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1989

Kevin Street College: Calendar 1989 - 1990

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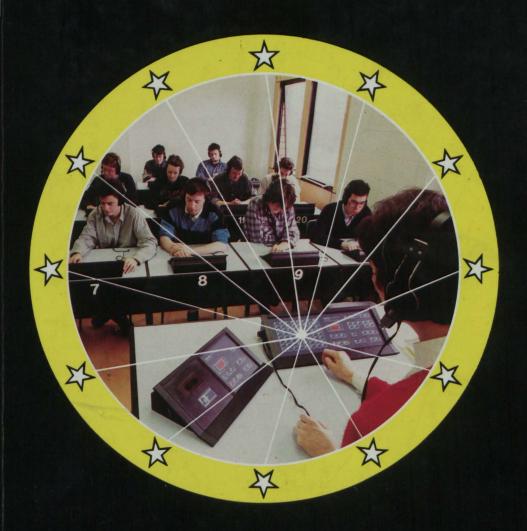
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COLLEGE OF TECHNOLOGY KEVIN STREET DUBLIN COLÁISTE TEICNEOLAÍOCHTA SRÁID CAOIMHÍN BAILE ÁTHA CLIATH

# CALENDAR 1989/90 Féilire



**DUBLIN INSTITUTE OF TECHNOLOGY** 

CITY OF DUBLIN VOCATIONAL EDUCATION COMMITTEE

## **DUBLIN INSTITUTE OF TECHNOLOGY**

## CITY OF DUBLIN VOCATIONAL EDUCATION COMMITTEE

# CALENDAR 1989/90 Féilire

COLLEGE OF TECHNOLOGY KEVIN STREET DUBLIN

COLÁISTE TEICNEOLAÍOCHTA SRÁID CAOIMHÍN BAILE ÁTHA CLIATH

# COISTE GAIRM-OIDEACHAIS CITY of DUBLIN CHATHAIR BHAILE VOCATIONAL EDUCATION ÁTHA CLIATH COMMITTEE

# INSTITIÚID TEICNEOLAÍOCHTA DUBLIN INSTITUTE BHAILE ÁTHA CLIATH OF TECHNOLOGY

COLÁISTE TEICNEOLAÍOCHTA SRÁID CAOIMHÍN BAILE ÁTHA CLIATH 8

COLLEGE OF TECHNOLOGY KEVIN STREET DUBLIN 8

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Príomh-Oide/Principal: F.M. Brennan DipEE CEng FIEI FIEE

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Monochrome Photography by James Robinson.

Every effort has been taken by the College to ensure that the information provided in this Calendar is correct at the time of going to press, but the course programmes are subject to continuing development and the College reserves the right to make changes at any time, before or after a candidate's admission. The College reserves the right to limit in size or cancel any course, class or subject grouping.

The College and the CDVEC are not bound by errors in, or omissions from this Calendar.

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# Ireland, Member of the European Economic Community Éire san gComhphobal Eorpach

The College is fully committed to participating in the Research Programmes of the Commission of European Communities and in the Comett and Erasmus Programmes. The College is always interested to hear from UETPs, Universities, Polytechnics and Technical Colleges in other Member States who would like to investigate possible collaboration in these programmes.



## ACKNOWLEDGEMENTS

# BUÍOCHAS

The College Council, staff and students of the College greatly appreciate the financial support and general sponsorship afforded by our friends in business, industry and the professions during the past year.

AGB Scientific Ltd Allied Irish Banks plc Association of Physics Technicians Association of Supervisory and **Exectutive Engineers** Association of Optometrists of Ireland Bank of Ireland plc **Bolands** Ltd Cara Computer Systems Ltd Cardiac Services Ltd H.E. Clissman Construction Industry Federation Donohoe Light Engineering Systems Ltd Electrical Contractors' Association Electricity Supply Board Ericsson Information Systems IBM (Ireland) plc Institute of Irish Bakers

Institution of Electrical and Electronics Incorporated Engineers Irish Nutrition and Dietetic Institute Lake Electronics Ltd Loctite Ltd W. & C. McDonnell Ltd Medical Supply Company of Ireland Medlabs Ltd Mercury Engineering Neltronic Ltd Opticians' Board Pagebov Ltd Renley Engineering Ltd Siemens Ltd Telecom Éireann Telemecanique (Ireland) Ltd Timeplex Ltd Yeast Products Ltd

#### Oifig an Aire Oideachais

Sráid Maoilbhríde, Baile Átha Cliath 1 Telefón 734700



# Office of the Minister for Education

Marlborough Street, Dublin 1 Telephone 734700

Márta 1989

Bhí mé an-sásta an Fómhar seo caite an leathnú nua a cuireadh le hInstitiúid Teicneolaíochta Bhaile Átha Cliath i Shráid Chaoimhín a oscailt go hoifigiúil. Cuireann an áit nua ghalánta seo saoráidí breise ar fáil le haghaidh múinteoireachta agus le haghaidh na foirne. An infheistíocht an-mhór caipitil atá i gceist, is comhartha í den mhuinín atá ag an stát as an gColáiste. Le breis agus céad bliain, tá baint an-tábhachtach aige leis an gceardoideachas agus leis an gceardoiliúint in Éirinn. Tá ról mór ag an gColáiste inár bhforbairt teicneolaíochta, ní hamháin ag an leibhéal réigiúnach ach ag an leibhéal náisiúnta freisin.

Tá raon na gcúrsaí a chuireann an Coláiste ar fáil an-leathan agus cuimsíonn sé raon an-fhairsing gníomhaíochtaí, ag gach aon leibhéal, agus obair ceardaithe agus teicneoirí san áireamh mar aon le hobair chéime agus iarchéime.

An meascán de chúrsaí páirtaimseartha agus de chúrsaí lánaimseartha atá ann, cuireann sé deis iontach ar fáil chun dul chun cinn a dhéanamh trí oideachas leanúna. Ligeann sé do dhaoine atá ag obair a bheith ag dul ar aghaidh agus a gcuid cáilíochtaí a nuashonrú nó a choinneáil bord ar bhord leis an aimsir. Thug fostóirí le fios le fada an lá gur mór acu na cúrsaí sin trína gcuid oibrithe a scaoileadh saor le dul i mbun staidéir pháirtaimseartha. De bharr na n-athruithe tapa atá ag teacht ar chúrsaí teicneolaíochta, tá tábhacht as cuimse ag baint le cúrsaí idir ghearr agus pháirtaimseartha a chur ar fáil.

During my visit to the College last Autumn I was very impressed by the range of research activities carried out with great enthusiasm by staff and post-graduate students ably assisted by the technical staff. I know that one quarter of the Dublin Millennium Post-graduate Research Fellowships were awarded to graduates of DIT Kevin Street and that this reflects the quality of teaching and learning and research in the College.

DIT Kevin Street has a growing reputation for its research activity. Most of this research is of an applied nature and focuses on either solving the technical problems of industry or on the development of new products and processes. This research and development is a very important resource for industry.



Mary O'Rourke TD Minister for Education

A new development which I have noted with particular interest is the formation of On-campus Companies. The Government is most supportive of such entrepreneurship and I wish this initiative every success. In addition I am very pleased that the College is making its expertise in research consultancy and development available to industry through its various "Centres of Expertise" and in particular the developments of Biotechnology related to food and medical science.

While we must always look to the future we must also be mindful of our heritage. So I am very pleased that the National Photographic Archive has found an appropriate home in a college where it can be integrated into the training and education of photographers in Ireland.

DIT Kevin Street führt jedoch kein abgekapseltes Dasein. Die Absolventen haben ihre Hochschule durch internationale Erfolge weithin bekannt gemacht. Viele Dozenten haben im Ausland an Projekten gearbeitet, die von HEDCO unterstützt wurden. Bei der Entwicklung in Lesotho spielt Irland weiterhin eine wichtige Rolle im Rahmen des irischen Entwicklungshilfe-Programms. Daran sind auch die Labormediziner von DIT Kevin Street wesentlich beteiligt.

In Europa ist unsere wirtschaftliche Zukunft untrennbar mit der europäischen Gemeinschaft verbunden. Die Vollendung des europäischen Binnenmarkts ist eine Herausforderung, der wir uns stellen müssen. Sie ist auch eine Chance, die wir nicht ungenutzt lassen werden.

Vor über einem Jahrhundert hat die Stadt Dublin mit großem Weitblick diese Hochschule gegründet, und sie hat sich erfolgreich immer neuen Herausforderungen gestellt. Die Hochschule hat bereits seit langem die europäische Dimension mit einbezogen und hat das Studium kontinentaler Sprachen zum festen Bestandteil ihrer Studiengänge gemacht. Sie hilft so ihren Absolventen, sich auf die Zukunft in einem erweiterten europäischen Markt vorzubereiten. Ich bin überzeugt, daß DIT Kevin Street, unterstützt durch den Strukturfonds der EG, sich eifrig an dem neuen umfassenden irischen Bildungsund Ausbildungsprogramm beteiligen wird.

Tá áthas orm an réamhrá seo a chuir le Féilire na bliana seo agus guím gach aon rath agus bail ó Dhia ar an gColáiste san am atá le teacht.

Mary O Rourke TD,

Minister for Education

Minister for Education.

1989		TERM 1 TÉ	ARMA 1				
Sept.	Friday 1 Monday 4	Commencement of Session Interviews for the following courses K100 (WBT), K172 (WSO) and in respect of course FT23 (WBD), are expected to commence.					
	Monday 11	Commencement of apprenticeship courses except where otherwise arranged.  Interviews and enrolments for part-time and evening courses commence except where otherwise arranged.					
	Wednesday 13 Monday 18	Meeting, College Meeting, Academ Re-enrolments an wholetime course	ic Council. d commence	ment dates for th	e following		
		Course Ref.	Year	Time			
		K121 (SEE)	2	09.00 hrs			
		K121 (SEE)	3	10.00 hrs			
		K121 (SEE)	4	11.00 hrs			
		K131 (WEET)	2 3 2 3	11.30 hrs			
		K131 (WEET)	3	12.00 hrs			
		K122 (WSAD)	2	14.00 hrs 14.45 hrs			
		K122 (WSAD) K122 (WSAD)	4	15.30 hrs			
		K173 (WAS)	2P	16.00 hrs			
		K173 (WAS)	3P	16.00 hrs			
		K172 (WSO)	2	16.30 hrs			
		K172 (WSO)	3	16.30 hrs			
		K172 (WSO)	4	16.30 hrs			
	Tuesday 19	K186 (WRTT)	2	09.00 hrs			
	Tuesday 13	K186 (WRTT)	2 3 2 3 2 2 2 2 3	09.30 hrs			
		K188 (WRS)	2	10.00 hrs			
		K188 (WRS)	3	10.30 hrs			
		K189 (WRCE)	2	11.00 hrs			
		K155 (WLBS)	2	11.30 hrs			
		K166 (WMT)	2	12.00 hrs			
		K166 (WMT)		12.00 hrs			
		K173 (WAS)	2B	14.00 hrs			
		K173 (WAS)	3B	14.00 hrs 14.30 hrs			
		K123 (WBD) K123 (WBD)	2 3 4	14.30 hrs			
		K123 (WBD)	4	14.30 hrs			
		K114 (WML)	2	15.00 hrs			
		K114 (WML)	2 3	15.00 hrs			
			10-10-10-10-10-10-10-10-10-10-10-10-10-1	The second secon			

		K173 (WAS) K173 (WAS) K100 (WBT) K100 (WBT)	2C 3C 2 3	16.00 hrs 16.00 hrs 16.30 hrs 16.30 hrs
	Monday 25	otherwise arranged.	enceme	commence except where nt dates for the following s:
		Course Ref. FT21, K121 (SEE) K131 (WEET) K166 (WMT) K173 (WAS) K155 (WLBS)		Time 09.30 hrs 10.30 hrs 11.15 hrs 14.30 hrs 15.15 hrs
	Tuesday 26	FT22, K122 (WSAD) K172 (WSO) K114 (WML) K100 (WBT) K187 (WRTT/WRS) K189 (WRCE) FT23, K123 (WBD)		09.15 hrs 10.30 hrs 11.00 hrs 11.45 hrs 14.00 hrs 15.00 hrs 16.15 hrs
Oct.	Monday 2 Wednesday 4 Friday 13	cing in the first term is in exceptional circums after that date and a late	uncil. ssion of s Friday tances w entry fee . Under	students to classes commen- 13th October, 1989. Only will applicants be admitted to will be payable (for session no circumstances will such 1st December 1989.
Nov.	Wednesday 1 Friday 3 Monday 6	Meeting, Academic Co Conferring Ceremony Meeting, College Coun	for 1989	Graduates.
Dec.	Monday 4 Wednesday 6 Thursday 21	Meeting, College Coun Meeting, Academic Co Final class meeting of	uncil.	m.
1990		TERM 2 TÉARMA	12	
Jan.	Monday 8 Wednesday 17	All Classes resume. Me Meeting, Academic Co		College Council.
Feb.	Thursday 1	Closing date for application through the CAO for 1		wholetime degree courses
	Monday 5	Meeting, College Coun		

Course Ref. Year

Time

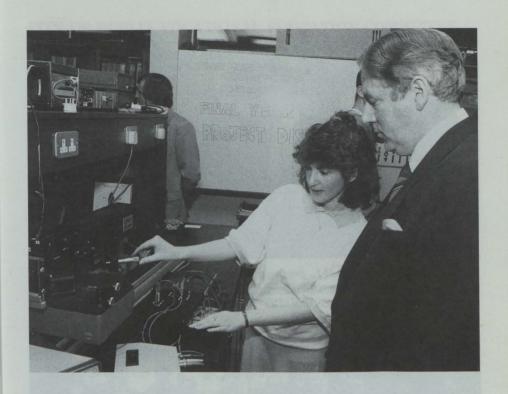
	Wednesday 7 Friday 9 Friday 16 Friday 23	Meeting, Academic Council. Closing date for applications for wholetime courses through the DIT Admissions Office for 1990/91. Fee £9. Closing date for applications for College Summer 1990 Examinations. Late closing date for applications for wholetime courses through the DIT Admissions Office for 1990/91. Fee £14.
Mar.	Monday 5 Wednesday 7 Tuesday 20	Meeting, College Council. Meeting, Academic Council. Final late closing date for applications for College Summer 1990 Examinations.
April	Monday 2 Wednesday 4 Tuesday 10	Meeting, College Council.  Meeting, Academic Council.  Final Class meeting of second term.
		TERM 3 TÉARMA 3
	Monday 23	All Classes resume.
May	Wednesday 2 Monday 7 Monday 14	Meeting, Academic Council.  Meeting, College Council.  Commencement of Summer 1990 Examination programme except where otherwise arranged.
June	Monday 4 Wednesday 6 Wednesday 20 Wednesday 27	Meeting, College Council.  Meeting, Academic Council.  All classes terminate except where otherwise arranged.  Meeting, Academic Council.
July	Monday 2	Meeting, College Council.
Aug.	Wednesday 1 Sunday 5 Wednesday 22 Monday 27	Latest date for receipt of late applications through CAO for 1990/91. Latest date for CAO 'Change of Mind' for CAO courses for 1990/91.  Final date for receipt of DIT Part I applications on payment of a late fee for 1990/91. Fee £40.  Applications invited for course K144 (ESED) by advertisments placed in the national newspapers for 1990/91. Commencement of College Supplemental 1990 Examinations Programme except where otherwise arranged. Closing date for receipt of applications for course K144
		(ESED) for 1990/91.

# **Block Release Dates for Engineering Trades: (Provisional)**

Term 1: 1989 Monday 2nd October — Friday 15th December Term 2: 1990 Monday 8th January — Friday 23rd March Term 3: 1990 Monday 26th March — Tuesday 10th April and Monday 23rd April — Wednesday 20th June

Classes will be closed on Public holidays during the session (viz. 30 October, 17 March, 4 June) and on Church Holidays except where otherwise arranged.

NOTE: This Almanac may be subject to alteration during the session.



On the 5th May 1988, the Minister for Science and Technology, Dr. Seán McCarthy TD, opened a display of experimental physics projects submitted by final-year students of the Technician Diploma in Applied Science Course (Physics Option).

The Minister presented the Association of Physics Technicians award for the Best Project to Jacqueline Ballentine-Armstrong, from Churchtown, Dublin, who developed an automated fringe counter which will have applications in the testing of lenses and in the manufacture of precision machine components. The Technician Diploma Course in Applied Science (Physics Option) is so broadly-based that Graduates have obtained employment in a wide spectrum of disciplines. They are currently employed in Medicine, Radiation Physics, Applied Optics, Electron Microscopy, Semiconductor Fabrication, Metrology, Computing, Quality Control, Technical Sales and Education.

Several graduates now have MSc's and some are currently working for their PhD. In England, graduates of the course have been accepted for MSc courses in Medical Physics and in Solid State Physics without any further requirements. Jacqueline Ballentine-Armstrong is shown explaining her project to the Minister for Science and Technology, Dr. Seán McCarthy TD.



