Part-time Courses 1994-95

City of Dublin Vocational Education Committee
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FOREWORD

I am very pleased to launch this new DIT initiative involving the production of a co-ordinated series of booklets that provide information about the part-time and apprenticeship courses which may be offered by the Institute in its different centres in the 1994/95 session. Since the establishment of the first of our Colleges in Kevin Street in 1887 there has been a special commitment to part-time education, and over the years many thousands of young people (and the not so young!) have benefited from the wide range of courses that has been developed. Today some 15,000 part-time and apprentice students are enrolled in the Colleges of the Institute, which is by far the largest provision being made in this area by any Irish higher education institution.

As part of the process of implementing the Dublin Institute of Technology Act 1992, DIT is in the process of a reorganisation, leading to an overall integrated structure, which hopefully will enable us to offer a wider range of courses and provide a better service to our students. It seems likely that most of the disciplines will continue to be based in their present sites, at least for the time being, with one major exception - the activities of the former College of Commerce in Rathmines will transfer to a new purpose built 10,000 square metre college in Aungier Street as from September 1994.

We are very aware of the rapid pace of technological change and the need for people to keep abreast of new developments or prepare for new career directions. We hope that you will find a course that is of interest to you in DIT. If not, you might contact the College Department associated with the broad discipline area and make them aware of your area of interest or needs. We are anxious to respond as comprehensively as possible to demands, having regard to available resources, and many of our present courses were developed in response to such expressions of interest. Enquiries from employers, professional bodies and other groups are also welcome in this context.

If you do decide to pursue a part-time or apprenticeship course in DIT we hope that you will both enjoy and benefit from your time with us.

Dr. Brendan Goldsmith.
President.

INTRODUCTION

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

METHOD OF APPLICATION AND ENROLMENT

With the exception of the Computing courses B70, B71, B72, B81, B82, B83, B91 and B92 application and admission to part-time day and evening courses is by personal attendance for interview at the College between 6.30 p.m. and 8.00 p.m. in accordance with the following schedule.

Monday, 12th September: Enrolment for all part-time and evening courses provided by the College except courses in the following: Printing, Automobile and Aeronautical Engineering.

Wednesday, 14th September: Enrolment for courses in Printing, Automobile and Aeronautical Engineering.

Thursday, 15th September and Friday, 16th September: Enrolment for all part-time day and evening courses in which vacancies remain.

Prior application or contact with the College is not necessary. Candidates are encouraged to bring with them evidence of existing qualifications and employment together with the specified tuition fee to enable them to complete the enrolment if they are acceptable and permitted to do so. Classes are generally scheduled to commence during the week commencing September 26th and those who have enrolled will be expected to report for classes in accordance with the schedule which will be available.

Applications for admission to the Computer courses must be made on the official form available on request from the Dean of Computing.
B2

CONSTRUCTION TECHNOLOGY CERTIFICATE/ DIPLOMA PART-TIME
This day release course is similar to the wholetime Construction Technology Certificate/Diploma course (DT114) and leads to the award of the Construction Technology Certificate/Diploma. Classes are scheduled on one day and two evenings per week over a period of four years. Entry to this course is open to those holding:
(a) The secondary schools Leaving Certificate in at least five subjects including Mathematics and English or an equivalent qualification.
(b) Appropriate employment in the Construction Industry.

Course fee
First Year £330
Subsequent Years £230

Department in Charge: Surveying and Building Technology.

B3

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

Entry Qualifications

Course fee
£330

Department in Charge: Surveying and Building Technology.

B4A

DIPLOMA/DEGREE IN CONSTRUCTION ECONOMICS PART-TIME
This day release course is similar to the corresponding wholetime course (FT02) and leads to the award of a Diploma/Degree in Construction Economics. Classes are scheduled on one day and two evenings per week over a period of six years. The academic entry qualifications to the First Year of the course are similar to those for FT110. Candidates holding relevant technician qualifications at an appropriate level may be eligible for exemptions from one or more years of the course. Candidates must be in appropriate employment in the Construction Industry.

Course fee
£640

Department in Charge: Surveying & Building Technology.

B5

GRADUATE DIPLOMA IN ARBITRATION LAW
The objectives of this one year part-time course are to provide participants with a better knowledge of the law and arbitration including the Arbitration Acts of 1954 and 1980. It has been developed at the request of and in co-operation with the Irish Branch of the Chartered Institute of Arbitrators. Normally this course runs on alternate years. It is expected that it will again be provided in 1995/96.

Entrance Requirements
Relevant professional qualification (e.g. Law, Engineering Architecture, Surveying, Accountancy, Insurance etc.) with exemptions from modules (a) and (b) for practising lawyers and those with a recognised law degree. Exceptionally, applications will be accepted from unqualified students who have appropriate training or experience. Selection will be subject to interview. Exempted students will be deemed to enrol in course B5A.

