. Technician Engineering Diploma Year III (Final year) (Ref: WFFT III)

R. H. Mitchell, BSc PhD CEng MIEE MIERE University of Ulster, Jordanstown Campus. Co. Antrim.

Technician Engineering Diploma

Brian Sweeney, BE MBA CEng FIEL Dublin.

Year III (Final year) (Ref: WRTT III)

Professor M. V. Whelan, BE ME(NUI) MA MSc(CalTech) DSc(Tueindhoven) FTCD Dublin.

Technician Diploma in Electronic Engineering Year III (Final year) (Ref: WRS III)

K. C. Jones BA(Hons) DipEE MPhil CEng Merton Technical College, England.

J. Blogh, BA BAI PhD MIIE Dowty Electronics Ltd., Greenford, England.

K. C. Jones BA(Hons) DipEE MPhil CEng Merton Technical College, England.

Certificate in Electronics

K. C. Jones BA(Hons) DipEE MPhil CEng Merton Technical College. England.

C. Ralph, MSc Dublin.

Certificate in European Languages for Business Studies Year 2 (Final year) (Ref: WLBS 2)

Christopher Lyons, PhD Department of Romance Linguistics University of Solford, England.

Glyn Hatherall, MA Head of School of Language Studies, Ealing College of Higher Education. London, England.

Con Power, BComm MEconSc FCCA FCMA FICS Dublin.

### **DIPLOMA IN APPLIED SCIENCES**

Graduates of this course also qualify for the award of BSc(Applied Sciences) from the University of Dublin with the same Honours Classification as that obtained in the Diploma in Applied Sciences.

Inmas Mark Brady	Honours 2.2	Kevin Gerard Jennings	Honours 2.1
James Mark Brady	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	9	Horiours 2.1
Barbara Elizabeth Buchanan	Honrous 2.1	Maurice Patrick Kelly	Pass
Graham Douglas Burns	Honours 2.2	Nicholas Francis Kenny	Pass
Bernadette Mary Collins	Honours 2.1	Martina Brigid Kavanagh	Pass
Cyril Anthony Connolly	Honours 2.2	Christopher Joseph Maginn	Honours 2.2
Marian Crean	Pass	Edel Mary McGinty	Pass
Michael James Corrigan	Honours 2.2	David O'Brien	Pass
Julia Maria Donnelly	Honours 2.2	John Raymond O'Flaherty	Pass
Edward Joseph Doyle	Honours 2.2	Francis Patrick Scanlan	Pass
Joseph Patrick Dunne	Honours 2.2	Joseph Anthony Timmons	Pass
Paula Elizabeth Farnan	Pass	Mary Tooher	Pass
Sean Joseph FitzGerald	Honours 2.1	Damien Vincent Weldon	Honours 2.2
Cormac A. J. Hegarty	Honours 2.2	Paul Joseph Wheatley	Honours 2.2
Frances Louise Hancock	Honours 1	Conor Michael Wickham	Honours 2.1

# **DIPLOMA IN DIETETICS AND NUTRITION**

Marie Therese Breslin	Honours 2.1	Bernadette Martina Morris	Pass
Mary Kathleen Coyle	Honours 1	Elizabeth Ann McTiegue	Honours 2.2
Cora Rose Glennon	Honours 2.1	Marguerite O'Brien	Honours 2.2
Susan Mary Hartford	Honours 2.1	Marie Elizabeth Quinn	Honours 2.1
Catherine Mary Keenan	Honours 2.2	Lillian Pearl Rafter	Honours 1
Fiona Mary L'Estrange	Honours 1		

### **DIPLOMA IN OPHTHALMIC OPTICS**

Margaret Barrett	Honours 2.1	John Gerard McGann	Honours 1
Catherine E. Bennett	Honours 2.2	Patricia Mary O'Brien	Honours 2.2
Leonard James Costello	Honours 2.2	Brenda Mary O'Farrell	Pass
Martin Gerard Crowe	Honours 2.1	Mary Imelda O'Loughlin	Honours 1
Anne Elizabeth de Loughry	Honours 2.1	Brigid Mary Piggott	Honours 2.1
Gregory John Gilna	Honours 2.2	Mary Helena Ryan	Honours 2.1
Suzanne Marie Mackey	Honours 2.1	Deirdre Wyley	Honours 2.1

### GRADUATESHIP OF THE INSTITUTE OF BIOLOGY

Patricia Barrett Honours 2.2 Kevina McGill Honours 2.1 Declan Gesparro Honours 2.2 Jean Mooney Honours 2.2 Richard Walsh Honours 2.2 Maeve Harvey Honours 2.2

### GRADUATESHIP OF THE ROYAL SOCIETY OF CHEMISTRY CHEMISTRY

Hugh Joseph Coyle Mary Carmel Flannery Robert John French John Thomas Gray Alan Haves

Joseph Patrick Heffernan Janet Mary Kerins Desmond Peter Kerr Stephen Leo Moran

John O'Brien Denis John O'Farrell Terence Patrick O'Hare Caroline Philomena Starrs

# GRADUATE DIPLOMA IN FOOD SCIENCE & TECHNOLOGY OF THE INSTITUTE OF FOOD SCIENCE AND TECHNOLOGY

William Raymond Martin Kevin Reid

David Anthony McFadden

# GRADUATESHIP OF THE INSTITUTE OF MATHEMATICS AND ITS **APPLICATIONS**

Richard Barry

### GRADUATESHIP OF THE INSTITUTE OF STATISTICIANS

Anne Gaffney

Deirdre O'Keeffe

# DIPLOMA IN FOOD SCIENCE

Jane Burke Sheila Patricia Kelly Pass Pass Jospehine Mary Gleeson Credit

# FELLOWSHIP OF THE INSTITUTE OF MEDICAL LABORATORY SCIENCES

Colma Barnes
Ann Marie Bermingham
Ann Breen
Helen Brownen
Ann Byrne
Catherine Mary Byrne
Jane Corcoran
John Crowley
Harold Croxan
Susan Crawford
Linda Dalby
Deirdre Fagan

Vincent Foley
Claire French
Colm Grogan
Geraldine Henry
Bernadette Jackson
Francis Johnson
Lindsay Jones
Jane Kavanagh
Caroline Liddy
Margaret Molloy
Joan Moore
Desmond McGowan

Susan Nicholl
Mary O'Brien
Leslie O'Connor
Myra O'Keane
Mairead O'Leary
Derek O'Neill
Margaret Ryan
Katherine Tansely
Ann Walsh
Margaret Walsh
James Wilson

### DIPLOMA IN MEDICAL LABORATORY SCIENCES

Margaret Ashworth	Pass	Mary Frances Lynch	Pass
Elizabeth Anne Barrett	Pass	Patrick Kieran McAllister	Pass
Siobhan Elizabeth Boothman	Pass	Ann Marie McCann	Pass
Christina Anne Brady	Pass	Rose Anne McNerney	Pass
Belinda Mary Cahill	Pass	Janette Ann Meade	Pass
Orla Catherine Caulfield	Pass	Mary Pauline Molloy	Pass
Joyce Mary Cleary	Pass	Rosemary Catherine Morrin	Credit
Peter Claude Cockburn	Pass	David Motsamai Mothabeng	Pass
Dolores Crowley	Pass	Anna Maria Murphy	Pass
Brendan Martin Fallon	Pass	Dympna Murphy	Pass
Barbara Feeney	Pass	Bonang Nchai	Pass
Antoinette Finlay	Credit	Ursula Margaret O'Byrne	Pass
Josephine Sheila Glynn	Pass	Ann Marie O'Loughlin	Pass
Eamonn Joseph Hyland	Pass	Catherine Mary O'Sullivan	Credit
Mary Faustina Joyce	Credit	Margaret Parsons	Pass
Veronica Christina Kelly	Pass	Bernadette Pidgeon	Pass
Gerard Paul Lanigan	Pass	Malepe Ramokuena	Pass
Susan Luke	Pass	Katherine Sleeman	Pass