On 1st December 1988, D.M.L. presented a valuable Sinar colour filtration system to the Photography Section, DIT Kevin Street. The photograph shows, left to right: Kieran Taaffe, Vice-principal, DIT Kevin Street, Alan Ivory of D.M.L. and David H. Davison, Head, Photography Section.



Twenty-one staff from the Danish Engineering Colleges visited the Engineering Departments of the Colleges of DIT in Bolton Street and Kevin Street in November 1988; the photograph shows the group, together with DIT engineering staff, on the steps of DIT Kevin Street.

Dr. J.C. Fisher, Head, Department of Control Systems and Electrical Engineering DIT Kevin Street is fifth from left and Mr. O. McNulty, Head, Department of Engineering Technology, DIT Bolton Street is seventh from left in the front row.

#### CITY OF DUBLIN VOCATIONAL EDUCATION COMMITTEE

# COISTE GHAIRM-OIDEACHAIS CHATHAIR BHAILE ÁTHA CLIATH

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/Baill:

Councillor Patrick Carey NT BA HDipEd (Chairman), 69 Bourne View, Ashbourne, Co. Meath.

Councillor Michael Donnelly BComm FCA (Vice-Chairman), 33 Glendoher Avenue, Rathfarnham, Dublin 16.

Councillor Andrew Callaghan BA HDipEd DipAILitt, The Abbey Theatre, Lower Abbey Street, Dublin 1.

Michael Cotter NT BA MEd, 51 Sefton, Rochestown Avenue, Dun Laoghaire, Co. Dublin. Patrick Donegan, 121 Shanard Road, Dublin 9.

Barry Early MA BComm DPA FCCA PC 161 Sutton Park, Dublin 13.

Councillor Liam Fitzgerald NT BA HDipEd TD, 117 Tonlegee Road, Raheny, Dublin 5.

Councillor Mary Hanafin BA HDipEd, 9 Brookville Avenue, Blackrock, Co. Dublin.

Seán Lyons Final(EEP)CGLI IEng(EC) MIElecIE, 30 Coolmine Woods, Clonsilla, Blanchardstown, Dublin 15.

Alderman Tomás MacGiolla TD, 49 St. Laurence's Road, Chapelizod, Dublin 20.

Councillor Charles McManus BA HDipEd, 14 Glenaulin Park, Chapelizod, Dublin 20.

Enda O'Callaghan, Students' Union, DIT College of Commerce, Rathmines, Dublin 6.

Councillor Michael O'Halloran PC, 141 Ardlea Road, Dublin 5.

Séamus Puirséil NT MA HDipEd, 16 Hampton Cove, Baile Brigín, Co. Átha Cliath.

#### Offices/Oifigí:

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

#### THE DUBLIN INSTITUTE OF TECHNOLOGY

# INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH

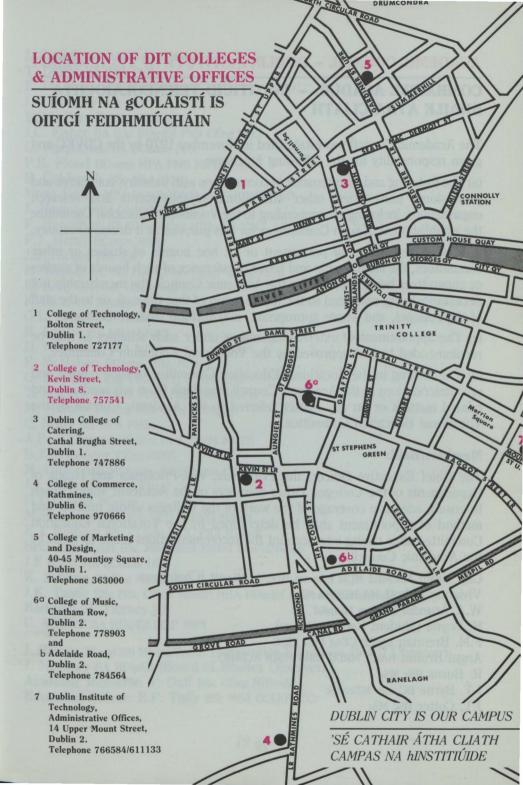
In 1978 the Dublin Institute of Technology was established by the City of Dublin Vocational Education Committee by placing its six Colleges under a single Governing Body. The Colleges of Technology in Bolton Street and Kevin Street are the largest of the Colleges, the other constituent Colleges being 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 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.

#### **GOVERNING BODY**

# BORD STIÚRTHA

Michael Cotter NT BA MEd (Chairman)
Councillor Patrick Carey NT BA HDipEd
Councillor Andrew Callaghan BA HDipEd DipAILitt
Councillor Liam Fitzgerald NT BA HDipEd TD
Councillor Michael O'Halloran PC
Séamus Puirséil NT MA HDipEd
Michael O'Donnell MEconSc BE BComm CEng MIProdE FIEI
Tom Fitzpatrick
Gerry Shanahan
Wolfgang Truetzschler DipPsych
Chris Wall
Student Representative



# ACADEMIC COUNCIL - DUBLIN INSTITUTE OF TECHNOLOGY

# COMHAIRLE ACADÚIL - INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH

The Academic Council was established in November 1970 by the CDVEC and given responsiblity for the following functions:

- (a) The fostering and maintenance of connections with industry, commerce and professions, universities, other educational establishments and research organisations, including recommending to the Vocational Education Committee the establishment of such Committees for this purpose as it deems necessary.
- (b) The establishment of permanent or ad hoc boards of studies or other committees, the membership and terms of reference of such boards of studies or committees being specified by the Academic Council, the membership not necessarily being restricted to the membership of that Council, or to the staff of the colleges, and where appropriate, may include student members.
- (c) The appointment of external examiners under such schemes as may be recommended to and approved by the Vocational Education Committee.
- (d) The making to the Vocational Education Committee of such reports and recommendations as the Academic Council may think fit on any academic and related matters or on any matter referred to the Academic Council by the Vocational Education Committee.

## Members/Baill:

The Chief Executive Officer, the Principals, Vice-Principals and Heads of Departments of the Colleges. Other members of the Academic staffs chosen to ensure adequate coverage of the work of the Colleges whose number and method of appointment shall be determined by the Vocational Education Committee after taking into account the recommendations made to them by the Academic Council.

C.L. Grant MA MEd MLitt BComm HDipEd MInstM (Chairman) Vivienne Abbott MA HDipEd MIL

W.J. Arundel BComm HDipEd

R. Boyne (Student Representative)

F.M. Brennan DipEE CEng FIEI FIEE

Angel Bruton BArch MRIAI RIBA MSDI ACIAHO

R. Burns BSc MSc

J.T. Byrne BComm MEconSc

J.T. Cotter BSc MSc

J. Creagh MA ANCA ATC MSDI

T. Dalgic BA MBA PhD

E. De Burca FRICS FCIOB

J.J. Doherty BA

Eilish Farrell BMus MMus

J.C. Fisher BA BAI HDipEd PhD CEng MIEI

G. Fitzpatrick BA BComm FCA

P.R. Flood BComm MPA FMII MIITM

B. Goldsmith BSc MSc DPhil

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 FIEE

E. Kelly BA(Mod) MSc(Mangt Sc)

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

O. McNulty CEng FIEI ARTCS MIStructE

T. Madden BComm FIMA FIIF MMII MIITM

M. Murphy DipEng MSc CEng MIMechE C. Nutty BA MPA FMS

A.P. O'Connor BComm DPA MIPM MIITD

B.J. O'Connor CEng MIEE

M. O'Donnell MEconSc BE BComm CEng FIEI

J.J. O'Keeffe BArch FRIAI

P.J. O'Neill BComm

Marlene Proctor MSc PhD MIFSTI MIHCI

E.J. Rothery BSc CChem FRIC FICI MIBiolI

Bríd Ann Ryan BSc MSc CBiol MIBiol DipIndMicrob

J.F Ryan MA BComm DPA

K. Sullivan DipEng MSc MIEI

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

Kathleen M. Tierney MA

G. Walker BA HDipEd MRP MIPI

J. Bernie TEng(CEI) MInstGTechE (Apprentice Education Board Observer)

J. Morrisey BA HDipEd (Board of Studies Observer)

Academic Registrar: T. Duff BSc CEng MIProdE Education Officer: E.P. Tuffy BSc MEd CGLI(FETC)



Membership Diploma, British Computer Society 1988 Front, (left to right): Lorna Healy, David Yates, Kathleen Soden. Back, (left to right): Vincent Wall, Robert Martin, Mark Foley, Dr. Brendan O'Shea, Dr. Brendan Goldsmith.

# GUIDE TO COURSES IN THE DUBLIN INSTITUTE OF TECHNOLOGY

# TREOR DO CHÚRSAÍ SAN INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH

idea of the range of the topics mentioned other subjects. Cours	re are not exhaustive but give some courses available in DIT. Some of d are studied in conjunction with se duration and final qualifications mation contact the relevant college.	Bolton Street	Catering	Kevin Street	Marketing & Design	Commerce	Music
Natural and Applied Science Eargna Aicionta & Fheidhmeach	Analytical and Applied Science Applied Mathematics Applied Physics Aquatic Biology Biochemistry			•			
	Biology Biotechnology Botany Chemical Technology Chemistry			0 0			
	Computer Science/Programming Environmental Science Fine Chemical and Pharmaceuticals			•		•	
	Food Technology Food Science Forensic Science Genetics		•	0			
	Mathematics Mathematical Physics Nautical Studies			•			
	Microbiology Oceanography Pharmacology Physics			•			
	Physiology Polymer Science Science of Materials Statistics			0	1		
	Systems Analysis Zoology			•			

idea of the range of the topics mentione other subjects. Cours	ere are not exhaustive but give some courses available in DIT. Some of d are studied in conjunction with se duration and final qualifications mation contact the relevant college.	Bolton Street	Catering	Kevin Street	Marketing & Design	Commerce	Music
Medical and Health	Animal Nursing		1	•	2012	110	
Related Science	Dentistry/Dental Technology			•	201		
Gar-leigheas agus	Dietetics						
Sláinte	Environmental Health		•				
	Health Science		•				
	Human Nutrition						
	Medicine						
	Medical Laboratory Sciences						
	Ophthalmic Optics			•			
	Physiological Measurement			•			
	Sciences for Nurses					•	
Social Sciences	Community Care						
Eargna Soisialach	Child Care						
	Social Science/Sociology					•	
Arts	Communication Studies			•		•	
Ealaíona	Drama Studies						
Ediaiolia	Economics			•		•	
	English/use of English			O		•	
	Ethics						-
	European Studies			•			$\vdash$
	French			•		•	
	Geography						Ť
	German						•
	Irish			•		•	
	Irish Studies						
	Italian	100					
	Journalism					•	Ť
	Linguistics/Applied Linguistics			•			
	Music						
	Philosophy						
	Political Science						
	Psychology					•	
	Regional Studies						
	Russian			•			
	Social Studies					•	
	Tourism		•				
	Translation			•			

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idea of the range of the topics mention other subjects. Cou	ere are not exhaustive but give some f courses available in DIT. Some of ed are studied in conjunction with rese duration and final qualifications ormation contact the relevant college.	Bolton Street	Catering	Kevin Street	Marketing & Design	Commerce	Music
Fine and Applied	Antique Furniture Restoration/						
Arts	Furniture Technology						
Na hEalaíonna	A . D l C						
Feidhmeacha	Craft/Ceramic Design						m.
- Claimedella	Design		1,34				
	Fine Arts	100					
	Graphic and Reproduction						
	Technology		•				
THE REAL PROPERTY.	History of Art		•				
	Industrial/Product Design		•	•	•		
	Model Making						
	Photography		A STATE	•			
	Retail Display	100		-			
	Visual Communication		•	•	•		
Commercial and	Accountancy			•	•	•	
Business	Administrative Systems/						
Administration				0		•	8113
Tráchtail agus	Advertising					•	
Riarachán	Agri-Business						
Marachan	Auctioneering	•					
	Bakery Production/Management			•			
	Business Administration		•	•	•	•	
	Business Studies/Commerce			•		•	
	Company Secretaryship						
	Construction Economics	•					
	Distribution Management				•	•	
	Environmental Economics						
	Environmental Management		•				
	Hotel and Catering Management		•				
	Management Finance	•	•	•	•	•	
	Marketing	•	•			•	
	Medical Records			•		1	
	Public Administration				•		
	Public Relations		100			•	
	Work Study					•	
Law/Dlí	Legal Studies				-	•	
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dea of the range of he topics mentione other subjects. Cours	re are not exhaustive but give some courses available in DIT. Some of d are studied in conjunction with se duration and final qualifications mation contact the relevant college.	Bolton Street	Catering	Kevin Street	Marketing & Design	Commerce	Misir
Engineering and	Agricultural Engineering			100	Ba	14	
Architecture	Architecture	•					Г
nnealtóireacht agus	Building Management		- 3 - 3				
illtíreacht	Chemical Engineering						
Ammeacht	Civil Engineering						
	Computer Engineering			•			
	Construction Studies	•					
	Electrical Engineering					1	
	Electronic Engineering						
	Engineering Draughtsmanship			•			
	Engineering Science	•					
	Building Services Engineering						Γ
	Geo-Surveying						
	Industrial Engineering	•		•		•	
	Instrumentation and Control						
	Engineering				700	100	
	Marine Engineering					11	
	Manufacturing Technology						L
	Materials and Production						
	Engineering						L
	Mechanical Engineering						
	Mechanical and Production		-				
	Engineering	•					
	Mining Geology/Mineral Engineering						
	Motor Industry Management	•				10	
	Plastics Engineering						1
	Printing	•				a	L
	Production Engineering						L
	Telecommunications Engineering			•			1
	Site Management	•					1
	Structural Engineering	•			711		1
	Surveying	•					1
		-	-	-	-		1
		-					1
					-		1
	The second secon	-	-	-	-		1
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	Carlotte and the second						1

# DUBLIN INSTITUTE OF TECHNOLOGY COURSE/CAREER ADVISORY PROGRAMME

# CLÁR EOLAIS CHURSAÍ/GHAIRMEACHA INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH

The six Colleges of the Dublin Institute of Technology offer a large number of courses covering a wide range of disciplines and areas of study. The Institute's courses are of their nature vocational and in entering one of them you may be choosing the direction of your career in life as well as in your studies. If, therefore, you are considering entering a course in the Dublin Institute of Technology it is important to make a careful choice of course among those which you think are best suited to your personality and talents.

There are a number of sources of information which will help give you an insight into different careers and the related third-level courses.

The Institute, for its part, provides information on its courses by means of College Prospecti, Booklets, Admissions Handbook and Course Leaflets. A particular feature of the Institute's activities in the area of information provision is the Annual Series of Course/Career Advisory Evenings. This series consists of a programme of 19 Talks which take place on weekday evenings during October and November.

Each evening deals with a group of DIT courses and consists of a formal presentation by a senior member of the Institute's academic staff which is followed by a Question/Answer Session during which a DIT Panel discuss the questions put by the participants. The DIT Panel consists of DIT Lecturers, graduates of the DIT courses being discussed and representatives of Business and Industry. The participating audience consists mainly of Leaving Certificate students, parents and Guidance Counsellors.

The objective of the Course/Career Advisory Evenings is to afford prospective students the opportunity to discuss their career aspirations with experts in particular areas of study. Tickets for the Advisory Evenings are available from early September at:

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

DIT also provides an annual full day of general advice in relation to careers and academic courses for students from outside the Dublin area.

Consideration will also be given to DIT Personnel attending Careers Exhibitions and Conferences organised by the Second Level Schools.



Mr. Frank Nutley (left) presenting the AGB Medal for First Place in Chemistry in the Final Examination of the Diploma in Applied Sciences to Mairéad Reynolds, 56 Glenbeigh Road, North Circular Road, Dublin 7. Mairéad attended St. Joseph's Secondary School before coming to DIT Kevin Street. On right of picture is Mr. E.J. Rothery, Head, Department of Chemistry.



A view of the Gleeson Hall, DIT Kevin Street, during Freshers' Day 1988, when the College Clubs and Societies welcome back old members and seek new members among the first year students.



Tá Cumann Gaelach láidir san gColáiste agus i 1988 bhronn Bord na Gaeilge deontas speisialta ar an gCumann ar a dtugtar Íota.
Taisbeanann an griangraf ó chlé, Míchéal Gré, Príomh Feidhmeanach, Bord na Gaeilge ag bronadh an seic ar Eoin Ó hUiginn, Cisteoir Íota agus Pól Mac Fhlannadha, Uachtarán Íota.



Gleeson Hall, DIT Kevin Street, during the Course/Careers Advisory Evening, October 1988, on Applied Sciences for Leaving Certificate students.