Course of Study
The course comprises three taught modules and two seminars. The taught modules are:
(a) Legal Principles, Civil Procedure & Evidence
(b) Contract & Tort
(c) Arbitration Law & Procedure, Alternative Methods of Dispute Resolution. The two seminars which are organised by the Irish Branch of the Chartered Institute of Arbitrators deal with: (i) Introduction to Arbitration and (ii) ADR and Award Writing. They are subject to a separate fee payable to the Irish Branch of the Institute.
On successful completion of course students will be awarded the Dublin Institute of Technology Graduate Diploma in Arbitration Law. It is intended to seek exemption for holders of this Diploma from Parts I and II of the examinations of the Chartered Institute of Arbitrators.

Course fee

£900

Department in Charge: Surveying & Building Technology

GRADUATE DIPLOMA IN INTERNATIONAL ARBITRATION LAW

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

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

The course comprises two taught modules and four special seminars. The taught modules are:

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

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

Course fee

£600

Department in Charge: Surveying & Building Technology

B7

GRADUATE DIPLOMA IN PLANNING AND DEVELOPMENT ECONOMICS

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

Entrance Requirements

(1) (a) a recognised professional qualification in the fields of Planning, Architecture, Surveying, Engineering, Law, Accountancy

or

(b) an Honours Degree in an appropriate discipline viz. Surveying, Economics, Law, Geography, Business Studies.

and

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

The course consists of two parts:


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

Examinations & Awards

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

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

Course fee

£850

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

Department in Charge: Surveying and Building Technology.

FOUNDATION COURSE FOR DEGREE IN ENGINEERING
The Department of Engineering Technology will offer a four year course leading to a Diploma/Degree in Engineering on a part-time basis commencing in September 1995. It is open to those who already hold an appropriate Technician Diploma qualification.

In the 1994/95 session the Department will offer the Foundation Year (or first year) Course for applicants who possess a Technician Diploma at Merit or Pass level. Applicants with a Distinction in their Diploma will be allowed entry to the second year commencing September 1995.

Following the Foundation Course students will complete three years on a Part-time basis with the object of achieving the qualification of Diploma/Degree in Engineering

£330

Department in Charge: Engineering Technology

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

(i) Institution of Engineers of Ireland.
(ii) The Engineering Council (UK) and its associated Professional Bodies such as—

(a) The Institution of Mechanical Engineers;
(b) The Institution of Electrical Engineers;
(c) The Institution of Structural Engineers;
(d) Chartered Institute of Building Services Engineers.

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

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

Details of the syllabus and examination regulations are available from the Institution of Engineers of Ireland, 22 Clyde Road, Dublin 4.

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

The requirement for student membership of the Institute of Engineers of Ireland is Leaving Certificate with Honours or GCE Advanced Level in Mathematics and a suitable Science subject together with four Ordinary Level subjects including English.

Certain Technician qualifications also meet the educational requirements for student membership and may give exemption from all or some subjects in Part I. Details are available from the Department of Engineering Technology

£330

Department in Charge: Engineering Technology
MECHANICAL ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA COURSE

This part-time day and/or evening course prepares students for a Technician Certificate/Diploma in Mechanical Engineering. Students are expected to be already suitably employed in Mechanical Engineering before commencing the course. It parallels the corresponding wholetime course DT 128 and follows the same core syllabus.

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


Stage II — Third and Fourth Years (Certificate Stage): At this stage three options are offered: Mechanical, Welding and Fluid Power. Common Subjects: Mathematics, Thermal and Fluid Plant, Electrotechnology and Industrial Instrumentation, Complementary Studies and Computing.

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

Municipal Option: Mathematics, Road Engineering, Management Studies, Planning and Building Regulations, Hydraulics and Sanitary Services, Structural Design and a Project.

(Structural Option): Mathematics, Management Studies, Theory of Structures, Structural Design (Concrete), Structural Design (Steel), Municipal Engineering and a Project.


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

The Environmental Option will commence in the academic year 1995/96.

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

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

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Department in Charge: Engineering Technology
MECHANICAL ENGINEERING TECHNICIAN
CERTIFICATE AND DIPLOMA COURSE

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

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


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


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


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

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

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

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

Course fee

<table>
<thead>
<tr>
<th>Stage</th>
<th>Fee</th>
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<tbody>
<tr>
<td>I</td>
<td>£330</td>
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<td>II &amp; III</td>
<td>£230</td>
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</table>

Department in Charge: Engineering Technology.

BUILDING SERVICES ENGINEERING TECHNICIAN
CERTIFICATE AND DIPLOMA COURSE

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

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

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

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

**Building Services Option:** Environmental Engineering, Environmental Plant Design, Lighting, Acoustics and Water Services.


Stage III - Fifth and Sixth Years (Diploma Stage): Mathematics, Management Studies, Electrotechnology and Controls, Lighting and Acoustics, Environmental Engineering, Air Conditioning and Refrigeration, Heating and Combustion, Computing and a Project.

Examinations and Other Requirements

At the end of the first year students take the Part I examination and Other Requirements of the City & Guilds of London Institute No. 2550, Part 11 at the end of the second year, and Part 111 at the end of the third year.