# CERTIFICATE IN MEDICAL LABORATORY SCIENCES

Aideen Mary Ardiff	Credit	Anne Keegan	Credit
Mary Bernadette Byrne	Credit	Orla Kelly	Credit
Margaret Antoinette Cagney	Credit	Marie Larkin	Pass
James Conheady	Credit	Helen Patricia McDermott	Credit
Suzanne Finola Doyle	Credit	Gertrude Mary McGinty	Pass
Ciaran Patrick Dunne	Credit	Mary O'Connor	Credit
Orla Gallagher	Credit	Grainne O'Flaherty	Pass
Chrissann Marie Gammell	Credit	Sean Gerard Rooney	Pass
Aine Ginty	Pass	Orla Mary Sheils	Credit
Rosmarie Grace	Credit	Catherine Mary Smith	Credit
Pugh Thando Gwintsa	Pass	Janet Mary Smith	Credit

# TECHNICIAN DIPLOMA IN APPLIED SCIENCE (BIOLOGY OPTION)

Una Mary Coogan	Pass	Ciaran Francis O'Neill	Pass
Helen Josephine Farrelly	Credit	Bridget Quinn	Distinction
Andrew Carl Gordon	Credit	Bernadette Rice	Distinction
Anthony Paul Healy	Credit	Mary Shannon	Credit
Anthony Joseph Hutchinson	Distinction	Siobhan Maire Stanbridge	Credit
Elizabeth Anna Jones	Pass	Alexandra Marie Whelan	Credit

# TECHNICIAN DIPLOMA IN APPLIED SCIENCE (CHEMISTRY OPTION)

THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWIND TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN			
Joseph Martin Adamson	Pass	Michael Thomas Farrell	Pass
Eamonn Joseph Brennan	Pass	Joseph Patrick Fitzsimons	Pass
Peter Gerard Brennan	Credit	Brenda Anne Hamill	Credit
Louise Anne Byrne	Credit	Gail Patricia Hand	Pass
Joseph Damian Carey	Pass	Gerard Anthony Kennedy	Pass
Brid Catherine Casey	Credit	Aidan Mahon	Pass
Michael Gary Cox	Pass	Carole Sandra Percival	Pass
Thomas Conleth Dempsey	Pass	Mary Taylor	Pass
Brenda Rita Downey	Distinction	Walter Joseph Walsh	Pass
Sylvia Frances Doyle	Pass		

# TECHNICIAN DIPLOMA IN APPLIED SCIENCE (PHYSICS OPTION)

Brian Joseph Buckley	Credit	Thomas Anthony Heary	Credit
Anthony Mary Burke	Pass	Paul Christopher Hendrick	Credit
Vivienne G. Butler-Rees	Pass	Patricia Mary Lawlor	Credit
John Gerard Colreavy	Pass	Denis John McArdle	Pass
Lorraine Marie Currivan	Pass	Catherine F. McDermott	Pass
Annette Mary Rose Cullen	Pass	David Edward Markey	Pass
Edwin Harold Davison	Pass	Bernadette Maria Meany	Credit
Ciaran Sean Donnegan	Pass	Brendan Thomas O'Beirn	Pass
Christopher Grant	Pass	Gráinne Mary O'Byrne	Credit
James Kieran Greed	Pass	Torlach Rush	Pass
John William Hannigan	Pass	Josephine Ryan	Pass
Daniel Hawthorne	Credit	Ciaran Brendan Saunders	Pass
Annette Mary Hayes	Distinction	Carmel Anne Walsh	Pass

### TECHNICIAN DIPLOMA IN COMPUTER SCIENCE

Mairead Bermingham	Pass	James Christopher McCabe	Pass
Helen Margaret Brangan	Pass	Sinead Catherine McMahon	Credit
Andrew Jude Collinge	Distinction	Gregory Patrick Magrane	Credit
John Joseph Corr	Distinction	Edward Joseph Maher	Credit
Noelle Josephine Daly	Credit	Áine Mary O'Grady	Distinction
Derek Paul Dunne	Distinction	Niall Edward O'Shea	Distinction
Ellen Martina Gorman	Credit	John Patrick Power	Credit
Dominick Kevin Higgins	Credit	William Thomas Young	Credit
Nuala Mary Kennedy	Distinction	A mand	MODA directoral

# **DIPLOMA IN BAKERY PRODUCTION AND MANAGEMENT**

Raymond Crotty Gerald Patrick Cunningham James Anthony Griffin Desmond Hewitt Mary Brigid Kavanagh	Credit Pass Credit Pass Credit	Martin John McGettigan Kathleen Mary Pyne Veronica G. Townsend Jacqueline Wrenn	Credit Pass Pass Pass

# SCIENCE LABORATORY TECHNICIAN DIPLOMA

Geraldine Eva Broderick	Credit	Aidan Mullen	Pass
John Paul Carey	Pass	Fiona Helena Murphy	Pass
Thomas Martin Casey	Pass	Patricia Agatha Reynolds	Pass
Mary Catherine McNelis	Pass	Martine on tradition above	

### SCIENCE LABORATORY TECHNICIAN CERTIFICATE

Francis Donal Hendron Pass Rhona Clare Prendergast Credit
Maria Caroline Johnstone Pass Patrick Joseph Quinn Pass
Donal Mary O'Callaghan Pass John Gerard Shortis Pass
Lorraine O'Neill Credit

### ADVANCED CERTIFICATE IN PROFESSIONAL PHOTOGRAPHY

David Samuel Carse Pass Jennifer Margaret O'Neill Distinction

### CERTIFICATE IN PROFESSIONAL PHOTOGRAPHY

Daphne Barrow Credit Bairbre Guilfoyle Pass John Francis Bourke Aine Nic Giolla Choille Credit Distinction Teresa Mary Buckley Distinction Denis O'Farrell Pass Credit Thomas Joseph Clancy Heinz Sieben Credit Lois Crighton Pass

### CERTIFICATE IN SCIENCES FOR NURSES

Mary Jennifer Beaver Credit Rita Lawlor Credit Esther Geraldine Boland Pass Una Mahon Credit **Bridget Frances Cahill** Credit Johanna McDonald Pass Mary Bridget Conlon Pass Yvonne Miriam McDonnell Pass Eileen Mary Courtney Credit Carol Teresa McKenna Pass Johanna Mary Crosbie Credit Mary Catherine McNally Distinction Helen Elizabeth Crowley Credit Maria Ann McVanemy Credit Margaret-Ann Cullen Distinction Dympna Patricia Maher Credit Credit Irene Daly Noeleen Mahon Pass Pass Elizabeth Anne Dempsey Sylvia Anne-Marie Minnock Credit Credit Helen Mary Doyle Carmel Mary Murphy Pass Credit Patricia Mary Murphy Bridget Martina Dwyer Credit Pass Martha Mary Egan Anne Mary Nolan Pass Mary Catherine English Pass Mary Alice O'Loughlin Pass Pass Mary Louise Fitzgerald Aoife Mary O'Reilly Pass Credit Judith Mary Fleming Catherine Maria Reynolds Credit Pass Paula Gallagher Mary Angela Ryan Pass **Emer Mary Gunning** Credit Nuala Staunton Credit Credit Mary Philomena Tunney Adrienne Dorcas Hales Pass Pass Margaret Mary Joyce Barbara Ann Walshe Credit Credit Rosemary Walsh Honora Keaveny Credit Pass Fiona Mary Kelly Brigid Elizabeth Ward Pass Geraldine Ellen Kinsella Credit Loraine Wright Pass

### HONOURS DIPLOMA IN ELECTRICAL ENGINEERING

Graduates of this course also qualify for the award of BSc(Eng) from the University of Dublin with the same Honours Classification as obtained in the Honours Diploma in Electrical Engineering.