# DUBLIN INSTITUTE OF TECHNOLOGY COURSE/CAREER ADVISORY EVENINGS 1989

# TRÁTHNÓNAÍ COMHAIRLE GHAIRM/CHURSAÍ INSTITIÚID TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH 1989

Series Timetable Srathchlár

Courses/Careers Cúrsaí/Gairmeacha	Date Dáta	Venue/College Láthair/Coláiste
Oíche Ghairmeach tré Ghaeilge i dtaobh Chursaí an Choláiste Teicneolaíochta, Sr. Caoimhín	Luain 2ú Deireadh Fomhair 1989	Halla Ó Glaisín, Sr. Caoimhín
Applied Sciences	Mon. 9th October 1989	Gleeson Hall, Kevin Street.
Health Sciences	Tues. 10th October 1989	Gleeson Hall, Kevin Street.
<b>Business Studies</b>	Wed. 11th October 1989	Gleeson Hall, Kevin Street.
Art & Design	Thurs. 12th October 1989	Gleeson Hall, Kevin Street.
Engineering (Mechanical/ Structural, Production, Building Services, Automobile)	Mon. 16th October 1989	Bolton Street.
Food & Environmental Health	Tues. 17th October 1989	Cathal Brugha St.
Auctioneering/Environmental Economics	Wed. 18th October 1989	Bolton Street.
Architecture/Architecture Technician	Mon. 23rd October 1989	Bolton Street.
Construction Economics/ Construction Technician/ Geo-Surveying	Tues. 24th October 1989	Bolton Street.
Computer Studies	Wed. 25th October 1989	Gleeson Hall, Kevin Street.
Hotel Management	Mon. 6th November 1989	Gleeson Hall, Kevin Street.

Social Studies	Wed. 8th November 1989	Gleeson Hall, Kevin Street.
European Languages	Thurs. 9th November 1989	Gleeson Hall, Kevin Street.
Catering & Bakery	Mon. 13th November 1989	Cathal Brugha St.
Music	Tues. 14th November 1989	College of Music (Chatham Row).
Distribution	Wed. 15th November 1989	College of Market- ing & Design
<b>Electrical Installation</b>	Thurs 16th November 1989	Gleeson Hall, Kevin Street.
Engineering (Electrical, Electronic, Control)	Mon. 20th November 1989	Gleeson Hall, Kevin Street.
Communications	Tues. 21st November 1989	Gleeson Hall, Kevin Street.

The programme will commence each evening at 19.30 hrs and finish at 21.30 hrs. The events in bold type relate to presentations by the Departments of the Dublin Institute of Technology, Kevin Street.

# Course/Career Advisory Day for those outside Dublin

# Lá Comhairle Ghairm/Chursaí doibh siúd ó na Cúigí

On Saturday 21st October 1989 the Dublin Institute of Technology will organise a comprehensive Course/Career Advisory Day for Guidance Counsellors, Parents and Pupils living outside the Dublin area. The event will take place in the Dublin Institute of Technology at Kevin Street and all aspects of the academic work of the six Colleges within the DIT will be covered.

## **COLLEGE COUNCIL**

# COMHAIRLE AN CHOLÁISTE

Councillor Liam Fitzgerald NT BA HDipEd TD (Chairman)

Councillor Michael Donnelly BComm FCA (Vice-Chairman)

Michael Cotter NT BA MEd

Patrick Donegan

Francis Brennan DipEE CEng FIEI FIEE (Principal)

Thomas P. Grennan BSc PhD (Staff Representative)

Seán Hanratty FIMLS (Representative of Industry)

Patrick Laffan (Representative of DCTU)

Patrick McCarthy BSc PhD CChem MRSC FICI (Representative of Industry)

Kenneth A. O'Reilly BE MIE CEng MIEI MIMechE (Representative of Industry)

Lisa Tinley (Student Representative)

# Industry Liaison & Staff Development Sub-Committee of College Council

## Fó-choiste Forbartha na Comhairle

The objectives of this sub-committee are to encourage, foster and promote closer links with industry, semi-state concerns, state institutions and the various Divisions of the Commission of the European Communities.

Seán Hanratty FIMLS (Chairman)

Councillor Liam Fitzgerald NT BA HDipEd TD

Michael Cotter NT BA MEd

Patrick Donegan

Patrick McCarthy BSc PhD CChem MRSC FICI

Kenneth A. O'Reilly BE MIE CEng MIEI MIMechE

J. Kieran Taaffe BSc MSc CPhys MInstP MBA HDipEd DipProd Barrister-at-Law Jacqueline Harrington (Recording Secretary)

# TRADISIÚN FADA TEICNEOLAÍOCHTA Eolaíocht agus Innealtóireacht ar fáil i Sráid Caoimhín ó 18879.

Ar an 24ú lá de mhí na Samhna 1988, d'oscail an t-Aire Oideachais Máire, Bean Uí Ruairc foirgneamh nua, a thug forbairt do spás agus áiseanna an Choláiste. Feachaimís siar ar ghinniúint agus breith an oideachais teicneolaíochta in Éirinn agus go háirithe ar an forbairt atá tagaithe air sa láthair seo ó shin i leith.

Leiríonn stair na gColáistí Teicneolaíochta i mBaile Átha Cliath fás agus forbairt oideachais teicneolaíochta in Éirinn. I rith 1886/1887 agus de bharr agallaimh idir Choiste Sealadach agus Bardas Átha Cliath aontaíodh scoil teicneolaíochta a thógaint i Sr. Chaoimhín. D'oscail an scoil i nDeireadh Fomhair 1887 le 10 muinteoirí, 78 micleinn agus 12 abhair teagaisc. D'oscail Scoil na gCeard i rith titim mhór ins an tionsclaíocht tairgaíochta i mBaile Átha Cliath agus i Sasain féin. Ins an naoiu-aois deag tháinig bagairt ar thionsclaíocht i Sasain trí mhéadú mór san dúshlán on Mhór-Roinn agus ó na Stait Aontaithe. I Sasain chonacthas an dainséir agus bunaíodh Coimisiún Ríoga in 1881 le modhanna oideachais teicneolaíochta a phlé. De bharr a gcuid fiosrúchán reachtaíodh Acht Teagaisc Teicneolaíochta 1889 a chuir curam an oideachais ar Chomhairlí Áitiúla. In Éirinn níor bunaíodh Comhairlí Áitiúla go dtí gur tháinig an Acht Rialtais Áitiúil (Éire) isteach i 1898.

I measc na ndaoine a bhí pairteach i mbunú an chéid Scoil Teicniúil i Sráid Caoimhín bhí Arnold Graves, uncal leis an bhfile, a bhí mar runaí don mBord Stiúrtha. Thug Charles Stewart Parnell agus Michael Davitt gach tachaíocht agus bhí an t-ollamh clúteach de Choláiste na Trionóide George Francis Fitzgerald ina bhall den mBord Stiúrtha thosaigh. Mhúin Michael Cusack Gaeilge san scoil. Bhí clann Guinness go fial flaithúil agus thug Edward Cecil Guinness, an céad Iarla Iveagh deontas de £2,500 i 1886 leis an tús a thosnú. Chuidigh saineolaithe an Royal College of Science, Royal College of Surgeons agus an Ollscoil Caitiliceach leis an mbreith.

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 Teagaisc Teicneolaíochta (1891) in Éirinn. D'ainneoin na ndeacrachtaí bhí 513 micleinn ar na rollaí san seisiúin 1891–1892. Ó 1893, nuair a chuir Bardas Átha Cliath an tAcht i bhfeidhm, bhí deontaisí le fáil le trealamh saotharlainne a leathnú agus le cúrsaí nua a stiúiriú. Chonachthas méadú mór ar tinreamh na scoile in 1895 de bharr na forbartha seo agus tógadh teach, 37, Sr. Chaoimhín (treasna an bhothair on scoil) are chíos leis an bhreis a fhreastal. Chuir an teach seo sé seomraí ranga ar fáil ach faoi 1897 agus le 925 micleinn are na rollaí bhí foirgneamh nua ag teastáil. Tosnaíodh an tógail i Lúnasa 1899 agus osclaíodh an scoil nua i 1901.

Faoi 1904 bhí brú arís ar spás do na ranganna agus tógadh 12, Cearnóg Rutland (anois Cearnóg Parnell) are chíos; 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 ón Roinn Talmhaíochta go dtí an Rionn

Oideachais. I 1930 tháinig an tAcht Gairm-Oideachais (1930) i bhfeidhm agus is ó shin i leith atá stiúiriú teagaisc teicneolaíochta faoi réir na gCoistí Ghairm-Oideachais ar fud na tíre.

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

Le tús an tarna chogaidh tháinig éileamh mór ar chúrsaí nua. I 1940 bunaíodh cúrsa ar Sheirbhís Raidio, cúrsaí reamh-Ollscoile ins na hAbhair Eargna; i 1942 bunaíodh cúrsa trí bliana in Innealtóireacht Raidio, cúrsaí don Radharcmhaisteoireacht, Poiticeireacht and Raidgradfadoireacht. Bunaíodh fresin cúrsaí Céime BSc d'Ollscoil Londain agus cé nach raibh ach beirt ar an gcúrsa i 1940 bhí 17 faoina bhun i 1949. Ba ins na blianta seo a tháinig cruth Institiúide Triúleibhéil ar an gColáiste.

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

I 1955 ceanaíodh dhá acra i Rae Port Chaoimhín agus i 1959 bhí na pleananna do choláiste nua críochnaithe. I 1963 thosnaigh an tógáil ar an bhfoirgneamh atá inniu 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 mór ar chúrsaí an Choláiste. Faoi 1960 bhí 38 foirne seasmhach sa Choláiste agus bhí 21 cúrsaí lán-aimsireacha dá reachtáil. I rith an ama seo freisin bunaíodh cúrsaí speisíalta teagaisc do theicneoirí — teicneoirí innealtóireachta i 1960 agus 1962, teicneoirí saotharlainne 'eighis 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 ceangal acadúil idir an Coláiste agus Coláiste na Trionóide mar a bronntar Céimeanna Ollscoile san Eargna, san Daon-Bheathú, agus san Innealtóireacht ar mhicleinn a bhaineann Dioploma an Choláiste amach.

I 1978 nascadh na sé Coláistí i mBaile Átha Cliath in Institiúid amháin Teicneolaíochta faoi riar an Choiste Ghairm-Oideachais. Tugadh Institiúid Teichneolaíochta Bhaile Átha Cliath air agus is Coláiste den Institiúid é an ceann i Sráid Chaoimhín a bhaineann le h-Eargna agus le hInnealtóireacht Leictreach, Leictreonach agus Cumarsáide agus le cúrsaí gar-leighis.

I mbliana tá 200 d'fhoireann acadúil seasmhach sa Choláiste, 300 d'fhoireann pháirtaimsireach agus breis is 4500 micleinn. Tá 80 cúrsaí fó-chéimeach le fáil maille le haiseanna iar-cheimeacha agus Cúrsaí Proifisiúnta. Tá taighde iar-chéimeach agus iar-dhochtúireachta idir lamha faoi dheontaisí ó eagraisí in Éirinn, ón Roinn Oideachais, ón gComhphobal Eorpach agus ó ionadaithe eagsúla seachtracha eile.

Le mhéadú mór ó 1980 anonn agus de bharr rachairt ar áiteanna ins na Coláistí Teicneolaíochta Triúleibhéil cuireadh clár tógala i bhfeidihm a tugadh chun críocha i 1988 le foirgneamh agus aiseanna nua; tá 6500 meadair cearnach spáis breise curtha leis on Choláiste, 25 seomraí ranga, 1200 meadair cearnach de leabharlann nua agus an achar cheanna mar bhialann nua.

Tá céad agus a haon bliain curtha fén gColáiste agus glacann sé le diograis fé dhúshlán an tarna chéid. Tá tradisiún bainte amach, tá na céimithe cruthaithe san tsaol, in Éirinn is i gcéin, tá cumas fairsing air idir foireann agus áiseanna; mic-leinn den céad scoth. Braitheann todhcaí agus leas na tíre ar leanúint foirfúil na forbartha.



Ar an 24ú lá de Mhí na Samhna 1988, d'oscail an t-Aire Oideachais Máire Bean Uí Ruairc TD foirgneamh nua a chuir ar fáil áiseanna nua mar Bialann agus Leabharlann agus nua ionaidí do theangacha na mór-roinne agus do mhúineadh chursaí ríomhaireachta. Taispeanann an griangraf an t-Aire ar chlé le Comhairleor Pat Carey, Cathaoirleach, Choiste Ghairm-Oideachais, Chathair Átha Cliath sa lár agus F.M. Brennan, Príomh-Oide an Choláiste ar dheis.

# BORD FEIDHMIÚCHÁIN AN CHOLÁISTE

The College Executive Board helps in co-ordinating the work of the College and its academic programmes. It comprises the Principal, Vice-Principals, Heads of Departments and the Secretary/Registrar. It has responsibility for approving and monitoring of courses leading to DIT and College awards, including examinations and student admission requirements. It also has an important role in promoting research and developing College academic policy.

## PRINCIPAL/PRÍOMH OIDE:

F.M. Brennan DipEE CEng FIEI FIEE

## VICE-PRINCIPALS/LEAS PRÍOMH-OIDÍ:

G.L. Latchford BE BSc CEng MIEI
J.K. Taaffe BSc MSc CPhys MInstP MBA HDipEd DipProd Barrister-at-Law

#### DEPARTMENT HEADS/CEANNASAITHE NA ROINN:

## Biological Sciences/Bitheolaíochtaí:

Brid Ann Ryan BSc MSc CBiol MIBiol DipIndMicrob

#### Chemistry/Ceimic:

E.J. Rothery BSc CChem FRSC FICI MIBiolI

## Control Systems & Electrical Engineering/ Innealtóireacht Leictreach agus Riartha:

J.C. Fisher BA BAI HDipEd PhD CEng MIEI

#### Electrical Installation/Instealbhú Leitreach:

Desmond McManus FTC(EEP)CGLI Final(EEP)DeptofEd

#### Electronic and Communications Engineering/ Innealtóireacht Leictreonach agus Cumarsáide:

B.J. O'Connor CEng MIERE

## Languages and Industrial Studies/Teangeolaíocht agus Staidéar Gnó: Kathleen M. Tiernev MA

Mathematics, Statistics and Computer Science/ Matamaitic, Statistic agus Ríomhaireacht:

B. Goldsmith BSc MSc DPhil

## Physics/Fisic:

M. Hussey BE MS PhD CPhys FInstP CEng FIEE

# SECRETARY/REGISTRAR: RUNAÍ/CLÁRAITHEOIR:

D.C. Spring GradIPM MACRA

#### COLLEGE EXECUTIVE BOARD

# BORD FEIDHMIÚCHÁIN AN CHOLÁISTE



F.M. Brennan



B.A. Ryan





E.J. Rothery



J.C. Fisher

#### **COLLEGE EXECUTIVE BOARD**

### BORD FEIDHMIÚCHÁIN AN CHOLÁISTE



D. McManus



B.J. O'Connor



B. Goldsmith



M. Hussey



K.M. Tierney



D.C. Spring

#### THE COLLEGE AND ITS DEPARTMENTS

#### AN COLÁISTE AGUS NA ROINN

Applied Sciences and Engineering have been very strongly represented in the curriculum since the first College was opened in Kevin Street in 1887. From a beginning one hundred years ago with 10 academic staff teaching 78 students in 12 different subjects the College has developed and evolved over the intervening century to the present position where 200 fulltime and 300 part-time academic staff teach 4,500 students on 80 different courses in Engineering, Applied Science, Health Science, Food Science, Mathematics, Computing and Languages.

#### Science/Eolaíocht

The four Departments of Biological Sciences, Chemistry, Mathematics, Statistics and Computer Science and Physics provide 45 of the 80 courses offered in the College. The spectrum of tuition covers a broad range of fulltime technician diploma and wholetime degree/professional programmes in the disciplines associated with the four departments mentioned above in addition to providing closely associated opportunities for part-time and evening students. The science departments strongly subscribe to the academic ethos of the DIT in which students who have displayed ability in the first courses of their choosing and who possess the appropriate motivation are facilitated to progress to higher level courses within their fields of study. Students who obtain good results in Certificate and Diploma courses in the Regional Technical Colleges have also successfully transferred to higher level technician and degree/professional programmes in the Science and Mathematics Departments.

#### Engineering/Innealtóireacht

The Department of Control Systems and Electrical Engineering and the Department of Electronic and Communications Engineering provide a range of courses which cater for some forty percent of the students currently enrolled in the College. These courses include technician, technician engineer and degree/professional level programmes as well as a number of part-time courses, many of which are designed to meet the needs of personnel in industry. Since 1975, The University of Dublin has awarded the degree of BSc(Eng) to successful graduates of the four-year wholetime Honours Diploma Course in Electrical Engineering. A major revision of this course was undertaken in 1982 to accommodate the many changes which have taken place in electrical/electronic engineering. This resulted in the

introduction of three specialist options in the areas of Electronic, Communications and Computer Engineering, Electrical Power Engineering, and Control Systems and Instrumentation Engineering. Many of the academic staff in the engineering departments are actively involved in research in these areas.