John Robert Ashworth	Honours 2.2	Richard James Kavanagh	Honours 2.1
Thomas Francis Briscoe	Honours 1	Nicholas Gregory Kearns	Honours 2.2
John Justin Caffrey	Honours 2.1	Denis McCormack	Honours 2.2
Barry Cahill-O'Brien	Honours 1	Maurice Noel McCormack	Pass
Liam Mary Carroll	Pass	Alan David McDonald	Honours 2.2
Stephen Patrick Claffey	Honours 2.1	Kevin Thomas McHugh	Honours 2.2
Declan Francis Coleman	Pass	James Gerard McInnes	Pass
James Paul Curran	Honours 2.2	Philip Anthony Maguire	Pass
Colin Joseph Devlin	Pass	Patrick Joseph Meehan	Honours 2.2
John James Dolan	Honours 2.2	Rajeev Mehtani	Honours 2.1
Garry Thomas Doran	Honours 2.1	Kieran Meskell	Honours 2.2
Patrick Bernard Dundas	Pass	Adrian Colmba Murphy	Pass
Anthony Martin Fay	Honours 2.1	Alan Patrick Myler	Honours 1
Francis Gerard Fowley	Honours 2.1	Patrick Donal Naughton	Honours 2.1
Rory Denis Hanly	Honours 1	Brian Anthony O'Malley	Honours 2.1
John Oliver Harkin	Honours 2.1	Paul Martin Sharkey	Honours 2.1
Shane Hurley	Honours 2.2	Robert Tait	Pass

# TECHNICIAN ENGINEERING DIPLOMA — ELECTRICAL ENGINEERING

Malcolm A. Banks	Credit	Brian Lynch	Credit
Michael Joseph Bookey	Credit	Liam Joseph McCabe	Distinction
George Lionel Burne	Distinction	Raphael Molony	Credit
Brendan Cronin	Credit	Christopher Mulhall	Credit
Kevin Michael Daly	Credit	George Patrick O'Connell	Pass
Charles Dunn	Pass	Anthony Laurence Riordan	Pass
Paul Farren	Pass	Gerard Ryan	Distinction
Robert Cecil Gilbert	Pass	John Eugene Stapleton	Pass
Peter Charles Handcock	Pass		

# TECHNICIAN ENGINEERING DIPLOMA — TELECOMMUNICATIONS AND ELECTRONICS

Brian Anthony Aherne
John Paul Duffy
John Joseph Gorman
Mark Anthony Griffin
David Leonard Higgins
Conor Hilliard
Barry Hoban
Patrick Francis Kane
Thomas Francis Keady
Robert Michael Kelly
Brian Francis Kennedy
John Paul Kennedy

Distinction
Credit
Pass
Distinction
Pass
Credit
Distinction
Credit
Pass
Credit

James Paul McGovern
Ronan John McGrath
Austin Thomas Madden
Robert Gerard Moloney
John Angelo Nardone
Stephen Anthony Neville
Joseph Charles O'Donoghue
Dermot O'Rorke
Michael Patrick Smyth
Michael Patrick Stacey
Ronan Gerard Taaffe
James Brendan Wright

Pass
Credit
Pass
Credit
Pass
Pass
e Credit
Pass
Pass
Pass
Credit
Distinction

### **TECHNICIAN DIPLOMA IN ELECTRONIC ENGINEERING**

Distinction

Distinction

Michel Joseph Bergin
Paul Clery
Jacqueline Anne Davis
Ciaran Thomas Doyle
John Michael Feerick
Denis Gleeson
Fergus Kernan
Niamh McGovern
Donnacha Michael McGrath

Credit
Distinction
Credit
Pass
Pass
Credit
Pass
Credit
Pass
Credit
Pass

David Gerard Maguire Robert Thomas Mason David Patrick Mulroy Liam J. O'Higgins Michael Thomas Pettigrew Joseph Thomas Reilly Thomas Gerard Smyth Raymond Walsh Credit Credit Pass Pass Pass Pass Pass Credit

### TECHNICIAN CERTIFICATE IN ELECTRONICS

Alan Pierce Brazil Francis Cass James Noel Deneher Colin Gaffney David Hanna Credit Pass Pass Credit Pass

Colm Seamus MacAlasdair Brian Patrick Reid John Reilly Norman Edward Walsh David Patrick Walsh Distinction Credit Pass Credit Pass

### **ELECTRICAL TECHNICIANS CERTIFICATE**

Colm Patrick Agnew Martin Joseph Loughnane Alan Ambrose McCall Patrick Anthony Muarry Pass Credit Credit Pass Kieran Martin O'Sullivan Kevin George Walker Dermot Noel Walley

Pass Credit Pass

# EXTERNAL AWARD OF CERTIFICATE IN MEDICAL LABORATORY SCIENCES FOR MEDICAL LABORATORY ASSISTANTS — LESOTHO

February 1985 Matsepiso Maphike Mathabo Mpobole Lebalang Nkaota November 1985 Ntombi Ginindza Mathabo Lebina Lilian Lefera Ronald Manyatsi Sipho Matse Pheta Matlanyane Evelyn Molibeli Sejojo Phaaroe

# FLORA NUTRITION AWARD

A Scholarship Award of £1,000 sponsored by the manufacturers of Flora, W. & C. McDonnells Ltd., and is to be used towards postgraduate research in the field of Human Nutrition and Dietetics. It is awarded to the best Final Year student of the Diploma in Dietetics and Nutrition.

LILLIAN PEARL RAFTER

# THE IRISH NUTRITION AND DIETETIC ASSOCIATION PRIZE

This Prize is sponsored by the Irish Nutrition and Dietetic Association, and is awarded to the graduate of the Diploma in Dietetics and Nutrition who maintained the most consistently high standard over the four years of the course.

LILLIAN PEARL RAFTER

# THE HARTE-BARRY PRIZES

These prizes, presented annually to the two best students in the Final Examination for the Diploma in Ophthalmic Optics are sponsored by the Opticians' Board to mark the work of its first Registrar, Ivor Harte-Barry.

MARY IMELDA O'LOUGHLIN
JOHN GERARD McCANN

# THE JOHN BROPHY MEDAL

This award is made annually to the best student in the Final Year Diploma Examination in Medical Laboratory Sciences. The prize, a Sterling Silver Medal, is sponsored by the Medical Supply Company to honour the memory of John Brophy, who was the first full-time Lecturer in Medical Laboratory Sciences in the College and who served in that capacity from his appointment in 1968 to the time of his death in 1976.

MARY FAUSTINA JOYCE

### THE BRIAN O'KEEFFE AWARD

Established by Mrs. O'Keeffe in memory of her husband Brian, who was a lecturer in the Chemistry Department, 1964–1974, and is awarded annually to the student who attains the highest total marks in the Final Year Examination for the Technician Diploma in Applied Science (Applied Chemistry Option).

#### **BRENDA DOWNEY**

### **ERICSSON PRIZE**

This prize is sponsored by Ericsson Information Systems and is awarded to the best student in the Final Year Examination of the Technician Diploma in Computer Science...

JOINT WINNERS
JOHN CORR & ÁINE O'GRADY

### INSTITUTE OF IRISH BAKERS CUP

Awarded annually to the student with the highest marks in Bakery Technology and Applied Sciences in the Final Examination of the Diploma in Bakery Production and Management Course.

MARTIN JOHN McGETTIGAN

### **FALCONER CUP**

Awarded annually to the student who has shown the highest standard of Artistic Excellence on set project work in the Final Year of the Diploma in Bakery Production and Management Course.

JAMES ANTHONY GRIFFIN

### **BOLANDS CUP**

Awarded annually for Artistic Merit and Craftsmanship in Cake Decoration.

JAMES ANTHONY GRIFFIN

### PAGEBOY AWARD FOR COMMUNICATIONS

Awarded annually to the student with the best performance in the Final Year of the Technician Engineering Diploma — Telecommunications and Electronics:

**BRIAN ANTHONY AHERNE** 

## ASSOCIATION OF SUPERVISORY & EXECUTIVE ENGINEERS AWARD

This prize is awarded to the student(s) who obtained the highest mark for the Building Services Project in the Final Examination of the Technician Engineering Diploma — Electrical Engineering.

JOINT WINNERS
GEORGE LIONEL BURNE & LIAM JOSEPH McCABE

# CITY & GUILDS OF LONDON INSTITUTE AWARDS OBTAINED IN 1985 BY STUDENTS OF THE COLLEGE

# First Prize TELECOMMUNICATION TECHNICIAN PART I COMMUNICATION STUDIES T1

ANTHONY MARTIN COX

First Prize
TELECOMMUNICATION TECHNICIAN PART II
ELECTRONICS T3

MICHAEL DOYLE

First Prize
TELECOMMUNICATIONS TECHNICIAN PART II
MICROELECTRONICS SYSTEMS T4

PAUL JOSEPH CULLEN

First Prize
ELECTRICAL ENGINEERING TECHNICIAN PART III
MICROPROCESSORS

PAUL GROGAN

Students whose projects in 1984/85 were funded by the National Board for Science and Technology under the Student Project Development Programme

STEWARD BOURKE EDWIN H. DAVISON

### STAFF

PRINCIPAL/PRÍOMH-OIDE
Francis M. Brennan, DipEE CEng MIEI
MIERE AMIEE

Secretary Anne-Marie O'Connell

VICE PRINCIPALS/LEAS PRÍOMH-OIDÍ George L. Latchford, BE BSc CEng MIEI

J. Kieran Taaffe, BSc MSc CPhys MInstP MBA HDipEd DipProd Barrister-at-Law

Acting Secretary Joan Horgan

SECRETARY/REGISTRAR RUNAÍ/CLARAITHEÓIR David C. Spring

Secretary Linda Roche

**FOIREANN** 

## DEPARTMENT OF BIOLOGICAL SCIENCES

HEAD:

Bríd Ann Ryan, BSc MSc CBiol MIBiol DipIndMicrob

ASSISTANT HEADS: Patrick J. Davey, BA(Mod) PhD CBiol MIBiol Liam M. Lawlor, FIMLS

DEPARTMENT SECRETARY: Miss Rita A. Kavanagh

ACADEMIC STAFF:
L. M. Armstrong, BSc PhD
Teresa M. Buckley, FIMLS CertPhoto
T. M. Cooke, FIMLS
Valerie M. Dowding, MA PhD
(On Career Break)
Monica A. Fagan, FIMLS
Joan D. Forsdyke, BSc PhD
J. R. Gray, BSc(Agric) CBiol MIBiol
F. M. Hallinan, BSc PhD
Pamela P. Kearney, Dip Dietetics &
Nutrition MSc

Ursula A. MacEvilly, BSc MSc PhD AIFSTI J. J. McEvoy, BSc BA BD BSc(Econ) AIFSTI

P. J. McHale, BA(Mod) MA PhD FAMLS
T. J. MacSiomoin, BSc PhD DipIndMicrob
(On Career Break)
P. M. Mathias, BSc MSc PhD

Mary T. Moloney Dip Dietetics Maeve Moynihan, BA(Mod) PhD

Doreen K. Nolan, LM LRCPI LRPCSI DPH C. P. O'Rourke, FIMLS

R. A. Ryan, BSc PhD

T. G. Scott, FIMLS FAMLS

Elizabeth M. Sweeney, BSc CBiol MIBiol FRAMI

J. J. Tighe, BA(Mod) MA MSc PhD

J. G. Vaughan, FIMLS B. P. Woods, BSc MSc

Katherine M. Younger, BSc MSc PhD CBiol MIBiol MACBI RESEARCH FELLOW: Veronica B. O'Riordan, BSc PhD

PART-TIME LECTURERS: M. Brunton, BSc MApplSc T. Buckley, FIMLS Aine Campbell, BA(Mod) MSc Margaret Cannon, BSc MPhil Jean Clarke, BSc MSc Pauline Coakley, FIMLS T. Curtis, BSc D. Dempsey, FIMLS Anne Downey Mary Duane, RANA Denise Farrell MB BCH BAO B. Fitzpatrick, FIMLS Marie Foley FIMLS Mary Linehan, AIMLS Patricia McCarthy, FIMLS Barbara McDonnell, FIMLS G. McDonnell, FIMLS Denise McEvoy, BSc PhD B. McKenna, BE MEngSc J. McMahon, FIMLS T. Moran, MVB MRCVS A. Murray, FIMLS A. Nolan, FIMLS Nuala O'Byrne-Ring, BSc PhD G. O'Connor, FIMLS Teresa O'Driscoll, MRCVS J. O'Loughlin, FIMLS J. Rochford, BSc PhD R. Russell, BA(Mod) PhD V. Shaw, FIMLS B. Tobin, FIMLS R. Ward, FIMLS Una Wilson, BSc PhD

# **ROINN NA BITHEOLAÍOCHTAÍ**

### DEPARTMENT OF BIOLOGICAL SCIENCES (Cont.)

#### VISITING LECTURERS:

R. Bayston, MSc PhD MMedSci FIMLS CBiol MIBiol

J. Begley, MB FIMLS P. Blake, BSc PhD

G. Boran, MB BA(Mod)

J. Brady, FIMLS

T. Brien, BSc MSc PhD Mary Brody, BSc MSc

Mary Cafferky, MD MRCPath

Breda Carroll, FIMLS
D. Coleman, BSc PhD
A. Cranny, FIMLS
Susan Crawford, FIMLS
D. Cronin, BSc PhD
Pauline Crosby, FIMLS
D. Cullen, FIMLS