#### Long Association with Professional Institutes/ Comhceangal fada leis na hInstitiúidí Proifísiúnta

The College of Technology, Kevin Street, is unique among Irish third-level institutions in the provision of tuition for a range of courses leading to the Graduateship Examinations of the Professional Institutes catering for scientists and mathematicians. These links with the Scientific Professional Institutes have been developed over a long period of time. These programmes have afforded an opportunity to the person working in industry to acquire an academic qualification at least the equal of an honours degree and have also catered for those holding qualifications less than that of an honours degree or equivalent who wish by further study to obtain full professional qualifications. The Department of Biological Sciences provides courses for the examinations of the Institutes of Biology, Medical Laboratory Sciences and Food Science and Technology. The Department of Chemistry provides courses leading to the Examinations of the Royal Society of Chemistry. The Department of Mathematics provides courses leading to the Examinations of the Institute of Mathematics and its Applications, The Institute of Statisticians and the British and Irish Computer Societies. The Department of Physics has had a long association with the Institute of Physics and the Diploma in Applied Physics offered by that Department is recognised by the Institute of Physics as equivalent to an honours degree in Physics.

The engineering departments have for many decades provided courses to prepare students for the examinations of the professional institutions. The Institution of Engineers of Ireland originally accredited the degree-level course in the early seventies and for many years this course has been accepted by the Institution of Electrical Engineers as satisfying the academic requirements for Corporate Membership.

#### Department of Biological Sciences/Roinn na Bitheolaíochtaí

The Department of Biological Sciences caters for those students wishing to follow careers in Applied Biology, Medical Laboratory Sciences, Human Nutrition, Food Science and Technology, Veterinary Nursing and Medical Records

Administration. A three-year wholetime Technician Diploma in Applied Biology covering the study of Biochemistry, Microbiology, Biotechnology, Cell Biology, Food Science and Biomedical Science caters for those seeking a good technician qualification in Applied Biology. The College initiated courses in Medical Laboratory Sciences in Ireland and currently courses are provided at Certificate and Diploma Level. Furthermore, specialisation for the Special Fellowship of the Institute of Medical Laboratory Sciences is offered in Medical Bacteriology, Blood Group Serology and Transfusion, Clinical Chemistry, Haematology, Histopathology and Immunology.

The College welcomes the recent decision of the Department of Education sanctioning the provision of a degree programme in Medical Laboratory Sciences within the College. Since 1946 the DIT has provided the only course for the education and training of dietitians in the country and the Department of Biological Sciences now jointly teaches and administers with the Faculty of Health Sciences in the University of Dublin an honours degree course leading to a BSc(Human Nutrition and Dietetics). The study of Food Science and Technology has been established in the College for over sixty years and courses are provided at pass and honours degree levels.

More recently the Department established the Graduateship of the Institute of Biology course. This Honours Degree equivalent course in biochemistry is available to those with Diplomas in Biology or Chemistry, the Special Fellowship of the Institute of Medical Laboratory Sciences, Pass Degrees and General Degrees.

#### Department of Chemistry/Roinn na Ceimice

In 1976 the Department of Chemistry, Mathematics and Physics co-operated in initiating the Diploma in Applied Sciences. Graduates of this course also qualify for the award of the BSc(Applied Sciences) from the University of Dublin. All students on this course take Chemistry, Mathematics and Physics in Year 1. Two of these subjects are taken in Year 2 and the same two subjects studied in Year 3 and 4. Students graduate with an honours degree in two major science subjects and also satisfy the academic requirements for membership of the Royal Society of Chemistry, the Institute of Mathematics and its Applications and the Institute of Physics. All students take Management Studies and a continental Language (French or German) in the first three years of the course. This has been found by employers to be a very attractive and innovative aspect of an honours degree in science and has greatly facilitated many graduates in their careers.

The Department of Chemistry also provide a part-time course for the Royal Society of Chemistry. High level technician education is provided by a three

year full-time course in Applied Chemistry. This course may also be taken on a part-time basis over six years. All chemistry courses in the College emphasise the applied aspects of chemistry, both industrial and analytical. Plastics technology is also included in industrial chemistry syllabuses.

Inservice Courses for teachers are provided by the Chemistry Department in co-operation with the Department of Education and the Institute of Chemistry of Ireland. During the session seminars are arranged on important specialist topics involving prominent visiting lecturers from home and overseas.

#### Department of Mathematics, Statistics and Computer Science/ Roinn na Matamaitice, Statistice agus Ríomhaireachta

The Department of Mathematics, Statistics and Computer Science in addition to its fulltime degree programmes in Mathematics and Computer Science, also provides a wholetime three year course in computing. Suitably qualified candidates from this programme are eligible for exemption from the Part I examinations of the British Computer Society. Part-time professional education is catered for by the provision of programmes leading to the Professional Examinations of the Institute of Statisticians, the Institute of Mathematics and its Applications and the British Computer Society. The Department has research interests in a number of areas of pure and applied mathematics and has had a number of post-doctoral fellows in Mathematics since the inclusion of DIT in the Department of Education post-doctoral fellowship scheme in 1983.

#### Department of Physics/Roinn na Fisice

The Department of Physics provides a wholetime four year programme in physics. Areas of Applied Physics which are specialised in, include Optics and Holography, Microprocessors and Instrumentation, Nuclear Instrumentation, Condensed Matter, Acoustics and Medical Physics.

The Department of Physics also provides a wholetime professional programme in Ophthalmic Optics. The Diploma in Ophthalmic Optics is a four year course which provides the education and training statutorily required for entrants to the profession by the 'Opticians Act 1956'. The course is approved by Bord na Radharcmhastóirí (Opticians' Board) which is the Registration Authority set up under the act. The majority of graduates of this course are in individual private practice as Ophthalmic Opticians.

Higher level technician education is provided for by a three year full-time course in

Applied Physics. Subjects studied on this course include Applied Optics, Vacuum Technology, Materials Science, Medical Physics, Applied Photography, Electronics, Control Theory, a modern continental language and Industrial Studies.

Between 1968 and 1984 the Department of Physics prepared students for the Graduateship of the Institute of Physics Examination with considerable success. Three times within that period students of the Department obtained First Place in Britain and Ireland in the Examination. In 1984 the Department established its own Diploma in Applied Physics (DIT) to replace the Graduateship of the Institute of Physics which has been phased out by the Institute. The Institute of Physics has recognised this new course as equivalent to an honours degree in physics and it satisfies the academic requirements of those seeking corporate membership of the Institute.

The Department of Physics has developed a good reputation in Medical Physics over the years and many of the graduates of its courses have followed careers in various aspects of medical physics. The Department provides a three year part-time course for students working in the area of Medical Physics and Physiological Measurement. Since 1980 it has joined with the College of Commerce, Rathmines and with the Nursing Schools in St. James' Hospital and the Meath Hospital in providing a course leading to a Certificate in Sciences for Nurses.

Photography was among the subjects taught when the first College opened in Kevin Street in 1887. The Department of Physics provides the only educational course in Professional Photography in the country. The course extends over 5 years part-time and students must also hold appropriate employment.

#### Department of Control Systems and Electrical Engineering/ Roinn na hInnealtóireachta Leictreach agus Riartha

The Department of Control Systems and Electrical Engineering provides a range of third-level courses from technician to professional level. These include the four-year wholetime Honours Diploma course in Electrical/Electronic Engineering, a three-year wholetime Technician Engineering Diploma course, a part-time technician programme and courses in preparation for the examinations of the Engineering Council. Since 1975 The University of Dublin has awarded the degree of BSc(Eng) to students who successfully completed the Honours Diploma course.

Because of the great diversity of present-day Electrical Engineering, it is inevitable that undergraduate courses tend to specialise in certain broad areas within the

subject. This Department concentrates on the areas of Electrical Power, and Control Systems with particular emphasis on computer applications. Nevertheless, the wholetime courses cover a broad range of topics in Electrical Engineering in order that our graduates may continue to find employment in a wide spectrum of Engineering activities.

#### Department of Electronic and Communications Engineering/ Roinn na hInnealtóireachta Leictreonach agus Cumarsáide

Courses in Radio Communications were established in the College prior to 1918. These courses were at that time directed primarily towards the needs of Marine and Aircraft Radio Officers.

In the later 1930's, however, professional and more broadly based technician courses in Electronics and Radio Engineering were established. The professional courses prepared students for external examinations conducted by the Institution of Electrical Engineers and by the Institution of Radio Engineers (later the IERE). The technician courses were mainly directed towards qualifications of the City and Guilds of London Institute.

At present this Department provides a range of third-level courses, both wholetime and part-time, in the fields of Electronic, Communications and Computer Engineering at technician and degree level. It is jointly responsible with the Department of Control Systems and Electrical Engineering for the conduct of the Honours Diploma course in Electrical/Electronic Engineering.

#### Department of Languages and Industrial Studies/ Roinn na Teangeolaíochta agus Staidéir Gnó

The Department of Languages and Industrial Studies provides, to the other Departments of the College, courses in Business and Management Studies, Communication Studies, General Studies & Modern Languages. Such courses are an integral part of all whole-time courses and of many part-time courses. The Department also provides a whole-time Certificate Course in European Languages for Business, courses in languages for Specific Purposes, a Post-Graduate Diploma Course in Applied Linguistics and a Post-graduate Diploma Course in Translation.

#### Department of Electrical Installation/Roinn Instealbhú Leictreach

Electrical Apprentices represent the majority of the students in this Department, and the technical education of apprentice electricians has been provided by the Electrical Installation Department since the First World War. The first apprentices were sent by Dublin Gas Company in 1918; a substantial amount of maintenance was necessary there due to the wide range of electrical equipment installed — including their own generating plant. In 1928 Dublin Corporation sent their apprentice electricians to the College in Kevin Street and in 1938 a very successful block-release course for ESB apprentices commenced.

The present day block-release format is based on the original ESB Scheme; however day-release courses are also provided, the particular course attended depends on the requirements of employers. All apprentices are prepared for the Department of Education Junior and Senior Trade Examinations, also a substantial number of students sit for the City and Guilds of London Institute Examinations.

The provision of evening courses has been a long established feature of the Department's activities. These provide opportunities for apprentices to add to their basic qualifications. Many evening students will already have obtained their basic qualifications. Recently a new Craft-based technician evening course commenced which caters for the Electrical Contracting Industry in terms of providing personnel to fill higher technical and managerial positions.

In 1975 a course in Electrical and Electronic Draughting commenced and is the only course at present in the Department not specifically for apprentices or electricians. This wholetime course prepares students for careers in drawing offices throughout the electrical and electronic industries.

#### Bakery Unit/Aonad Báicéireachta

The Dublin Bakery School situated in the Dublin Institute of Technology, Kevin Street is the only bakery school in the Republic of Ireland. It celebrated its Golden Jubilee in 1986. The School has been engaged in the training and education of bakery apprentices since its foundation. In 1973 a whole-time Diploma Course in Bakery Production and Management was started to cater for the supervisory and management needs of the industry. This has proved to be a very popular course and since its introduction the demand for places has far exceeded the number available.

#### THE LIBRARY

#### AN LEABHARLANN

#### Introduction

The Library plays a vital role in any academic institution. The College has readily recognised this importance, by the recent completion of an extensive new library.

#### Stock

The College Library at present holds a stock of about 32,000 volumes to which it adds about 3,000 volumes per year. It is possible to borrow most of the books in stock, except for recommended course texts which are placed in the Reserve Section, for consultation in the library only. There is also a collection of Standards and a Reference Section containing encyclopaedias, directories, handbooks etc.

The Library also subscribes to approximately 350 journal titles and a wide selection of current abstracts and indices. These may not be borrowed; a photocopying service is available. In circumstances where the Library stock may not meet specific requirements an excellent inter-lending service from libraries in Ireland and abroad is available.

The total stock held by the Library represents not only the subjects covered by all courses but also provides for reading in cognate fields.

#### **Opening Hours**

The Library is open during term-time from 09.30~hr. until 21.30hr. Monday to Thursday and from 09.30hr to 17.30hr on Fridays — a total of 56~hours.

During vacation the opening hours are 09.30hr. to 17.30hr Monday to Friday only.

#### Access to the Library

Each student wishing to use the Library must first complete a membership card and produce a current college identity card. All library users are required to abide by the Library regulations, a copy of which is available on the first visit.

#### **Library Regulations**

Any reader found to be violating the terms of the Library declaration or denying the obligations which it imposes may be permanently excluded from the Library. Readers must also observe the following Library regulations:

(i) Readers must show their College Identity Card or Library Ticket on entry to the Library. It is a breach of the Library regulations to attempt to enter any

Library building by use of another reader's Identity Card or Library Ticket. Readers must show their Identity Card or Library Ticket on request to any member of the Library staff when within the Library.

- (ii) Readers, before leaving Library buildings, must present all books, bags and briefcases for inspection. No Library book may be taken out of a Library building except a book the loan of which is permitted and which has been recorded by the Library staff as being on loan to the reader.
- (iii) Readers may not use bottles of ink in the Library.
- (iv) Silence must be observed as much as possible in all parts of the Library.
- (v) Smoking and the consumption of food and drink are forbidden in all parts of the Library open to readers.
- (vi) Readers are not allowed to bring visitors into the reading rooms.
- (vii) Readers are not permitted to reserve seats by leaving their belongings or books on seats and desks. The Library staff may move any property left at unoccupied desks or seats except for officially reserved seats and carrels.

#### **Library Facilities**

In order to use the Library resources most effectively students are encouraged to consult the Library Staff, who will always welcome enquiries and requests. Arrangements may be made with the Senior Librarian for group talks to be given on various library procedures - for example the use of the author and subject catalogues.

Publications produced by the Library include a guide to 'Use of the College Library', 'Recent Additions' lists, and a list of journals taken by the Library. A comprehensive list of periodical holdings of major libraries in Ireland is available on microfiche.

The Library subscribes to various external services - for example Trinity College Information Service, The British Standards Institution, and the British Library Document Supply Centre. Those wishing to avail of any of these services should enquire from the Library Staff.

#### Senior Librarian/Leabharlannaí Sínsearach

Mary Davis BSc DipLib

#### **POST-GRADUATE STUDIES**

#### STAIDÉAR IAR-CHÉIMEACH

In addition to its undergraduate programmes, the College also welcomes applications from well-qualified candidates wishing to undertake research leading to higher degrees (MSc and PhD). At present such research may be undertaken in the departments of Biological Sciences; Chemistry; Control Systems and Electrical Engineering; Electronics and Communications Engineering; Mathematics, Statistics and Computer Science; 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.

#### **Application Procedure:**

- (a) A candidate proposing to become involved in research in the College should in the first instance discuss the project with his/her Head of Department with a view to establishing its feasability and relevance. Other matters to be considered include the possibility of external funding, the type of facilities and support required and the proposed programme of work.
- (b) A written application should be made to the College on the Post-Graduate Research Form through the Head of Department outlining clearly the nature of the project, the type of facilities and support required, the proposed supervisors and programme of work, funding arrangements and other details considered to be relevant.
- (c) Candidates should not begin work on their projects until all the registration requirements have been completed.

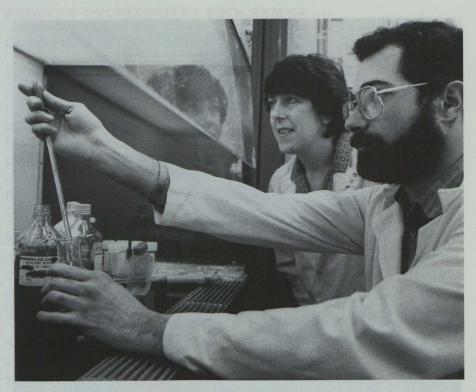
#### **Specialised Awards:**

Specialised research awards 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.

#### Department of Education Post-Doctoral Fellowships

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 scheme and the post-graduate programmes may be obtained from:

Mr. J.K. Taaffe, Vice-Principal, or Dr. B. Goldsmith, Chairman, Research Committee.



Mr. Vincente Rodilla is a post-graduate student registered for a PhD degree in the University of Valencia in Spain. He is working in collaboration with Dr. Carmel Mothersill, Department of Physics, on the kinetics of cisplatin uptake in mammalian cells and its effect on the subsequent radiation response. Cisplatin is a cytotoxic drug used in the treatment of cancer, often in conjunction with radiotherapy.

Mr. Rodilla expects to spend another year in DIT Kevin Street before returning to Spain in 1990 to submit his thesis.



Ms Hilda Mulrooney is a postgraduate student in the Department of Biological Sciences working under the direction of Mr John McEvoy on product development in the food sector financed through the Dublin Institute of Technology Product Development Programme. Ms Mulrooney obtained an Honours Degree in Human Nutrition and Dietitics in Winter 1988.

Here she is studying the effect of microwave cooking on new food products.

Here she is studying the effect of microwave cooking on new food products. Research into this exciting field involves market research, nutritional assessment and product development.

An increasing number of employment opportunities are becoming available in the Food Industry for graduates in Human Nutrition and Dietetics.

#### PRODUCT DEVELOPMENT PROGRAMME

#### CLÁR FORBARTHA TAIRIGTHE

The College participates in a Graduate Product Development Programme organised by the Dublin Institute of Technology and funded partly from the Commission of European Communities. This programme is **project based** i.e. training consists of carrying through a project idea from the basic concept to the building and testing of an initial prototype and the preparation of a business plan.