Cecily Cunningham, BSc MSc S. Cunningham, BSc PhD Aidan Daly, FIMLS, BSc

P. Daly, BSc PhD L. Donnelly, BSc PhD

B. Doughty, BSc PhD FIMLS

B. Dowling, FIMLS
G. Downey, BSc PhD
L. English, FIMLS
F. Falkiner, BSc PhD
C. Feighery, MD MRCPI

A. Finch, FIMLS
E. Fitzpatrick, FIMLS

P. Fitzpatrick, MB BCH BAO MCRPath

P. Flynn, FIMLS
N. Gibbons, FIMLS
J. Giddings, BSc PhD
R. Gormley, BSc PhD
K. Grundy, FIMLS
R. Hall, FIMLS

S. Hanratty, FIMLS B. Hickey, FIMLS

Professor D. J. Hingerty, MSc PhD CChem FRSC

J. Jackson, FIMLS

Professor C. Keane, MB BSc MRCPath

J. Keating, FIMLS A. Keenan, BSc PhD

P. Keely, FIMLS

D. Kenny, BSc MSc MRCPath

D. Kilshaw, JP FIMLS CBiol MIBiol

Anne Kirrane, FIMLS

Eimear Lalor, MB MRCPath DCH

J. Lamont, FIMLS Olwyn Lanigan, BSc MSc D. Magee, FIMLS

J. Malone, BSc PhD CPhys FinstP MIBiol

S. McCann, MD MRCPath Nuala McCarroll, BSc MSc Patricia McCarthy, FIMLS T. F. McCormack, FIMLS P. McDonnell, FIMLS B. McSweeney, BSc MSc T. Moloney, FIMLS P. Mulholland, FIMLS Catherine Mullins, BSc MSc

G. Murphy, BSc MSc D. O'Beirne, BSc PhD P. O'Brien, FIMLS

Maura O'Connell, BSc PhD M. O'Connor, FIMLS M. O'Keeffe, BSc PhD B. O'Mahony, FIMLS

R. O'Moore, MD MRCPath

C. O'Neill, FIMLS
Angela Rossney, FIMLS
Maura Reynolds, BSc PhD
J. Sadlier, BE CEng MIEI

Professor J. M. Scott, BSc MA PhD

I. Shirley, FIMLS
C. Smyth, BSc PhD
Annette Sneyd, FIMLS
R. Spencer, FIMLS
M. Stringer, FIMLS

P. V. Tarrant, BSc PhD FICI

Helen Taylor, FIMLS

Professor I. Temperley, MA MD MRCPI

MRCPath FRCPI FRCPath
Patricia Walsh, FIMLS

### ROINN NA BITHEOLAIOCHTAÍ (ar lean)

# **DEPARTMENT OF BIOLOGICAL SCIENCES (Cont.)**

R. Walsh, FIMLS, GIBiol

T. Walsh, MB

R. Ward, FIMLS

B. West, MB PhD

A. Whelan, PhD FIMLS

W. N. White, FIMLS

J. Williams, FIMLS

J. Witcher, MA MB BMChir

J. Woods, FIMLS

E. Wright, FIMLS

TECHNICAL STAFF:

Lindsey Abbott, TechDipAppSc Patricia Brennan, RT(CSLT) Canada Daireen Caffrey, TechDipAppSc Ted Doody, TechDipAppSc Breege Keenan CGLI(Biochem) Ronan Leydon CGLI AIST Patricia Taylor TechDipAppSc

RESEARCH STAFF

Sandra M. Healy, TechDipAppSc Ruth I. McKenzie, BSc

LABORATORY AIDES:

Ann Collier Kathleen Johnson, Mary Kavanagh David White

### **BAKERY UNIT**

ACADEMIC STAFF:

Daniel T. Carey. NBDip FTC(CGLI)
MIIB

W. Graham, FTC(CGLI)

E. Kane, Dip Bakery Prod & Mangt FTC(CGLI)

D. O'Brien, NBDip FTC(CGLI)

R. Humphries, Dip Bakery Prod & Mangt FTC(CGLI)

PART-TIME LECTURERS:

R. A. D'Arcy, BSc

W. FitzSimons, FTC(CGLI)

J. Humphries, FTC(CGLI) MIBB

Mary Long, FTC(CGLI)

B. Mealy, FTC(CGLI)

TECHNICAL STAFF:

T. Ahern, Inter (CGLI)

J. O'Neill

# AONAD BÁICÉIREACHTA

### DEPARTMENT OF CHEMISTRY

#### HEAD

Eamonn Rothery, BSc CChem FRSC FICI MIBioII

#### **ASSISTANT HEADS:**

Diarmuid A. MacDaeid, MSc PhD CChem FRSC FICI

Noel R. Russell, BA(Mod) PhD HDipEd CChem MRSC

# DEPARTMENT SECRETARY:

Ms. Joan Horgan

### ACADEMIC STAFF:

P. Ashall, BSc FICI CChem MRSC

L. Breen, BSc DipChemTech

P. Cullen, BSc

Patricia M. Ennis, BA(Mod) PhD MICI MRSC

M. B. Foley, BSc PhD MICI

J. A. Hamill, BSc

M. Jeffares, BA PhD

P. F. Kavanagh, BSc PhD

Marie T. Keating, BA(Mod) MA PhD MICI FIMLS

J. Treacy, BSc PhD

B. T. Woods, BSc PhD

#### PART-TIME LECTURERS:

D. Byrne, BSc

L. Doolan, BSc

P. Fitzsimons, BSc

B. Fleming, BSc

A. Gormley, BSc PhD

J. Guinnevan, BSc

N. Hanley, BSc

C. Hegarty, BSc

J. Hennessy, BSc PhD

K. McCormac, BSc

A. Odumosu, PhD MPSI

D. O'Farrell, GRSC

M. O'Kane, BA(Mod)

M. O'Neill, BSc MSc

A. O'Reilly, BSc MSc

M. Sedwich, BSc

B. Buchanon, BSc

#### TECHNICAL STAFF:

S. Magee, BSc

H. Wallace, BSc

P. White

### **ROINN NA CEIMICE**

# DEPARTMENT OF MATHEMATICS, STATISTICS & COMPUTER SCIENCE

HEAD:

Brendan Goldsmith, BSc MSc DPhil

**ASSISTANT HEADS:** 

Thomas Ambrose, BSc MSc PhD Brendan O'Shea, BSc MSc PhD

DEPARTMENT SECRETARY:

Mrs. June Carroll

ACADEMIC STAFF:

B. T. Browne, BE MSc PhD

A. A. Byrne, BSc MSc

J. R. Byrne, BSc

H. Dalton, FTC(EEP)CGLI BSc

M. Downes, BSc GradIMA

T. Gaffney, BE BSc MSc

T. Garavaglia, MA PhD

S. Jordan, BSc MSc ATO

I. A. Kinsella, MSc FIS

D. J. McCarthy, BSc

Maeve P. Maguire, BA HDipEd MMangtSc

Ann Murphy, BSc HDipEd

P. O'Gallchobhair, BEol ATO

B. O'Brien, BSc

T. O. O'Connor, BSc MSc(CompSc)

M. V. O'Neill, BSc

Marie Reilly, BSc MSc

M. Tuite, BA MA PhD

P. F. Walsh, BSc

DEPARTMENT OF EDUCATION POST DOCTORAL RESEARCH FELLOW Radoslav Dimitric, BSc MSc PhD

PART-TIME LECTURERS:

P. Devlin, BSc GradIMA

M. FitzGerald, BSc

B. McCabe, BSc

P. O'Byrne, BSc

D. Malone, BSc MSc

**ROINN NA MATEMAITICE, STATISTICE AGUS RÍOMHAIREACHTA** 

### DEPARTMENT OF PHYSICS

#### HEAD:

Matthew Hussey, BE MS PhD CPhys FInstP CEng MIEE

ASSISTANT HEADS: Kevin P. Culliton, FAOI Henry W. K. Hopkins, MA DPhil MAPS

DEPARTMENT SECRETARY: Miss Jackie Harrington

### ACADEMIC STAFF:

T. W. Cantwell, BSc PhD

S. Coonan, AdvCert(DIT) AdvCert(CGLI)

D. H. Davison, IIP (Inter) LIPPA

P. A. Davison, BSc MSc PhD FRCO

C. M. Feeley, BA(Mod) MA MS PhD

F. E. FitzSimons, BSc MSc

T. P. Grennan, BSc PhD

J. E. Guy, BSc MSc

P. M. A. Healy, BSc HDipEd

D. C. Hickey BSc PhD

K. P. Maher, MSc CPhys MInstP

K. V. Kamath, BSc MSc PhD

A. Mion, BSc

Carmel E. Mothersill, BSc PhD CBiol MIBiol MIBioll CPhys MInstP

M. A. Mullett, BSc HDipEd

S. E. O'Flatharta BSc HDipEd MLitt

P. B. O'hAnnaidh, BSc MSc PhD DipEdAdmin

A. O'Hare, BSc MSc

A. F. M. Z. Rahman, BSc MSc Dr in den Wertenscapen

V. Toal, BSc MSc PhD CEng MIEE

F. H. Walker, DipOphthOpt FAOI

E. J. Williams, BSc

G. White, AdvCert(DIT)

#### PART-TIME LECTURERS:

T. G. Brien, BSc MSc PhD CBiol MIBiol CPhys MInstP

J. Brilly, CPhys MInstP

C. Connolly, DipAppSc BSc(AppSc)
Triona Culliton, DipOphthOpts FAOI

M. Daly, BSc MLitt HDipEd

M. Desmond, DipAppSc BSc(AppSc)

J. Dunne, DipAppSc BSc(AppSc)

S. Fleming, DipAppSc BSc(AppSc) MSc

P. Fogarty, BSc

V. Garrett

Elizabeth Gregan, DipAppSc BSc(AppSc) Frances Hancock, DipAppSc BSc(AppSc)

P. Harding, AdvCert(DIT) AdvCert(CGLI)

B. Hawdon, BSc

P. Hodgins, AdvCert(DIT) AdvCert(CGLI)

N. Kenny, DipAppSc BSc(AppSc)

R. Lawlor, BSc

J. Magan, DipAppSc BSc(AppSc)

C. Maginn, DipAppSc BSc(AppSc)

F. McGovern, BSc

P. Maloney, AdvCert(DIT) AdvCert(CGLI)

A. Murphy, DipAppSc BSc(AppSc)

B. Murphy, DipAppSc BSc(AppSc) MSc

P. Neary, DipAppSc BSc(AppSc)

D. O'Brien, DipAppSc BSc (AppSc)

R. O'Flaherty, DipAppSc BSc(AppSc)

J. O'Gorman, BSc

D. O'Toole, BSc

Miriam Russell, DipOphthOpts FAOI

G. Smyth, BSc

Ellen Thornton, AdvCert(DIT)

C. Wickham, DipAppSc BSc(AppSc)

#### TECHNICAL STAFF:

J. Callis, TechDipAppSc

A. Campbell, TechDipAppSc

D. Hayes, TechDipAppSc

J. Keogh, CGLI (Physics Tech)

J. Robinson, CGLI (Physics Tech)

Anne Scully, TechDipAppSc

### **ROINN NA FISICE**

### DEPARTMENT OF ELECTRICAL ENGINEERING

HEAD:

Jonathan C. Fisher, BA BAI HDipEd PhD

**ASSISTANT HEADS:** 

John J. Farrell, MSc CEng MIEI MIEE

W. T. C. Grimson, BA BAI MASC

DEPARTMENT SECRETARY:

Miss Dymphna White

ACADEMIC STAFF:

D. Berber, DipEE BSc(Eng)

G. Caffrey, DipEng MIEI

P. Connell, MTC(Dept of Ed)

E. D. Coyle, BE CEng MIEI

J. Fennell, DipEng MIEI

J. Flood, BE MSc

B. Goulding, MTC(Dept of Ed)

R. Hatton, MTC(Dept of Ed) MIEI

P. McGloin, MTC(Dept of Ed)

C. Murray, DipEng BSC(Eng) MIEI

D. Naessens, MTC(Dept of Ed)

M. O'Halloran, BE(Elect) MIEI

K. Sullivan DipEE MSc

PART-TIME LECTURERS

M. Brazil

D. Byrne

J. Byrne

P. Cadden, DipEng

J. Caffrey, DipEE BSc(Eng)

S. Claffey, DipEE BSc(Eng)

B. Cogan, BE(Elect)

G. Conlon, DipEE BSc(Eng) MIEE MIEI

J. Connell

E. Coyle, BE(Elect)

R. Cregan

P. Duffy, DipEE, BSc(Eng)

G. Egan, BSc BE(Elect) HDipEd

M. Farrell, DipEE BSc(Eng)

J. Graham K. Howell

M. Jordan, BE(Mech) MESc

P. Kavanagh, DipEE BSc(Eng)

G. Keeley

K. Kennedy, DipEE BSc(Eng)

B. McArdle, BSc MSc PhD

J. McCarthy, DipEE BSc(Eng)

G. McGee, BA BAI MMgtSc MIMechE

O. Molloy, BE(Elect)

J. Muckian, BE(Elect)

S. Murphy, DipEE BSc(Eng)

E. Oakes

P. O'Duill

S. O'Flynn

M. O'Malley, BE(Elect)

J. Ryan, DipEE BSc(Eng)

A. Staunton, DipEng MIEE

### TECHNICAL STAFF:

M. Feeney

T. Kelly, TechEngDip(EE)

N. McCaughey, TechEngDip(EE)

P. O'Reilly

L. Quinn, FTC(EEP) GradITE

M. Scanlon

# ROINN NA HINNEALLTÓIREACHTA LEICTREACH

# DEPARTMENT OF ELECTRONIC & COMMUNICATIONS ENGINEERING

HEAD:

Bartholomew J. O'Connor, CEng MIERE

**ASSISTANT HEADS:** 

Christopher Cowley, DipEE CEng MIEI MIERE

Matthew Rice, CEng MIERE MIEI

DEPARTMENT SECRETARY:

Mrs. Mary McLoughlin

ACADEMIC STAFF:

C. Bruce, DipTechSc DipEE MSc CEng MIEE MIEI

T. Clancy, GradIERE

J. Dalton, BE MEngSc

C. Downing, BE MEngSc CEng MIEI

G. Farrell, BE MSc MIEI

M. Gara, TEng(CEI) CGLI(FTC)

D. Harley, TEng(CEI) FSERT PMGCert RadarCert

T. Hartigan, TechEngDip(TelecomEng)

T. Lawless, TEng(CEI) CGLI(FTC)

E. R. Lynch, BE(Elect)

J. Mahon, TEng(CEI) FSERT PMGCert

P. Murray, MIERE

T. P. O'Brien, MIERE

S. O'Donnell, FTC(CGLI)

B. A. O'Sullivan, BSc MSc MBA PhD CEng MIEE

P. Rainsford, BE MEngSc

J. Russell, PMGCert RadarCert

E. G. Seale, GradIERE

V. Thorne, FTC(CGLI MRGC RadarCert

K. Tiernan, BSc MSc

P. Tobin, DipEE MIEI CGLI(FTC)

M. Tully, CEng MIERE

PART-TIME LECTURERS:

Derek Beswick, CGLI

Brian Bohill, BSc MIE

Liam Brady

John Brophy, TechEngDip(TelecomEng)

Thomas Caffrey, BE

Jim Cleary, BE

Liam Collins, BE

Michael Connolly, BSc PhD

Sean Conway, TechEngDip(TelecomEng)