Emphasis throughout the programme is placed on commercial feasability and tuition in the business and financial aspects of the programme is provided by the School of Management Studies in Rathmines.

The programme is open to technician or degree graduates with good project ideas which they might wish to bring to commercial feasability.

A number of the projects are linked with small business ventures while others are linked with lecturers in the College who wish to develop commercial ideas.

For the 1988/89 year there were 8 projects based within the College covering the following: -

Subject Area	Graduate	Consultant(s)	Department
Food Processing	Anna Cruickshank	J. McEvoy	Biological Sciences
<b>Enzyme Production</b>	Niamh Fitzmaurice	U. MacEvilly R. Ryan	Biological Sciences
Cheese Production	Adrienne Harkin	J. McEvoy	Biological Sciences
Snack Food	Hilda Mulrooney	J. McEvoy	Biological Sciences
Fish Processing	Dorothy O'Connell	J. McEvoy	Biological Sciences
Flame Retardants	Clare O'Leary	P. Ashall	Chemistry
Robotics	Declan Stewart	C. Cowley	Electronic & Communications Engineering
<b>Optical Measurement</b>	Jackie Armstrong	T.P. Grennan	Physics

While engaged on the programme, graduates are paid a weekly maintenance allowance. Funds are available for project materials and associated costs for development and maximum use is made of workshops and laboratory facilities within the College. Enquiries should be directed to:

Mr. J.K. Taaffe, Vice-Principal, or

Mr. F.R. O'Neill, Industrial Liaison Officer, Dublin Institute of Technology, 14 Upper Mount Street, Dublin 2. Telephone 766584/611133.



Photograph shows Dr. Derek Neylan at work in the tissue culture and biotechnology research laboratories in the Dublin Institute of Technology, Kevin Street. Dr. Neylan is a member of the Department of Biological Sciences and lectures in cell and molecular biology. His previous position was Assistant Professor of Medicine at the School of Medicine, University of Miami, Florida, USA. While in the USA Dr. Neylan's research interests focused on factors governing the control of thyroid cell growth and function and he is continuing this research.

#### **BIOTECHNOLOGY CENTRE**

#### IONAD DON BITHTHEICNEOLAÍOCHT

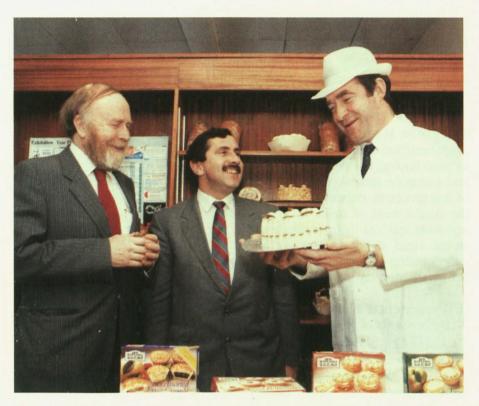
The College has recently decided to establish a Centre for Assessment of Risk from Biotechnological Processes. The Centre combines expertise from all departments in the College.

The Centre is focussing on a major problem area of biotechnology — risk assessment and environmental impact analysis. This is becoming more important as biotechnology revolutionises the way we live. There is concern both in industry and among the general public not only over possible adverse environmental effects of new processes, organisms and waste, but there is also an increasing need for the development of rapid, accurate, cheap and preferably non-animal-based screening and toxicity testing techniques. The Centre, under the Chairmanship of the Head of the Department of Biological Sciences, Ms. B.A. Ryan, is concentrating on a few projects initially and will develop as funds are generated. Projects under way at present include:

- (1) Development of a human tissue based *in vitro* carcinogenicity and toxicity assay Departments of Biological Sciences and Physics.
- (2) Assessment of risks associated with microwave, UV and ionising radiations
   Departments of Physics and Biological Sciences.
- (3) Analysis of byproducts of food irradiation identification and toxicity testing Departments of Chemistry, Physics and Biological Sciences.
- (4) Development of databases which could be used to identify subgroups of the human population most at risk from cancer causing pollutants/conditions
- Departments of Mathematics, Statistics & Computer Science, Physics and Biological Sciences.

#### **Further Information from:**

Ms. B.A. Ryan or Dr. U. MacEvilly, Department of Biological Sciences. Dr. C. Mothersill, Department of Physics. Telephone 757541.



Mr. J. Walsh TD, Minister for Food, on right, photographed on a visit to the National Bakery School with Mr. F.M. Brennan, Principal, DIT Kevin Street on left and Mr. Liam Fitzgerald TD, Chairman, Council, DIT Kevin Stret, centre.

#### NATIONAL BAKERY SCHOOL

#### Centre for Specialised Courses, Product Development & Consultancy

### SCOIL NÁISIÚNTA BAICEÍREACHTA Ionad do Chursaí Speisialta, Forbairt Tairgthe agus Comhairleacht

In 1937 the Bakery School was established in what was then known as Kevin Street Technical Institute, as part of the CDVEC system of craft trade education. Today the school is the only one in Ireland servicing the needs of the Bakery Industry.

Traditionally the School has provided courses in bakery practice for part-time day release apprentices. In 1970 the whole-time Diploma Course in Bakery Production and Management was established.

In responding to the changing needs of the industry, the National Bakery School has embarked on a programme which will provide a series of short duration courses. These courses will cover a wide range of specialisations and are designed to provide the necessary skills to equip industry for the challenge of the future.

#### Product Development, Research and Training Facility.

It is important to the College and the Industry nationally that the resources of the National Bakery School should be made more widely available and that the School should reflect the modern needs of the industry. With this objective in mind, the College has established a Research, Development and Training facility in the School.

The objects of the facility are:

To provide assistance in the area of product development.

To advise on quality control and hygiene.

To assist in the development of product specifications.

To advise on and assist with staff development and training programmes.

#### **Further Information from:**

Mr. Derek O'Brien, National Bakery School, Dublin Institute of Technology, Kevin Street, Dublin 8. Telephone 757541.



Dr. Peter Kavanagh, Department of Chemistry, DIT Kevin Street (left), Dr. Barry Foley, Department of Chemistry, DIT Kevin Street (centre) and Professor Francesco Corigliano of Messina, Sicily (right), discussing a proposal for joint research and development into the recovery of precious metals from waste materials.

Professor Corigliano's visit to Dublin reciprocates a visit by Dr. Kavanagh to Messina earlier this year with the object of finalising an agreed experimental programme. Both parties are currently carrying out related work in collaboration with Irish and Italian companies.

#### FOURIER-TRANSFORM-INFRARED/RAMAN (FTIR) CENTRE

#### IONAD CLAOCHLÚ-FOURIER-IR/RAMAN

A Centre of expertise in FTIR/Raman spectroscopy has been developed in the College culminating in the recent purchase of a Computer Interfaced Jobin Yvon Raman Spectrometer to compliment the Perkin Elmer FTIR instrument.

This facility is unique in this country and will provide specialised data, both qualitative and quantitative, on chemical samples for industry and other academic institutions. The lack of interference from water or glass on Raman spectra gives this technique a special advantage in the analysis of industrial samples.

This Unit augments the considerable analytical instrumentation and expertise already centred in the Department of Chemistry which features AAS/FES, GLC, HPLC, ion chromatography, polarography, uv/visible and NMR (80MH).

The Department of Chemistry can now offer a comprehensive service based on this modern instrumentation and give to under-graduate and post-graduate students invaluable experience in the use of these techniques.

Principal Staff involved: Dr. B. Foley, Dr. J. Cassidy and Dr. N.R. Russell.

#### Further Information from:

Dr. N.R. Russell, Assistant Head, Department of Chemistry. Telephone 757541 ext. 220.



# CENTRE FOR RESEARCH, DEVELOPMENT AND CONSULTANCY IN COMMUNICATIONS ENGINEERING AND IN DIGITAL SIGNAL PROCESSING

# IONAD FORBARTHA, TAIGHDE AGUS COMHAIRLEACHT SAN INNEALTÓIREACHT CUMARSÁIDE AGUS DO PROISÉAIL CHOMAIRCÍ DIGITEACH

The College has a long tradition of development in Communications Engineering and was one of the first institutions in this country to establish specific courses in this discipline.

In recent years the application of digital methods to the processing of signals has become of paramount importance. Considerable expertise and resources in this area have been built up in the College.

The College would wish that these resources should be made more widely available, in particular to provide assistance in the industrial exploitation of these technologies.

As a consequence, a Research and Development Centre in Communications Engineering and Digital Signal Processing has been established in the Department of Electronic and Communication Engineering.

The objectives of the Centre are:

- (1) To foster research and development in Communications Engineering and Digital Signal Processing.
- (2) To undertake industrially sponsored research, development and design work in these fields.
- (3) To provide a consultancy service to industry.

#### **Further Information from:**

Communications Engineering, Mr. G. Farrell, Telephone 757541 ext. 248 Digital Signal Processing, Dr. R. Lynch, Telephone 757541 ext. 302

#### **CAMPUS COMPANIES**

#### **COMHLUCHTAÍ CHAMPAIS**

The College is very supportive of Government policy as outlined by the Minister for Education, Mrs. Mary O'Rourke TD and the Minister for Science and Technology, Dr. Seán McCarthy TD in encouraging academic staff and Third Level Colleges to become involved in industrial development and entrepreneurship.

Both Ministers explained their policy in this regard during the IDA Conference on Campus Entrepreneurs in the Royal Hospital, Kilmainham on 15th November 1988.

During the past year the College has responded to Government policy and Ministerial encouragement when it supported the foundation of four Campus Companies.

Company: Microsol Ltd.

Founder Director: Barry Redmond.

Department: Telecommunications and Electronic Engineering.

Microsol designs and manufactures a new type of industrial monitoring and control system. The system consists of compact units, each microcomputer-controlled, distributed around the plant or equipment to be monitored and communicating via a Local Area Network. It was developed as a result of many years' experience in the Process Control Industry, where monitoring systems have typically been large cumbersome centralised units.

The design, which was done over a period of 3 years, is wholly original and includes a number of innovative ideas. Development of the product involved the design of the multi-tasking real-time operating system and the Local Area Network protocol, as well as all the electronic circuits.

The product was launched at a specialist exhibition in London in 1988 and resulted in the Company's first sale — to the UK Central Electricity Generating Board. Other applications for the system include industries such as water treatment, chemicals, gas, security, building management and general manufacturing. New applications appear regularly; monitoring kiln temperatures in a pottery, for example, or engine performance in coupled locomotives for British Rail.

During 1988 Microsol secured a major investor and moved into offices in the IDA Enterprise Centre in Pearse Street, Dublin to commence production. The company was a winner in the Bank of Ireland Dublin Millennium Business Competition and in April 1989 Microsol Ltd was also a winner in the Industrial Development Authority/Lombard and Ulster Banking Academic Enterprise Awards for the Dublin Region.

Future plans include entering the European and American markets and, on the technical side, the development of the next generation of the system including work on operating systems and computer networking.

Company: Irish Biomedical Systems Ltd. Founder Director: Dr. M. Hussey. Department: Physics.

The aims of the Company are to develop and commercialise ultrasonic and electronic product ideas in the biological sciences and medical physics areas. The product ideas currently under research and development involve objective assessment of a range of meat quality parameters, novel medical imaging modalities, techniques for quality control in ultrasound medical imaging and applications of ultrasound spectrometry.

Financial support has been obtained for specific projects from the National Development Corporation (Nadcorp) and from the Industrial Development Authority (IDA). Collaboration has also been established with a French engineering company for the carrying out of an extensive market and product specification study in the European arena and for the commercialisation of a number if product ideas.

Company: Optometrics Ltd.

Founder Directors: Dr. P.A. Davison, Dr. T.P. Grennan, David O'Brien.

Department: Physics.

Optometrics is a Dublin Institute of Technology Campus Company founded by 3 lecturers of the Department of Physics for the purpose of designing and developing new instruments for testing the performance of the eye. The Company combines expertise in physiology of the eye, physics, optometry, electronics and computer programming. Personnel involved at present are two full-time lecturers (Drs. Thomas Grennan and Peter Davison), a part-time lecturer (Mr. David O'Brien) and a researcer (Ms. Jacqueline Armstrong). Other lecturers, including Dr. Paul Mathias (Department of Biological Sciences) have an advisory role.

Instruments currently under development include two devices for testing night vision and one for detection of glaucoma (raised pressure within the eye causing blindness if not treated). An Irish Patent Application has been registered relating to the first two devices. Applications for the instruments are in the following areas: (i) hospitals' clinics and consulting rooms, (ii) detection of damaging effects on vision and general health in cases of malnutrition, and (iii) personnel selection and monitoring, for example of pilots.

The Company is in co-operation with the DIT Product Development Centre, the Bolton Trust, and the Dublin Business Innovation Centre.

Optometrics has been successful in attracting funding from the Industrial Development Authority, and was a finalist in the Dublin Millennium Enterprise Competition.

Company: Energy Control Systems Ltd.

Founder Director: John Brazil.

Department: Control Systems & Electrical Engineering.

Energy Control Systems Ltd was formed in 1986 as a research and development company by Mr. John Brazil of the Department of Control Systems & Electrical

Engineering in order to develop control systems for small hydroelectric installations.

Due to its company status, it has succeeded in obtaining financial assistance from both the Industrial Development Authority and Coras Trachtala. In addition, it was a regional winner in the 1988 Sunday Tribune/Glen Dimplex Business Ideas Competition. In December 1988, it won a grant allocation from the Commission of the European Communities of £75,000 for demonstrating the developed technology at a test site in Ireland.

The above project will use cost-effective digital electronics to convert mass-produced industrial motors into generators. High quality electricity will then be produced without needing a grid connection for stability. In addition, all energy produced will be regulated by a sophisticated energy management system and therefore the proposed technology is particularly suitable for use in remote areas and for small local utilities and cooperatives in countries where private utilities are legally permitted.

At present the company is actively building up industrial contacts throughout Europe and looks forward to working on joint research projects with them in the near future.



Professor Louden Ryan (left), Governor of the Bank of Ireland, presents a cheque for £5,000 to Graham O'Donnell (centre) and Barry Redmond (right) of Microsol Ltd, winners of the Most Enterprising New Business Proposal Award in the Dublin Millennium Enterprise Competition.



In Autumn 1988, The Photography Section, DIT, Kevin Street collaborated with the Geological Survey of Ireland in mounting an exhibition entitled "Rock by The Liffey". The display related Dublin and its building stones to the natural environment of the mountains and the rock. The Exhibition was devised by Dr. Jean Archer, Education Officer of the GSI and Mr. David H. Davison, Head of Photography Section, DIT Kevin Street.

Most of the photographs were the work of Séan Malone, a fifth year photography student and a member of the Technical Bureau of the Garda Siochána. The Exhibition was designed and erected by another fifth year student, Edwin Davison.

The photograph shows: (left to right)

Dr. Jean Archer, Mr. David H. Davison, Edwin Davison and Seán Malone.

#### THE IRISH NATIONAL PHOTOGRAPHIC ARCHIVE

### AIRCÍOVLANN GRIANGRAFAÍOCHTA NÁISIÚNTA NA hÉIREANN

January 1989 saw the 150th anniversary of the invention of photography. It is, in consequence, most appropriate that in this year we announce the formation of a National Photographic Archive. It is equally appropriate that this archive has been established in this College, being the national centre for the study of photography.

The Archive has been formed to collect and conserve photographs of artistic, social or historical significance from the earliest days to the present. It will of course concentrate on Irish subjects or photographers but will include important pictures from any source or of any subject. The source of all the pictures will be entered along with comprehensive details of each photograph on the computerised database which will make the entire collection accessible to researchers and other enquirers.

A national portrait collection of significant people in all walks of life will be assembled, filling a significant need.

The archive has already received generous donations of negatives, lantern slides and prints. Any person who has photographs within the catagories specified above who would wish to donate them to the national collection or allow the most significant images to be copied for the collection, is invited to contact the Director of the Archive at the College address.

Special archive facilities have been constructed adjoining the photography section. These include a reading room which will soon be open to researchers and it is hoped to have some periods of opening for the general public in the near future.

#### **Further Information from:**

Mr. D.H. Davison or Mr. S. Coonan or Mr. G.E. White, Photographic Section, Department of Physics. Telephone 757541.



Dr. Noel Russell, Dr. John Cassidy, Br. R. Geoghegan and Randel Henley with the teachers participating in the Department of Education In-Service Course for Second Level School Teachers held at DIT Kevin Street in June 1988. (Left to Right) Front row: Margaret Fox (Presentation School, Offaly), Cecily O'Flynn (St. Mark's, Tallaght), Florence McKenna (Loreto College, Crumlin Road), Miriam Horgan (Bishopstown Convent School, Cork), Sheila McCarthy (Intermediate School, Killorglin), Brenda Kelly (Holy Family Convent School, Kilteel Road, Cork), Geralyn Corcoran (Eureka Convent of Mercy, Kells), Br. Rory Geoghegan (Christian Brothers, Thurles).