Eugene Coyle, BE

Joseph Cullen, BE

James Devereux, NDEng(Elect)

Bernard Donne, BE

Vincent Donne, DipEE BSc(Eng)

Michael Donoghue, BSc

Martin Farnan, TechEngDip(TelecomEng)

Francis Feehan, FTC(CGLI)

Patrick Feenan, BSc

Liam Fennell, BA BAI

Eoin Flynn, BSc

Brian Garry, DipEE BSc(Eng)

Noel Garvey, BSc MSc

Derek Gillmore, BSc(Eng)

Isolde Goggin, BA BAI

Michael Goggin, CEng MIEE MITTD

Anthony Grennan, TechEngDip(TelecomEng

Frank Groome, CGLI

Robert Halpin, CEng MIERE FTC(CGLI)

Liam Hamilton, BSc(Eng)

Daragh Kelly, TechEngDip(TelecomEng)

David Kennedy, DipEE BSc(Eng)

Robert Laurence, BE

John Lysaght, BE CEng MIEI MIEE

Noel McArdle, NCEA Dip (Elect)

Brian McBryan, BE

John McDonagh, Tech EngDip(Telecom Eng)

Noel McArdle, NDEng(Elect)

Fergus McGreal, BSc John Martin, DipEE

ROINN NA HINNEALLTÓIREACHTA LEICTREONACH AGUS CUMARSÁIDE

# DEPARTMENT OF ELECTRONIC AND COMMUNICATIONS ENGINEERING (Cont.)

Alan Moore, BSc PhD Peter Moran, BE Patrick Naughton, DipEE Robert O'Dea, BE Niall O'Gara, BA BAI Brian O'Reilly, BE MIE Ronan O'Riain Michael O'Rourke, FTC(CGLI) Desmond Power, BA BAI Liam Quinn Chris Russell, BE Tom Scarff, TechEngDip(TelecomEng) Anthony Shanahan, DipEE BSc(Eng) Mark Shankey, TechEngDip(TelecomEng) Eamonn Skelly Joseph Styles, DipEE BSc(Eng) John Tully, DipAppSc BSc(AppSc)

Eugene Wogan, TechEngDip(TelecomEng)

Paul Walsh

**TECHNICAL STAFF:** 

R. Gobl, TechEngDip(TelecomEng)

D. Nardone, TechEngDip(TelecomEng)

N. Sinnott, TechEngDip(TelecomEng)

S. MacSuibhne, NatDipEng(Elect

E. Skelly, SRS(Dept of Ed)

P. Collins, Laboratory Aide

### LABORATORY AIDE:

P. Collins

ROINN NA HINNEALLTÓIREACHTA LEICTREONACH AGUS CUMARSÁIDE (ar lean)

### DEPARTMENT OF LANGUAGES AND INDUSTRIAL STUDIES

HEAD: Kathleen M. Tierney, MA

ASSISTANT HEADS:
Miriam Broderick, BA MA HDipEd
DipSupLingAppl
Dermot Campbell, BA MA

DEPARTMENT SECRETARY: Mrs. June Carroll

ACADEMIC STAFF Christina Alberiini, BA MA Siegfriend Bertz, DrPhil Josianne Deloire, Licence es Lettres, Maitrise es Lettres Modernes Mary Faulkner, BA HDipEd Paul Gilmer, BA BPh BD Marie Guilfovle, BA HDE Brendan Halligan, BAMA (On Career Break) Seamus Lynch, MEconSc MA BComm DPA Robert McMahon, BComm MBS Jennifer Moreton, BA MA HDipEd Kathleen Muldowney, BA HDipEd Geraldine Redmond, BA MA HDipEd

Janet Ryan, BA MA HDipEd Mary Ryan, BA HDipEd Daragh Smyth, BSocSc DipEd Colette Weaire, BA MA

PART-TIME LECTURERS: Peter Brennan, BComm MBS Michael Brophy, BA MA Jutta Kankel Breatnach, Dipl-Ubers Christa Droth-Wagner, Staatsexamen Una Coleman, BA HDipEd Olivea de Miguel, Licenciada Sabine Hariq, Staatsexamen Margaret Harvey, BSc(Mgt) Peter Lennon, BBS Andrew Maguire, Dip Advanced Marketing Techniques(DIT) BSc(Mgt) Gillian Martin, BA Michael Mulreany, BA MA David Nolan, BComm Barrister-at-Law Didier Perret, BA HDipEd Almut Schlepper, Staatsexamen Thomas Schnoeber, Staatsexamen Rhava Wall, Maitrise-es-Lettres

TECHNICAL STAFF: Anthony Breen, CGLI(Electr)

# DEPARTMENT OF ELECTRICAL INSTALLATION

HEAD:

Desmond McManus, FTC(EEP)CGLI FINAL(EEP)Dept of Ed

ASSISTANT HEADS:

G. Murphy, BA MEd(Hon) TEng(CEI) HDipEd MIElecIE

J. O'Donnell, BA TEng(CEI) HDipEd

LECTURER-IN-CHARGE:

Ignatius Tighe

DEPARTMENT SECRETARY:

Margaret O'Keeffe

ACADEMIC STAFF:

E. Barber, FTC(EEP)CGLI FINAL(EEP)
Dept of Ed MIEleclE TEng(CEI)

J. Boyle, TEng(CEI) MIElecIE FTC(EEP)

R. Byrne, BA FTC(EEP)CGLI HDipEd

J. T. Cahill, TEng(CEI) MIElecIE

T. Colohan, FTC(EEP)CGLI

P. Cosgrave, FINAL CERT(EEP)CGLI

J. Davis, FTC(EEP)CGLI

T. F. Dillon, BA HDipEd FTC(EEP)CGLI

G. Eastwood, Final(EEP)Dept of Ed FETC CGLI MIElecIE TEng(CEI)

G. Farrelly, HNC(EE) ETC CGLI

M. Farrelly, TechEng(CEI) MSERT CGLI
P. Gough, Final(EEP)CGLI Final(EEP)

Dept of Ed

T. Grandison, FTC(EEP)CGLI MIElecIE

K. Kelly, TEng(CEI) MIElecIE

V. Kenny, TEng(CEI) MIElecIE FTC (EEP)CGLI

R. McCann, BA Final(EEP)Dept of Ed HDipEd

R. McCarthy FTC(EEP)CGLI

B. McNally, FTC(EET)CGLI

Nugent, Final(EEP)Dept of Ed

J. O'Brien, FTC(EEP)CGLI

K. O'Connell, FTC(EEP)CGLI

K. O'Farrell, FTC(EEP)CGLI EEP(Dept of Ed)

R. O'Rourke, TEng(CEI) MIEIIeclE FTC(EEP) CGLI

S. Sludds, BA FTC(EEP)CGLI HDipEd

W. Traynor, FTC(EEP)CGLI TEng(CEI)
MIElecIE

### PART-TIME LECTURERS:

C. Agnew

F. Ashworth

P. Behan

D. Braiden

B. Casey

T. Carton

A. Jameson

D. Lalor

N. Minihan

B. Murphy

M. Roberts

G. Ryan

D. Sheedy, BSc(Eng)

L. Trundle

#### TECHNICAL STAFF:

J. Butler

T. Clerkin

J. Comerford

P. Harding

L. Manning

N. Masterson

E. Murphy .

# ROINN INSTEALLBHÚ LEICTREACH

### PHYSICAL EDUCATION UNIT

LECTURER-IN-CHARGE: S. Byrne, BA DipPE DipEd(Lond)

### INSTRUCTORS:

Ken Doyle, Volleyball Association Coach A. Byrne, Chief Examiner, Irish Water Safety Association

J. Delaney, Leading Diver, Irish Underwater Council

R. Greenlee, Swimming Teacher

# AONAD CHOIRP OIDEACHAIS

C. Hardy, Swimming Teacher
D. Lever Black Belt, Judo

J. McKenna, Black Belt, Kenpo Karate

A. Carey, Basketball Coach

D. Tully, Water Safety Association Examiner

L. Murray, Tai-Chi-Chiun

P. Seaman, Jazz Ballet

F. Byrne, ANCAD (Education) DipAIC

#### LIBRARY

Mary Davis BSc DipLib (Senior Librarian) Martina Maher

# CHAPLAINS

CATHOLIC: Fr. R. Geary, SJ

Fr. B. Staunton, SJ

### AN LEABHARLANN

Aoibhinn Hogan Brendan McGrath

# SÉIPLÍNEACHA

CHURCH OF IRELAND Dean Victor G. Griffin

METHODIST Rev. Donald Kerr

# ADMINISTRATION

SECRETARY/REGISTRAR: David C. Spring

ACCOUNTS OFFICE: Frances Lynch

REGISTRATIONS/ADMISSIONS OFFICE Honora Fleming

EXAMINATIONS SECRETARY: Mairead Mullen

SECRETARY TO THE PRINCIPAL:
Anne-Marie O'Connell

ACTING SECRETARY TO VICE PRINCIPAL

Joan Horgan

SECRETARY TO REGISTRAR:

Linda Roche

# RIARACHÁN

CLERICAL STAFF: Maurice Boland Catherine Byrne Mary Browne Yvonne Greagsbey Lillian Nolan

Brenda McClean Colm O'Regan

TECHNICAL STAFF (Reprographics) Elma Flanagan, MSGAI

A. Cromie, AMIRT(C&G)
C. Ingle, MIRT(C&G)

MAINTENANCE SUPERVISOR: Andrew Farrelly

HEAD PORTER:

N. McCormack

```
DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN INSTITU
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
               OF
               OF TECHNOLOGY DURLIN INSTITUTE OF TECHNOLOGY DURLIN
                                                                        INSTITUT
                                                    ECIN
                                             ₹1 FC Ê
                                DUB IN -II ! TIT
                       N D
                                                                  UIL
DUBLIN INSTIT
                      3
                                                                        INSTITUT
                                                            3
                                DUB IN TIETT I TO
                    Έ
                     CHNO
                                                                  UILN
DUBLIN INSTIT
                 7
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY
DUBLIN INSTITUTE
                                                                 DUBLIN INSTITUT
               OF
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                                                                        INSTITU
                                        IS TO THE C
                                                  24
                                DUBL
                                                     EC
                                                          OI O i
DUBLIN INSTITUTE
                OF
                           C
                                                                 DUBLIN
                                         IS II I
                                              ECE
                                                     EC
                                                          T C IC
                                DUBL
                                                                 DUBLIN
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY
                                                                DUBLIN
DUBLIN INSTITUTE
                OF
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                                DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                                DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                                                                        INSTITU
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                                       INSTITUTE OF TECHNOLOGY DUBLIN
                OF
                   TECHNOLOGY DUBLIN
                OF
                   TECHNOLOGY
                                DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                                DUBLIN
                                       INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                                       INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY DUBLIN
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                                DUBLIN
                                       INSTITUTE OF TECHNOLOGY DUBLIN
                OF
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                                                                        INSTITU
DUBLIN INSTITUTE
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                                                                        INSTITU
DUBLIN INSTITUTE
                OF
DUBLIN
                                DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                OF
                   TECHNOLOGY
                                DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                                                                        INSTITU
DUBLIN INSTITUTE
                OF
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                                                                        INSTITU
                   TGODAISTEBLE ISINE ODATOOD TA
DUBLIN INSTITUTE
                OF
                                                                 DUBLIN
                   TECHNOLOGY DURLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                OF
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY
                                                                DUBLIN
                                                                        INSTITU
DUBLIN INSTITUTE
                                                                        INSTITU
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                   TECHNOLOGY DUBLIN
                                       INSTITUTE OF TECHNOLOGY DUBLIN
                OF
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN INSTITU
DUBLIN INSTITUTE
               ₹0F
DUBLIN INSTIT
            I E
                OF
                     ΞC
                                D
                                       IN
                                                 C
                                                  ETEC N D C G /
                                                                 DURLIN
                                                                        INSTITU
               OF TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY
DUBLIN INSTIT
                                                                  JBLI
DUBLIN INSTITUTE
                                                                DUBLIN
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                                                                        INSTITU
DUBLIN
      INSTITUTE
                OF
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                OF
DUBLIN
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                OF
DUBLIN INSTITUTE
                   TECHNOLOGY
DUBLIN
                OF
                                DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                                DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
                                                                        INSTITU
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                OF
                   TECHNOLOGY
                                DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                                DUBLIN INSTITUTE OF
                                                    TECHNOLOGY
                                                                DUBLIN
                                DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                OF
                                DUBLIN
                                       INSTITUTE
                                                OF
                                                    TECHNOLOGY
                                                                DUBLIN
                                                                        INSTITU
DUBLIN
      INSTITUTE
                   TECHNOLOGY
                OF
                   TECHNOLOGY
                                DUBLIN
                                       INSTITUTE
                                                OF
                                                    TECHNOLOGY DUBLIN
                   TECHNOLOGY DUBLIN INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                                DUBLIN
                                       INSTITUTE OF
                                                                        INSTITU
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                                                    TECHNOLOGY DUBLIN
                OF
                   TECHNOLOGY
                                DUBLIN
                                       INSTITUTE OF TECHNOLOGY DUBLIN
DUBLIN INSTITUTE
                OF
                   TECHNOLOGY
                                DUBLIN
                                       INSTITUTE OF
                                                    TECHNOLOGY
                                                                DUBLIN
                                                OF
DUBLIN
      INSTITUTE
                OF
                   TECHNOLOGY
                                DUBLIN
                                       INSTITUTE
                                                    TECHNOLOGY
                                                                DUBLIN
DUBLIN
                OF
                   TECHNOLOGY
                                DUBLIN
                                       INSTITUTE
                                                OF
                                                    TECHNOLOGY
                                                                DUBLIN
                                DUBLIN
                                                                        INSTITU
                OF
                   TECHNOLOGY
                                       INSTITUTE
                                                OF
                                                    TECHNOLOGY
                                                                DUBLIN
                OF
                   TECHNOLOGY
                                DUBLIN
                                       INSTITUTE
                                                OF
                                                    TECHNOLOGY
                                                                DUBLIN
DUBLIN
                                                                        INSTITU
               OF
                                DUBLIN
                                       INSTITUTE
                                                    TECHNOLOGY
                                                                 DUBLIN
DUBLIN INSTITUTE
                   TECHNOLOGY
                C
                   TECHNOLOGPY LICHTS LIST
                                       INSULTIFE OF
                                                    TECHNOLOGY DUBEN
          TIJTE
                   TECHNOLOGY DUBLIN INSTITUTE OF
                                                   TECHNOLOGY DUBLIN
                                                                        INSTITU
DUBLIN INSTITUTE OF
                   TECHNICIOCY DUDIN INSTITUTE OF
                                                    TECHNOLOGY DUBLIN
                                                                        INICTITU
```