Second row: Dr. Noel Russell (DIT Kevin Street), Dr. Catherine O'Dwyer (Mount Anville, Goatstown), Desmond Glynn (St. Eamonn's College, Letterkenny), Sr. Majella Dennely (Presentation Convent, Bandon), Sr. Rose Dwane (Scoil Mhuire, Ballinasloe), Anne Smyth (Scoil Mhuire, Trim), Sr. Susan Naughton (Scoil Mhuire, Brosna), Dr. John Cassidy (DIT Kevin Street).

Third row: Randel Henley (Mount Temple, Dublin), Sr. Kathleen Cowens (St. Joseph's, Lanesboro), Carol Murphy, Maria Hally (Loreto Convent, Balbriggan), Geraldine Thompson (Malahide Convent School), Donal Rochford (Notre Dame, Churchtown), Peter Geraghty (Ardee C.S.).

Fourth row: Siobhán Martin (Coláiste Iosagáin, Stillorgan), Genevieve McKenna (Mount Anville, Goatstown).

# REFRESHER COURSE CENTRE FOR SECOND-LEVEL SCIENCE TEACHERS

Subjects: Chemistry, Physics.

### IONAD CHURSAÍ ATHNUACHANA MHÚINTEOIRÍ EOLAÍOCHTA DEN TARNA LEIBHÉIL

Abhair: Ceimic, Fisic.

These are five-day courses and take place in June of each year. Each option is organised by the appropriate Department in the College on behalf of the Department of Education.

#### Chemistry Course.

Curriculum:

Morning Periods (9.30-12.30).

Aspects of the new Leaving Certificate syllabus in a series of lectures and demonstrations including Organic Synthesis, Industrial Polymer Chemistry, Kinetics, Equilibrium, Volumetric Analysis and Computer Applications. Emphasis here is on methodology.

Afternoon Period (2.00-5.00).

Hands-on laboratory practice designed to emphasise the points discussed in the lectures. Discussion sessions are organised after each practical, one afternoon is devoted to an industrial visit.

#### Physics Course.

While the Physics course is designed primarily for post-primary teachers who have just begun teaching physics, many experienced teachers attend the course to update themselves on various aspects of the revised physics Leaving Certificate syllabus. There is a strong emphasis in the course on experimental work and the participants spend two sessions each day in the laboratory. This practical work is closely related to the revised physics syllabus and is directed by four very experienced Lecturers. There are also two lectures each day on aspects of the syllabus where students experience difficulty. On the final day of the course, an extended discussion takes place on the administrative, logistical and pedagogical problems associated with student practical work.

A social evening, when the two groups come together, has also become a standard and popular feature of the course.

Acceptance to these courses is at the discretion of the Department of Education. Second-level Schools and Colleges are normally circulated with the appropriate information during the Spring Term.



In spring 1989 Ms. Bríd Ann Ryan, Head of Department of Biological Sciences, DIT Kevin Street and Mr. Seán Hanratty, Chief Scientific Officer, Blood Transfusion Service and Chairman, Industry Liaison and Staff Development Sub-Committee of the Council, DIT Kevin Street visited Singapore at the invitation of the EC/Asian Science and Technology Co-operation Programme. They were invited to advise on future developments in Medical Laboratory Science at Singapore Polytechnic and the Ministry of Health, Singapore.

#### Photograph Shows (left to right):

Mr. Seán Hanratty, Mr. Mok Chee Ho, Section Head Medical Laboratory Sciences, Singapore Polytechnic, Ms. Bríd Ann Ryan, Dr. Yeow Kian Peng, Head, and Dr. Paul Yap Yeon Pin, Deputy Head of Chemical Process Technology Department, Singapore Polytechnic in informal discussion in the Senior Common Room, Singapore Polytechnic.

#### OVERSEAS DEVELOPMENT WORK

#### OBAIR FORBARTHA THAR SÁILE

Following a feasibility study undertaken by Ms. Bríd Ann Ryan, Head of the Department of Biological Sciences in 1977, the Irish Government agreed with the Government of Lesotho to fund a training programme for medical laboratory personnel in Lesotho under its bilateral aid programme. This programme is designed to train Basotho technicians in Lesotho and Ireland to service their 17 hospitals and 88 health clinics. The course qualifies about 10 technicians each year.

In 1982 the Dublin Institute of Technology began granting an external award to graduates of this course. In 1985 a new Certificate Course in Medical Laboratory Sciences for Laboratory Technicians was initiated under the programme and this course was also recognised by the Dublin Institute of Technology for an external award.

Academic staff of the College have to-date participated in the project in addition to medical laboratory technologists who have been seconded to the project by the various health boards and hospitals.

The Department of Mathematics, Statistics and Computing have established a co-operative link with the Department of Mathematics in the University of Dar-es-Salaam in Tanzania, through the sponsorship of HEDCO. The same Department is also involved in a Commission of the European Communities sponsored collaboration with Yarmouk University, Irbid in Jordan.

In 1988, the College, through the Head of the Department of Biological Sciences was invited by the Commission of the European Communities and the Government of Singapore to advise on the development of programmes in Medical Laboratory Sciences in Singapore.

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

Ms. B.A. Ryan, Head of the Department of Biological Sciences, is a member of the Council of HEDCO (Higher Education Development Co-operation) and of the Board of Directors of APSO (Agency for Personal Service Overseas). Mr. J.K. Taaffe, Vice-Principal, is Chairman of the Education Committee of ICOS (Irish Council for Overseas Students) and a member of the Technological Colleges Committee of HEDCO.



Pictured at a workshop on Algebra and Applied Mathematics at Yarmouk University, Jordan in March 1989 are:

Left to Right:

Dr. B. Goldsmith, Head of Department of Mathematics, Statistics and Computer Science, DIT Kevin Street, Director of the Algebra workshop; Professor M. Hamdan, President of the University; Professor T.J.M. Boyde, University College of Wales, Director of the Applied Mathematics workshop; Professor M. Abu-Salih, Dean of the Science Faculty and Professor A. Fora, Chairman of Department of Mathematics.

The workshop was sponsored by the Commission of the European Communities and was intended to build links between Jordanian and European Mathematicians.

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

# CÚRSAÍ SAN EARGNA FHEIDMHEACH, GAR-LEIGHEAS, BIA-EOLAÍOCHT, MATAMAITIC AGUS RÍOMHAIREACHT

Wholetime Degree & Professional Courses/ Cúrsaí Céime & Proifísiúnta Lánaimsearacha		CAO/DIT Ref.	College Ref.	Page/ Leath.
Diploma in Applied Sciences BSc(Applied Sciences) (Six Programmes)	Wholetime	FT22 K122	WSAD	113
Diploma in Ophthalmic Optics Diploma in Human Nutrition and Dietetics	Wholetime	K172 FT23	WSO	121
BSc(Human Nutrition and Dietetics) Degree Course in Medical	Wholetime	K123	WBD	125
Laboratory Sciences Certificate in Medical Laboratory	Wholetime			130
Sciences	Wholetime	K114	WML	130
Diploma in Biomedical Sciences Diploma in Medical Laboratory	Wholetime	K115	WBS	133
Sciences	Block-Release	K111	WAML	135
Graduate Diploma in Food Science and Technology of the Institute of Food Science and Technology (UK)	Wholetime	K113	WSFS	137
Graduateship of the Royal Society of Chemistry	Wholetime	K199	WSIC	142
Part-time Post-Graduate & Profession Cúrsaí Iar-Chéimeacha agus Proifísi		searacha		
Fellowship of the Institute of Medical Laboratory Sciences Part 1	Block-Release		S10.1	148
Fellowship of the Institute of Medical Laboratory Sciences Part 2	Block-Release		S10.2	149
Degree Conversion Course for holders of the Diploma in Dietetics	Part-time		PBD	151
Graduateship of the Institute of Biology	Part-time		PSIB	152
Graduate Diploma in Food Science and Technology of the Institute of Food Science and Technology (UK)	Evening		S6.3	158

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

# CÚRSAÍ SAN EARGNA FHEIDMHEACH, GAR-LEIGHEAS, BIA-EOLAÍOCHT, MATAMATIC AGUS RÍOMHAIREACHT

		CAO/DIT Ref.	College Ref.	Page/ Leath.
Diploma in Food Science	Evening		S6	160
Graduateship of the Royal Society	D 441		DOLO	100
of Chemistry	Part-time		PSIC	163
Diploma in Applied Physics	Part-time or fulltime		PSAP	165
Graduateship of the Institute of Statisticians	Evening		M6	167
Certificate in Mathematics/ Licentiateship of the Institute of Mathematics and its Applications	Evening		M4	171
Diploma in Mathematics/ Graduateship of the Institute of Mathematics and its Applications	Evening		M7	173
Membership of the British and/or Irish Computer Society	Evening		M8	175
Wholetime Technician Courses/ Cursaí Lánaimsearacha do Theicneoirí				
Technician Diploma in Applied Science (Biology, Chemistry, Physics)	Wholetime	K173	WAS	180
Technician Diploma in Computer Science	Wholetime	K166	WMT	185
Diploma in Bakery Production and Management	Wholetime	K100	WBT	189
Certificate in Optical Dispensing	Wholetime		WSTO	192
Part-time & Evening Technician Courses/ Cúrsaí Páirtaimsearacha & Thráthnóna do Theicneoirí				
Technician Certificate in Applied Science (Biology, Chemistry)	Part-time		PAS	196
Technician Diploma in Applied Science (Biology, Chemistry)	Part-time		PAS 5 & 6	198

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

# CÚRSAÍ SAN EARGNA FHEIDMHEACH, GAR-LEIGHEAS, BIA-EOLAÍOCHT, MATAMAITIC AGUS RÍOMHAIREACHT

		College Ref.	Page/ Leath.
Technician Diploma in Dental	D 441	Daba	200
Technology	Part-time	PSDT	200
Photographic Technicians' Certificate	Part-time	PSPT	201
Technician Certificate in Medical Physics & Physiological Measurement	Evening	PBE	204
Other Science and Mathematics Bas Cúrsaí eile le bunús san Eolaíocht			
Certificate in Professional Photography	Part-time	PSP	208
Advanced Certificate in Professional			
Photography	Part-time	PSP4 & 5	210
Certificate in Sciences for Nurses	Block-Release	PSN	214
Course in Plastics	Evening	PCP	217
Course for the Associateship of the			
Institute of Brewing	Evening	PBA	218
Course for Registered Nursing			
Auxiliaries of the Royal College of Veterinary Surgeons	Evening	S9	219
Course for the Institute of Meat	Evening	S11	220
Course in Medical Records	Livering	511	220
Administration	Evening	S12	221
Course in Mathematics for Engineering	Evening	M1	223
Course in Mathematics for		***	220
Telecommunications	Evening	M2	224
Course in Computing for the			
Electrical Contracting Industry	Evening	M3	226
Course in Mathematics on a			
Microcomputer	Evening	M5	227
Course in Cobol Programming	Evening	M9	228
Course in Computing for Engineering	Evening	M10	229
Bakery Practice	Part-time	PSB	231
Confectionery Decoration Intermediate	Evening	B1.2	232
Confectionery Decoration Advanced	Evening	B1.3	232

#### **COURSES IN ENGINEERING**

# CÚRSAÍ SAN INNEALTÓIREACHT

Wholetime Degree & Professional Courses/ Cúrsaí Céime & Proifísiúnta Lánaimearacha		CAO/DIT Ref.	College Ref.	Page/ Leath.	
Honours Diploma in Electrical/Electronic Engineering BSc(Eng)	Wholetime	FT21 K121	SEE	237	
Course for the Engineering Council Part II Examination	Wholetime		WCE	240	
Part-time Professional Courses/ Cúrsaí Proifísiúnta Páirtaimsearacha					
Course for the Engineering Council Part I Examination	Evening		EE1	244	
Course for the Engineering Council Part II Examination	Evening		EE2	245	
Wholetime Technician Engineering and Technician Courses/ Cúrsaí Lánaimsearacha do Theicneoirí-innealtóireachta agus do Theicneoirí					
Technician Engineering Diploma – Electrical Engineering	Wholetime	K131	WEET	249	
Technician Engineering Diploma – Telecommunications and Electronics	Wholetime	K187	WRTT	254	
Technician Diploma in Electronic Engineering	Wholetime		WRS		
Technician Certificate in Electronics	Wholetime	K189	WRCE	262	
Telecommunications and Electronic Technicians	Wholetime		WRAL	264	

# **COURSES IN ENGINEERING**

# CÚRSAÍ SAN INNEALTÓIREACHT

Part-time and Evening Technician Cúrsaí Páirtaimsearacha & Thráth do Theicneoirí		CAO/DIT Ref.	College Ref.	Page/ Leath.
Electrical Technicians' Certificate	Part-time		PET	268
Electronic Servicing	Part-time		PRM	270
Electronic Equipment Maintenance	Evening		R1	271
Telecommunications Technicians	Evening		R6	273
Industrial Electronics for Electricians	Evening		R7	275
Digital Electronics and Microprocessors	Evening		R8	276
Electrical Technicians	Evening		ET	277

# LANGUAGE COURSES

# CÚRSAÍ SAN TEANGEOLAÍOCHT

		CAO/DIT Ref.	College Ref.	Page/ Leath.
Certificate in European Languages for Business	Wholetime	K155	WLBS	282
Post-Graduate Diploma in Applied Linguistics	Evening		PLAL	284
Diploma in Translation	Evening		PDT	286
Modern Languages (Practical Use)	Evening		PCLL	287
Modern Languages for Specialist Purposes	Evening		PCLS	289

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

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

		CAO/DIT Ref.	College Ref.	Page/ Leath.
Electrical and Electronic Draughting	Wholetime	K144	ESED	292
Certificate Course for Electricians in the Aircraft Industry	Sandwich		SEAL	294
Certificate Course in Electrical Installation Work	Block-Release		SEAS	296
Certificate Course in Electrical Installation Work	Block-Release		PAA	297
Certificate Course in Electrical Installation Work	Block-Release		SESB	298
Certificate Course in Electrical Installation Work	Day-Release		PEI	298
Certificate Course in Electrical Installation Work	Block-Release		BESB	300
Certificate Course in Electrical Installation and Maintenance	Block-Release		SEM	302
Evening Course in Electrical Installation Work	Evening		T1	303
Craft Based Technician Certificate in Electrical Installation Technology	Evening		Т3	305
Evening Course for Updating in Electrical Installation Technology	Evening		T4.1/2	307

# **COURSES IN PHYSICAL EDUCATION**

308

# CÚRSAÍ SAN CORP OIDEACHAS

# RIARACHÁN

# SECRETARY/REGISTRAR - Rúnaí/Cláraitheoir:

David C. Spring GradIPM MACRA

ACCOUNTS OFFICE:

REGISTRATIONS/ADMISSIONS OFFICE:

Cúntasaíocht:

Clárú agus Ionadú: Staff Officer: Thomas Treacy

Senior Staff Officer: Edward J. Delanev

> EXAMINATIONS SECRETARY - Rúnaí Scrúdúcháin: Nuala McGlade BComm

Rúnaí don bPríomh-Oide:

SECRETARY TO THE PRINCIPAL:

SECRETARY TO VICE-PRINCIPAL: Rúnaí don Leas Príomh-Oide:

Janette McFall Vacant

SECRETARY TO REGISTRAR - Rúnaí don Rúnaí/Cláraitheoir: Thérèse Grogan

CLERICAL STAFF - Foireann Cléireach:

Mary Browne Yvonne Cooke

Íde Farrelly Jacqueline Harrington Lorraine Longmore Colm O'Regan Maria Costello Claire Herdman

Thérèse Hussey Joan McElwain

Lillian Nolan Dymphna White

Catherine Murphy Frances Durkan Joan Horgan

TECHNICAL STAFF (Reprographics) - Foireann Teicniúl (Cóipeáil): Elma Flanagan MSGAI C. Ingle MIRT(C&G) A. Cromie AMIRT(C&G)

MAINTENANCE SUPERVISOR: Maor Cothabhail: Andrew Farrelly

**HEAD PORTER:** Príomh Doirseoir: Nicholas McCormack

# COLLEGE OFFICE HOURS - Am Ghnó an Choláiste:

The opening hours of the General Office are as follows:-Monday - Friday: 09.30/12.30; 14.00/17.00. The General Office may also be open at special periods of the year at times which will be posted on the notice board. Except during enrolment periods, members of the academic staff will not be available for interview or consultations except by prior appointment.

# CÁILÍOCHTAÍ RIACHTANACHA

# A. Leaving Certificate

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

# (a) For Diploma in Applied Sciences:

Irish Leaving Certificate in six subjects (including English and a minimum of Grade B in ordinary level Mathematics) with Grade C or higher in two subjects taken at Higher Level (one of which must be Mathematics or Applied Mathematics or a Science subject i.e. Physics, Chemistry, Biology or Physics

with Chemistry).

From Session 1990/91 onwards: Passes in six subjects in the Leaving Certificate Examination with the additional provisos that (i) English and Mathematics are two of the subjects, (ii) Grade B at Ordinary Level or higher be achieved in Mathematics, and (iii) at least Grade C be achieved in two Higher Level papers to include one of the following subjects: Mathematics, Physics, Chemistry, Physics and Chemistry, Biology, Engineering, Applied Mathematics, Technical Drawing.

# (b) For Honours Diploma in Electrical/Electronic Engineering:

Grade C or higher on Higher Level Papers in both Mathematics and Physics and Pass levels in four other subjects in the Leaving Certificate Examination including English.

# (c) For BSc(Human Nutrition and Dietetics):

Irish leaving Certificate in six subjects with Grade C or higher on at least THREE subjects taken at Higher Level, one of which must be Chemistry and passes in three other subjects. English and Mathematics must be included in the six subjects.

# (d) For Certificate in Medical Laboratory Sciences:

Irish Leaving Certificate in six subjects with Grade C or higher in two subjects taken at Higher Level (to include either Biology or Chemistry or Physics or Chemistry and Physics). Subjects passed must include Mathematics, with a minimum of Grade C at Ordinary Level, and English.

From Session 1991/92 onwards, the minimum entry requirements will be: Irish Leaving Certificate in six subjects with Grade C or higher in two subjects on Higher Level papers, one of which must be Chemistry. Subjects passed must include Mathematics, with a minimum of Grade C at Ordinary Level, and English.

# (e) For other courses:

requiring Leaving Certificate standard for entry: Pass in English, Pass in Mathematics, Pass in three other subjects.

# **Summary of Minimum Leaving Certificate Requirements for Wholetime Courses**

# Tábla Ios-Cailíochtaí Árd Teistiméireachta Riachtanach do Chúrsaí Lánaimsearacha

# Irish Leaving Certificate

CAO DIT COUES Six Subjects Thee Honours Mandalory Mails Mandalory Figures Aminole Best (Essee) Merriew (Essee) Merriew (September) College Cotes													College Codes
FT21	•			•	НС	•	i	•					SEE
FT22	•			•	ОВ	•	ii						WSAD
FT23	•	i de	•	Significant of the last of the	•	•	iii	meg	Similar		ilija.	•	WBD
K172	•			•	•	•	Man and a second	•				•	WSO
K114	•			•	OC	•	iv						WML
K100		•			•	•						•	WBT
K131	44	•			OB	•		•	Rolling.	i e di		110	WEET
K166	To be	•			OB	•		•					WMT
K173		•			•	•				343			WAS
K187		•			ОВ	•		•	1161			Ter.	WRTT/WRS
K189		•			•	•		12.0	HAR.		T.	15,0	WRCE
K155	daily.	•	a bere	ris	•	•	ν	•		E IV I'M	N. Year	in Agus	WLBS

- i Results must include a Grade C or higher on Higher Level Physics.
- ii Results must include a Grade C or higher on Higher Level in **one** of the following: **Mathematics, Applied Mathematics, Physics, Chemistry, Biology, Physics with Chemistry.**
- iii Results must include a Grade C or higher on Higher Level Chemistry.
- iv Results must include a Grade C or higher on Higher Level Papers in **one** of the following: **Physics, Chemistry, Physics with Chemistry, Biology.**
- $\nu$  Results must include a Grade C or higher on Higher Level Papers in **one** of the following: **French, German.**

# B. Senior Trade Certificate

Students holding the Senior Trade Certificate of the Department of Education with one endorsement in Mathematics or a Science subject will satisfy the minimum entrance requirements for courses in the Dublin Institute of Technology which specify a pass in the Leaving Certificate Examination as the entrance requirement. Where endorsement subjects are not offered in the trade examination, a pass in an appropriate subject of the Elementary Technological Certificate Examinations of the Department of Education will be an acceptable equivalent.

# C. General Certificate in Education

Candidates may present either (a) 3 A-Levels or (b) 2 A-Levels and 2 O-Levels or (c) 1 A-Level and 4 O-Levels or (d) 6 O-Levels.

# D. International Baccalaureate

The minimum entry requirement with this qualification is:

(i) For Professional/Degree Courses:

Two Subjects at Grade 5 (Higher Level) and four subjects at Grade 4.

(ii) For Non-Professional Courses:

Five Subjects.

International Baccalaureate grades can be equated to Leaving Certificate grades and the points calculation made accordingly.

Leaving Certificate requirements such as Mathematics and or English would also apply in the same way for I.B. However specific course requirements must also be satisfied in common with Leaving Certificate applicants.

# E. Career Foundation Courses in CDVEC Schools

Applicants may gain entry to a course by this mechanism if they meet the appropriate standard.

# F. Equivalent Qualifications

Attainment which the College regards as equivalent to these specified in A to E may be acceptable.

# G. Deferred Entry

Applicants may be permitted this facility under certain agreed conditions.

An applicant who is offered a place on a DIT course and who wishes to defer entry to the course for one year must comply with the following procedures:

- 1. The offer of a place should **not** be accepted through the normal procedures (i.e. completing and returning the CAO or DIT offer notice as issued to applicants).
- 2. The applicant should write to the Admissions Office, Dublin Institute of Technology, 14 Upper Mount Street, Dublin 2, requesting a deferment for one year and explaining his/her reasons for seeking it.
- 3. The letter requesting deferment must arrive in the Admissions Office not later than two days before the Reply Date for the offer of the place.
- 4. The letter should indicate:
- (i) The applicant's Application Number (CAO or DIT as appropriate).
- (ii) The Title and Code of the Course already offered.
- (iii) The reason for the deferment.
- 5. If the request for deferment is refused the offer of the place will be reissued to the applicant in the subsequent Offer Round.
- 6. If the request for deferment is granted the applicant will be so advised, and will be required to accept the deferred place and pay an appropriate deposit before 31st May of the following year.

# Notes:

- (a) Deferment will not be granted to facilitate an applicant in taking another DIT course or a course in another third level education institution.
- (b) the number of deferments granted in any year will be limited and will depend on the nature of the course and the case made by the applicant.

Applicants may be required to undergo Selection Tests, and admission will be dependent on satisfactory results in these tests and interviews and for some courses the following will also apply:

The College may demand a pass, or a particular grade of pass, in specific subjects including 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 (E) 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.

# MODH IONTRÁLA

# (a) Diploma/Degree Courses in CAO Scheme

The following degree courses are included 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).

CAO Code	College Code	Course Description	Course Duration (years)	P	nimun oints '87	in
FT21	SEE	Honours Diploma in Electrical/ Electronic Engineering BSc(Eng)	4	35	39	33
FT22	WSAD	Diploma in Applied Sciences BSc(Applied Sciences)	4	28	30	27
FT23*	WBD	Diploma in Human Nutrition and Dietetics BSc(Human Nutrition & Dietetics)	41/4	36	37	37

<sup>\*\*</sup>See note on selection procedures.

NOTE: Not all applicants who scored the above number of points obtained places in 1986, 1987 and 1988

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

The Central Applications Office, Tower House, Eglinton Street, Galway. Telephone (091) 63318/63269.

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

CAO CLOSING DATE: IRISH APPLICANTS - 1st FEB. 1989 (17.15 hrs)

APPLICATION FEES: IRISH APPLICANTS ----- IR£18.00

# Notes:

Late Application Fee (up to 1st August 1989) IR£40.00

Applicants are advised to read the 1989 CAO Handbook carefully before making application.

(i) When submitting an application to CAO, applicants should ensure that all information entered on the form is accurate and legible. The Central Applications Office makes a charge for the return of incorrect and/or incomplete application forms.

<sup>\*</sup>The cut off points in respect of FT23 relate to applicants who were called for interview only.

- (ii) There will be a period of grace for the receipt of Irish applications during which time applications may be accepted at a fee of IR£26.00. This period will last from February 2nd to March 1st inclusive. Such applications are not considered to be late; late applications are those received for the first time after March 1st.
- (iii) Re-applications (see CAO Handbook) will not be accepted in respect of any DIT degree level courses in CAO scheme.
- (iv) Late applications received in CAO by 1st August, 1989, will be considered together with normal applications on the basis of merit. Late applications for DIT degree courses received in CAO after that date will not be considered.
- (v) Applications from mature and overseas students for DIT courses are not processed through CAO. Such applications must be made directly to:

The Admissions Office, Dublin Institute of Technology, 14 Upper Mount Street, Dublin 2. Telephone (01) 766584.

on or before 10th February 1989

# WHOLETIME DEGREE/PROFESSIONAL COURSES

Chemistry and Physics |

# APPLIED SCIENCE HEALTH SCIENCE FOOD SCIENCE

# **IMPORTANT**

Applicants should note that for Session 1988/89 onwards, new course codes are being introduced. On the following pages, former codes are given for reference only, and should not be used.

# **DIPLOMA IN APPLIED SCIENCES**

Former

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 technical options studied for the final three years of the course as follows:

Chemistry and Physics
Physics and Mathematics
Mathematics and Chemistry

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

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 and at least Grade B in Ordinary Level Mathematics.

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

Applicants should apply on the standard CAO application form to the:

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

Closing Date:

1st February

# First Year:

**Physics** — Electricity and Magnetism, Thermal and Mechanical 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, Industrial Chemistry.

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

Management Studies.

Language — French or German.

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

# Third Year:

Physics — Atomic and Nuclear Physics, Solid State Physics, Electromagnetism and Applied Optics, Electronics, Microprocessors, Topics from Applied Biophysics. 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. Unit Operations: Solvent Extraction, Distillation.

Ancilliary 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 Biophysics.

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 or/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. Unit operations: Reactor Design, Filtrator size reduction.

Project — All students will undertake and complete a Project.

# Awards:

Graduates of this course are eligible for the following awards: Diploma in Applied Sciences (Dublin Institute of Technology)

BSc (Applied Sciences) 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

The main thrust of the course is towards industrial and commercial Opportunities: applications of the various sciences. The graduates of the course are law one discouniquely 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 in the United States, Some have gone into private industry while others have gone into the public service, hospitals. electricity supply and telecommunications. Some have embarked on vod some careers in education.

# For Further Information:

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

# DIPLOMA IN HUMAN NUTRITION AND DIETETICS BSc (Human Nutrition and Dietetics)

Former

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).

The course is designed to provide an integrated training in the science of nutrition and dietetics and its application to human health and well being both at the individual and community level. This includes six months hospital internship and also a period of practical Catering Administration and Management. At present there are insufficient training places available in Ireland and it may be necessary that some students travel to Britain for this component of the course. Students are responsible for their own upkeep during these training periods since they are unpaid.

# 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 six higher level papers will be required in practice before an applicant would be called for interview.

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

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

**Closing Date:** 

1st February

### First Year:

Mathematics, Physics, Chemistry, Biology, Food Science, Communication Studies, Technical French.

### Second Year:

Biochemistry, Physiology, Nutrition, Dietetics, Medicine, Catering Administration, 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 Human Nutrition and Dietetics** (Dublin Institute of Technology) and

**BSc (Human Nutrition and Dietetics)** (University of Dublin) with grades of Pass, Second Class Honours and First Class Honours as appropriate.

# Career Opportunities:

Nutrition as science is a relatively young discipline. The scientific study of nutrition was not possible until the development of the chemical, physical and biological sciences throughout the 19th century. These foundations have been consolidated and new fields investigated. The application of this scientific knowledge for the improvement of health and the prevention of disease requires an understanding of many factors. A career in nutrition or dietetics may appeal to those who are interested in nutrition, have an aptitude for science and for work in medical, social or scientific fields. Graduates from this course are equipped to find employment in many different spheres of nutritional work. In this country, at present, the majority of posts held by graduates are in the Hospital Service in clinical dietetics.

Other areas where posts are 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:

K172

Former

College Code:

WSO

**Duration:** 

Four years wholetime

Description of Course:

This is a course leading to a Diploma in Ophthalmic Optics and provides 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 required.

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.

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Mathematics	14	11	9	6	8	5	3	2	11	8	5	3	5	3
Engineering	12	9	8	5	7	4	3	1	-	HILLON.	-	-	-	-
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	0141	9	7	4	3	m4ni	7-10
Physics/Chemistry	12	9	8	5	7	4	3	11	nem!	ISQU!	-	+11	01400	meli
Other Subjects	9	7	6	4	5	3	2	1	7	5	2	2	3	2

(b) Such qualification as the College may deem equivalent. Some qualified applicants may 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 DIT Application Form to:

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

**Closing Date:** 

12th February

## 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, 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 (FAOI)

# 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 Physics.
Telephone 757541 ext. 235

# DIPLOMA IN MEDICAL LABORATORY SCIENCES

College Code:

K111

Former

College Code:

WAML

Duration:

Two years. 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.

Entry

Requirements:

The Certificate in Medical Laboratory Sciences or equivalent.

**Application** Procedure:

Applicants should apply directly to:

The Registration Section, College of Technology, Kevin Street.

Dublin 8.

Closing Date:

31st August.

Course of Study: Students will study all core subjects and select one specialist option.

**Core Subjects:** 

Chemistry, Biochemistry, Physiology, Physics, Management Studies.

Specialist Subjects:

Microbiology, Histopathology, Haematology 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:

Dioploma 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) as satisfying the requirements for the award of: Associateship of the Institute of Medical Laboratory Sciences (AIMLS)

Career Opportunities:

Associateship of the Institute of Medical Laboratory Sciences qualifies the holder to apply for posts as Technician or Senior Technician in Medical Science Laboratories e.g. Hospitals, Blood Transfusion Service and Veterinary Laboratories.

For Further: Information: Mr. J. Vaughan FIMLS, Department of Biological Sciences, Telephone: 757541 ext. 320

# DEGREE COURSE IN MEDICAL LABORATORY SCIENCES

The Irish Department of Education have authorised the College to proceed with the establishment of an honours degree programme in Medical Laboratory Sciences. Interested parties should consult with the College Secretary/Registrar.

# GRADUATE DIPLOMA OF THE INSTITUTE OF FOOD SCIENCE AND TECHNOLOGY

College Code:

K113

Former

College Code:

WSFS

Duration:

One year wholetime.

It is also possible to prepare for this qualification by three years of part - time study by taking courses \$6.1 and \$6.2 followed by \$6.3.

Description of Course:

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

Qualifications

for Admission:

BSc or equivalent.

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

Application

Procedure:

Applications should be made directly to:

The Registration Section, College of Technology, Kevin Street.

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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.

# WHOLETIME TECHNICIAN COURSES IN APPLIED SCIENCE HEALTH SCIENCE FOOD SCIENCE COMPUTING

# **IMPORTANT**

Applicants should note that for Session 1988/89 and onwards, new course codes are being introduced. On the following pages, former codes are given for reference only, and should not be used.

# **TECHNICIAN DIPLOMA IN APPLIED SCIENCE**

College Code:

K173

Former

College Code:

WAS

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

# 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:** 

12th 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 and Cell Biology. Students will also take Food Science (including instrumentation and control systems) or Biomedical Science (Haematology and Histology).

# **Applied Chemistry Option:**

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

# **Applied Physics Option:**

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

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

For Further Information:

Re: entry to First Year, contact:

Mr. S. E. O'Flatharta,

Department of Physics.

Re: Applied Biology Option, contact:
Dr. R. 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:

K166

Former

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

Weighting Factors Applied

Mathematics English, Physics, Applied Mathematics, Engineering 1.5

1.3

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

Subject	Irish Leaving Certificate							1	TCD Matric					
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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	-	45.86
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

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(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: 12th February

Course of Study: First Year:

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

### Second Year:

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

### Third Year:

Advanced Computer Programming, Microprocessors, Hardware and Data Transmission, Information Systems and Systems Analysis, Operations Research Techniques, Numerical Methods, Business Studies.

Award:

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

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: and K114 and to see sold detuco entrol attementures

Former

College Code:

Duration:

Three years wholetime

Description of Course:

This course provides education in the appropriate Sciences and Technologies 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: 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 and 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).

Weighting Factors Applied

Mathematics, Physics, Chemistry 1.5

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

Subject	4 Gi	Irish Leaving Certificate									NUI Matric					
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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	-		
Applied Maths	12	9	8	5	7	4	3	1	9	7	4	3	-	-		
Engineering	12	9	8	5	7	4	3	1	-	-	-	-	-	-		
Physics/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.

**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:

12th February

Course of Study:

First Year:

Medical Laboratory Sciences, Biology, Chemistry, Physics, Mathematics, Technical German.

Second Year:

Medical Laboratory Sciences, Physiology, Chemistry/Biochemistry, Physics, Statistics and Data Processing, Technical German.

Third Year:

Medical Laboratory Sciences.

Further Study:

The Certificate is a requirment 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 Certificate 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 and developing countries.

For Further Information: Mr. Colm P. O'Rourke FIMLS.

Department of Biological Sciences.

Telephone: 757541 ext. 320

# DIPLOMA IN BAKERY PRODUCTION AND MANAGEMENT

College Code:

K100

Former

College Code:

WBT

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 studied as well as Hygiene and Microbiology, Bakery Equipment, Machine and Modern Plant and Production Systems. 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. A modern continental language is also studied. 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 qualifications 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:

12th February.

Course of Study: First Year:

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

# Second Year:

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

# Third Year:

Applied Science, Bakery Technology, Microbiology and Hygiene, Marketing, Business Administration and Financial Control, Computing, Bread Production (Methods and Techniques), Flour Confectionery bellouis calls (Production Methods and Techniques), Raw Materials Testing, Production Planning and Human Relations, German.

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 all 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.

Telephone 757541 ext. 360

# WHOLETIME DEGREE/PROFESSIONAL COURSES IN ENGINEERING

# **IMPORTANT**

Applicants should note that for Session 1988/89 and onwards, new course codes are being introduced. On the following pages, former codes are given for reference only, and should not be used.

# HONOURS DIPLOMA IN ELECTRICAL/ELECTRONIC ENGINEERING

Former

College Code:

SEE

CAO Code:

FT21

**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 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, 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.

10

(b) Pass in three subjects at A – Level in the General Certificate of Education.

The following scores are awarded to grades A to C on the General Certificate in Education A – Level papers:

A-Level Mathematics, A-20, B-17, C-14 A - Level Physics, Chemistry, Applied Mathematics, A - 17, B - 14, C - 11

Computer Systems, Communications Engineering

(c) 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 CAO application form to:

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

Closing Date:

1st February (ugmo) bus annihusinummo) asinculasi

Course of Study: First Year:

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

### Second Year:

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).

# Third Year:

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.

Fourth Year: hyam epello est as noticellisup douc (a)

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) and

BSc(Eng) 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 Opportunities: Graduates of the course are employed in all areas of electrical/ electronic technology, including computer engineering, electronics, telecommunications, automatic control and electrical power.

For Further

Dr. J.C. Fisher,

Head, Department of Electrical Engineering.

Telephone: 757541 ext. 243.

# WHOLETIME TECHNICIAN COURSES IN ENGINEERING

#### **IMPORTANT**

Applicants should note that for Session 1988/89 and onwards, new course codes are being introduced. On the following pages, former codes are given for reference only, and should not be used.

#### TECHNICIAN ENGINEERING DIPLOMA— ELECTRICAL ENGINEERING

College Code:

K131

Former

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 1 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: FT21 (SEE).

Note: This course is presently under review, it is intended that the revised course will be introduced in September 1989.

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.

Subject	1 to 2011	Irish Leaving Certificate								NUI Matric				TCD Matric	
Population Colors	НА	НВ	НС	HD	OA	ОВ	ОС	OD	Α	В	С	D	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	112	pab	1101	82	ספת	90	
Physics	12	9	8	5	7	4	3	010	9	7	4	3	10	710	
Other Subjects	9	7	6	4	5	3	2	1	9	5	2	2	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.

(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:

12th February

Course of Study: First Year:

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

#### Second Year: Electrical Power Option:

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

#### Second Year: Control and Instrumentation Option:

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

#### Third Year: Electrical Power Option:

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

Third Year: Control and Instrumentation Option:

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

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

> Technician Engineering Diploma - Electrical Engineering (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

As this is a broadly based course graduates take employment in a wide Career Opportunities:

range of activities such as Electrical Supply, Instrumentation and

Control, Computing and Consulting.

For Further Mr. J.J. Farrell, Assistant Head, Information:

Department of Electrical Engineering,

Telephone: 757541 ext. 261

#### DIPLOMA COURSES IN ELECTRONIC. COMMUNICATIONS AND COMPUTER **ENGINEERING**

The College provides two three - year diploma courses in Electronic and Communications Engineering and Computer Engineering, one leading to the D.I.T. Technician Engineering Diploma in Telecommunications and Electronics, K186 (WRTT) the other to the D.I.T. Technician Diploma in Electronic Engineering, K188 (WRS).

From September 1987 a common first year, Course Code K187 (WRS/WRTT), has been provided for both of these courses. On successful completion of this first year students proceed over the following two years to study for either the D.I.T. Technician Engineering Diploma to Telecommunications and Electronics, Course Code K186 (WRTT) see page 52. or for the D.I.T. Technician Diploma in Electronic Engineering, Course Code K188 (WRS) see page 54.

The particular course of study open to students in these two subsequent years will be determined by the College having regard to performance in the first year Summer examinations and, if necessary, in an interview.

#### **TECHNICIAN ENGINEERING DIPLOMA IN** TELECOMMUNICATIONS AND ELECTRONICS— TECHNICIAN DIPLOMA IN ELECTRONIC **ENGINEERING**

#### Common First Year Course:

College Code:

K187

Former

College Code:

of Course:

Description This common first year is designed to provide a foundation from which students may progress either via Course K186 (WRTT) to the Technician Engineering Diploma in Telecommunications and Electronics, or via Course K188 (WRS) to the Technician Diploma in Electronic Engineering.

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
English, Physics,
Applied Mathematics and Engineering

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

Subject	Seldur Krak Mort and	Irish Leaving Certificate								NUI Matric				TCD Matric	
echniquen Engineering oo	НА	НВ	НС	HD	OA	ОВ	ОС	OD	A	В	С	D	0	P	
English	12	9	8	5	7	4	3	810	9	7	4	3	J_an	040	
Mathematics	14	11	9	6	8	5	H B	rolgi	11	8	5	TIC	5		
Applied Maths	12	9	8	5	7	4	3	1	9	7	4	3	401	3-0	
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 qualifications 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 D.I.T. Application Form to:

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

Closing Date:

12th February, 1988.

Course of Study:

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

For Further Information:

Mr. B.J. O'Connor,

Head,

Department of Electronic and Communications Engineering.

Telephone 757541 ext. 225

This course is of three years duretion, including the 'no

Mr. C.V. Cowley, Assistant Head,

Department of Electronic and Communications Engineering,

Telephone 757541 ext. 240

## TECHNICIAN ENGINEERING DIPLOMA IN TELECOMMUNICATIONS AND ELECTRONICS

College Code:

K186

Former

College Code:

WRTT

**Duration:** 

This course is of three years duration, including the first year which is also common to Course K188 (WRS). Details of the first year of this Course, K187 (WRS/WRTT) are set out on page 49.

Entrance

Requirements:

Please see page 49.

Application

Procedure:

Please see page 50.

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: FT21 (SEE).

Course of Study: 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, Computer and Microprocessor Systems, Communication Engineering, Industrial Studies, Technical French or Technical German. Integrated Circuit Fabrication is offered as an optional subject.

#### Awards:

Graduates of this course are eligible for the following award:

Technician Engineering Diploma-Telecommunications and Electronics (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

A supplementary Certificate in Integrated Circuit Fabrication is awarded to graduates who are successful in a special examination in this optional subject.

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

Department of Electronic and Communications Engineering. Telephone 757541 ext. 225

provide a sound technical education for students preparing for careers

Mr. C.V. Cowley, Assistant Head, Department of Electronic and Communications Engineering. Telephone: 757541 ext. 240

#### **TECHNICIAN DIPLOMA IN ELECTRONIC ENGINEERING**

College Code:

K188

Former

College Code:

WRS

**Duration:** 

This course is of three years duration, including the first year which is also common to Course K186 (WRTT). Details of the first year of this

Course K187 (WRS/WRTT) are set out on page 49.

**Entrance** 

Requirements:

Please see page 49.

**Application** 

Procedure:

Please see page 50.

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, and sales of electronic, communications and computer equipment.

The subjects covered on the course include Mathematics, 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.

Course of Study: 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 covervage 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. B.J. O'Connor,

Head,

Department of Electronic and Communications Engineering.

Telephone 757541 ext. 225

with an approach which emphasizes the practicalisp to a aspects of the

Mr. C.V. Cowley,
Assistant Head,

Department of Electronic and Communications Engineering.

Telephone 757541 ext. 240

Note: It must be emphasised that the above are the minimum entry

#### **TECHNICIAN CERTIFICATE IN ELECTRONICS**

College Code:

K189

Former

College Code:

WRCE

**Duration:** 

Two years wholetime

Description

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.

Entrance Requirements: (a) Irish Leaving Certificate in five subjects which must include Mathematics and English.

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 qualifications 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 higher standard is necessary in practice to gain a place.

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

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

**Closing Date:** 

12th February

#### Course of Study: First Year:

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

#### Second Year:

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

#### Award:

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 the 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. V. Cowley, Assistant Head,

Department of Electronic and Communication Engineering. Telephone 757541 ext. 240

TECHNICIAN CERTIFICATE IN ELECTRONICS

Mathematics, Engineering Science, Electricity, Electronics Workshop, Analogue and Digital Electronics, Electrical Disugniting, Computer Programming Systems, Computer Programming

Former

College Code: WRCE

Second Year:

Mathematics, Electricity, Circuit Theory, Digital and Agalogue Electronics, Communication Principles, Computer Systems, Computerud

Description

This is a properly besser course secreting entries application but with an approach which prophesives the practical/applied aspects of the warphistion of the warphis

the attended to the control of the c

Career Graduates of the course are qualified to take up employment across Career Opportunities and account of the solution of the solution of the production, services and applications are productly in the production, services and applications are productly in the production.

Mr. C. V. Cowley.

For Further

pringerioral noiteoinummod one pinostosia to inemissed cation with one endorsement in Mathematics of a Science of the Wave encorsement subjects are not offered in the trade examinations, a pass in an appropriate subject of the Elementary Technological Cartificate extranel roots of the Department of Education will be an acceptable accuration.

200

(u) Such qualifications as the College may deem equivalent

Flota: It must be established that the above are the minimum entry requirements for the observe throughout all the surpresentations seeming entry a higher standard to represent an explanation on a place.

Application Procedura: Applicants should apply on the absolute D.LT. Application Form to:

The Admiestone Office, Dublin Institute of Technology, 14 Upper Mount Street, Dublic 2

Clarking Date:

12th February

## WHOLETIME COURSES IN LANGUAGES

#### **IMPORTANT**

Applicants should note that for Session 1988/89 and onwards, new course codes are being introduced. On the following pages, former codes are given for reference only, and should not be used.

#### CERTIFICATE IN EUROPEAN LANGUAGES FOR BUSINESS

College Code: K155

Former

College Code: WLBS

**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

business.

Entrance Requirements: Irish Leaving Certificate in five subjects, including English and Mathematics with Grade C or higher on the higher level papers in either

French or German.

or

such qualification as the College may deem equivalent.

Note: 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. Application Form to:

The Admissions Office.

**Dublin Institute of Technology,** 14 Upper Mount Street, Dublin 2.

**Closing Date:** 

12th February

Course of Study: First Year:

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

Studies, European Studies, Keyboard Appreciation.

Second Year:

one section Service German or French with either French or German or Spanish, Business Many Studies, European Studies, Computer Applications.

Award:

Graduates of this course are eligible for the following award:

Certificate in European Languages for Business (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

Career Opportunities: The course is designed to train students to work as personal assistants, executive assistants, commercial translators in many different areas requiring a thorough language competence and a good knowledge of business practice.

For Further Information:

Department of Languages and Industrial Studies Telephone 757541

#### ward: SEDVERMENT ON HELDER GERALD LOUIS LANGE LANGE CONTRACTOR CON

Contilicate in European Languages for Business (Dublin Institute of Technology) with grades of Pass, Credit or Distinction as appropriate.

The course is designed to train students to work as personal assistants, executive assistants, commercial translators in many different areas mounting a thorough language competence and a good knowledge definition.

Carser Opportunities:

Directions

Two years wholetime

Description The theoretical and practical content of this course is designed of the course of Countain the second of Countain the second of the course of th

Entrance Requirements: hish Leaving Certificate in five subjects, tocluding English and Mathematics with Grade C or higher on the higher level papers in either French or German.

or

such qualification as the College may deem squivalent.

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

Application Procedure: Applicants should suply on the standard D.L.T. Applicative Form to

The Admissions Office, Dublin Institute of Technology, 15 Useer Mount Street, Dublin 2.

Closing Unie:

12th February

Course of Study: First

Contain or Freigh with either Freigh or British in Spiedeb, Business Studies, European Studies, Keyboard Appreniation.

Romand Year

Comman at French with either French or German or Sweden, Business Studies, European Studies, Computer Applications.

## WHOLETIME COURSES FOR DRAUGHTSMEN

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Applicants should note that for Session 1988/89 and onwards, new course codes are being introduced. On the following pages, former codes are given for reference only, and should not be used.

#### CERTIFICATE COURSE IN ELECTRICAL AND **ELECTRONIC DRAUGHTING**

College Code:

K144

Former

College Code:

**ESED** 

**Duration:** 

One year wholetime

Description of Course:

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 Requirements: Passes in five subjects in the Irish Leaving Certificate including English 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.

**Application** Procedure:

This Course is organised under the Special Training Programme of the European Social Fund. Applications for places on the course will be invited on 7th August 1988 by advertisements placed in the national

newspapers.

Closing Date:

29th August 1988

Course of Study: Electrical Science (including Electronics), Electrical Installation Theory, Electrical Draughting (including Computer Aided Draughting) Engineering

Drawing, Laboratory/Workshop, and Project work.

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

on current drawing - office practice.

Award:

Internal examinations are set by the College. A Certificate with pass, Credit or Distinction, as appropriate, is awarded by the College to

successful students.

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

Department in Charge:

Electrical Installation

For Further Information:

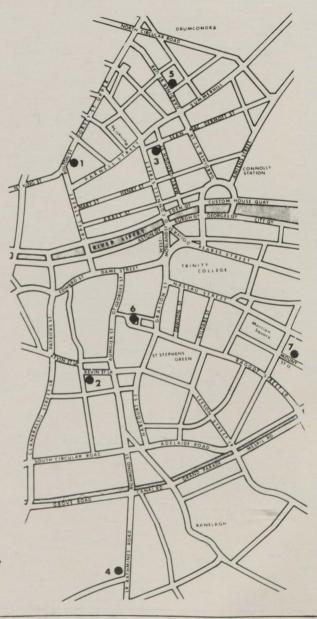
Mr. J. O'Donnell Assistant Head.

Department of Electrical Installation. Telephone 757541 ext. 222

### NOTES

## CITY OF DUBLIN VOCATIONAL EDUCATION COMMITTEE DUBLIN INSTITUTE OF TECHNOLOGY THIRD LEVEL INSTITUTIONS

- College of Technology, Bolton Street, Dublin 1.
  Telephone 727177
- 2. College of Technology, Kevin Street, Dublin 8. Telephone 757541
- Dublin College of Catering, Cathal Brugha Street, Dublin 1. Telephone 747886
- College of Commerce, Rathmines Road, Dublin 6. Telephone 970666
- College of Marketing, and Design, 40 – 45 Mountjoy Square, Dublin 1. Telephone 363000
- 6. College of Music, Chatham Row, Dublin 2. Telephone 778903
- Dublin Institute of Technology, 14 Upper Mount Street, Dublin 2.
   Telephone 766584



## 1988 CALENDAR

	JANUARY	FEBRUARY	MARCH
Su	3 10 17 24 31	7 14 21 28	6 13 20 27
M	4 11 18 25	① 8 15 22 29	7 14 21 28
Tu	5 12 19 26	2 9 16 23	1 8 15 22 29
W	6 13 20 27	3 10 17 24	2 9 16 23 30
Th	7 14 21 28	4 11 18 25	3 10 17 24 31
F	1 8 15 22 29	5 12 19 26	4 11 18 25
Sa	2 9 16 23 30	6 13 20 27	5 12 19 26
	APRIL	MAY	JUNE
Su	3 10 17 24	1 8 15 22 29	5 12 19 26
M	4 11 18 25	2 9 16 23 30	6 13 20 27
Tu	5 12 19 26	3 10 17 24 31	7 14 21 28
W	6 13 20 27	4 11 18 25	1 8 15 22 29
Th	7 14 21 28	5 12 19 26	2 9 16 23 30
F	1 8 15 22 29	6 13 20 27	3 10 17 24
Sa	2 9 16 23 30	7 14 21 28	4 11 18 25
	JULY	AUGUST	SEPTEMBER
Su	3 10 17 24 31	7 14 21 28	4 11 18 25
M	4 11 18 25	T; 8 15 22 29	5 12 19 26
Tu	5 12 19 26	2 9 16 23 30	6 13 20 27
W	6 13 20 27	3 10 17 24 31	7 14 21 28
Th	7 14 21 28	4 11 18 25	1 8 15 22 29
F	1 8 15 22 29	5 12 19 26	2 9 16 23 30
Sa	2 9 16 23 30	6 13 20 27	3 10 17 24
	OCTOBER	NOVEMBER	DECEMBER
Su	2 9 16 23 30	6 13 20 27	4 11 18 25
M	3 10 17 24 31	7 14 21 28	5 12 19 26
Tu	4 11 18 25	1 8 15 22 29	6 13 20 27
W	5 12 19 26	2 9 16 23 30	7 14 21 28
Th	6 13 20 27	3 10 17 24	1 8 15 22 29
100	7 14 21 28	4 11 18 25	2 9 16 23 30
F	1 8 15 22 29	5 12 19 26	3 10 17 24 31

O C.A.O. Closing Date ○ C.A.O. Late Closing Date ☐ D.I.T. Closing Date