**Course fee**

| First Year | £330 |
| Second Year & Third Year | £230 |

**Department in Charge: Engineering Technology**

B47D/B47E

**MECHANICAL ENGINEERING TECHNICIAN COURSE**

This part-time day and evening course is intended to prepare students for the City & Guilds of London examinations for Mechanical Engineering Technicians (2550). The course is for technicians and draughtsmen engaged in the following types of employment:

- Elementary Stage Technological Certificate of the Department of Education in Mechanical Engineering or Leaving Certificate or endorsement in Senior Craft Certificate or equivalent.

**Course of Study**


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

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

Entrance Requirements

Candidates must have 4 or more years manufacturing engineering experience and suitable education.

Course Content

A review of manufacturing engineering fundamentals including applied mechanics, materials, quality control, management, computer applications, automation, manufacturing processes and engineering design. Duration: One year, two evenings per week.

Course fee

£330

**Department in Charge: Engineering Technology**

B48

**CERTIFIED MANUFACTURING TECHNOLOGIST**

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

Course fee

£330
STRUCTURAL DESIGN COURSE
This is a one year advanced course intended for those who wish to prepare for the Part III Design examination of the Institution of Structural Engineers. Depending on demand, there may be options in Steel or Concrete Design.

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

Department in Charge: Engineering Technology.

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

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

Course of Study

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

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

Department in Charge: Engineering Technology.

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

Those who enrol are required to apply for student membership.

Course fee
First Year £330
Second Year £230

Department in Charge: Engineering Technology.

REFRIGERATION ENGINEERING TECHNICIAN
This is a two year course for technicians employed in the refrigeration engineering industry. Suitable students are prepared for the City & Guilds of London Institute examinations in the Science and Technology of Refrigeration (2570). The subjects of instruction are: Science, Refrigeration Processes and Machinery, and Drawing.

Course fee
£330

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

Department in Charge: Engineering Technology.

MAINTENANCE TECHNOLOGY CERTIFICATE COURSE
This course will provide participants with a knowledge of maintenance strategies and skills to cope with the demands of modern maintenance requirements.

The course is organised on a modular basis and has considerable flexibility for craftspersons and other maintenance staff to enhance their qualifications.

Entrance Requirements
Leaving Certificate in five subjects including English and Mathematics, or appropriate Senior Trades Certificate with endorsements or equivalent qualifications or mature applicants. Participants should have at least three years experience performing plant maintenance duties.

Certification
Certification will be provided by the National Council for Educational Awards and the course is offered in the NCEA ACCS mode to allow participants to study for individual subjects, groups of subjects or the entire course programme.

Course of Study

STAGE 1
Common Core Subjects
Mathematics, Computer Studies, Basic Technology, Maintenance Organisation, Technical Communication

Fluid Power Technology Option
Fluid Power Sciences,
Fluid Power Plant 1
Refrigeration & Air Conditioning Option
Basic Heat, Fundamentals of Refrigeration

STAGE 2
Common Core Subjects
Management of Maintenance
Computer Studies II

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

Course fee
£330

Department in Charge: Engineering Technology

INTRODUCTORY PROGRAMMING
This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examinations 726 Information Technology Program. Successful candidates will receive a City & Guilds Certificate in Programming (Level I )
- 7261-212 Introduction to Computers I
- 7261-200 Basic Programming I
- 7261-201 Cobol Programming I
This course covers the fundamental principles of programming. Computers systems in general are covered and the students are introduced to computer application packages in addition to BASIC and COBOL languages.

**Course of Study**
- Databases
- Computer Systems
- Spreadsheets
- Wordprocessing
- BASIC Language
- COBOL Language

**Entrance Requirements**
Leaving Certificate or Equivalent

**Timetable**

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<thead>
<tr>
<th>DAY</th>
<th>TIME</th>
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<tr>
<td>Wednesday</td>
<td>6.30 - 9.30 p.m.</td>
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<tr>
<td>Monday</td>
<td>6.30 - 9.30 p.m.</td>
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**Duration**
One year, two evenings per week, Monday and Wednesday

**Course fee**
£330

**Department in Charge:** Science, Mathematics & Computing

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**B72 ADVANCED PROGRAMMING**

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examination 425 'Applicants Programming Certificate'.

**Course Objectives**
This is an advanced applications programming course enabling the student to design and develop commercial systems using advanced programming and design techniques. This course prepares students for work as a junior programmer.

**Course of Study**
- Program Design
- Structured Programming
- Problem Solving
- Design & Specification Tools
- Fourth Generation Languages
- Databases
- Program Documentation

**Entrance Requirements**
(a) Leaving Certificate or Equivalent
(b) City & Guilds Preliminary Certificate in Applications Programming or equivalent

**Course fee**
£330

**Department in Charge:** Science, Mathematics & Computing
**AUTOCAD**

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examination 4351 'Introduction to AutoCAD'. Successful candidates of this course who have also successfully completed either courses B91 or B92, will receive a City & Guilds Diploma in Computer Applications (Level 2).

**Course Objectives**

To give a thorough knowledge of the important aspects of computer aided design and its associated technologies.

- Computer Hardware
- Operating Systems
- AutoCAD
- CAD Concepts
- Drawing Creation & Modification
- Drawing Maintenance
- Hardcopy Generation
- Drawing Management

**Entrance Requirements**

(a) Leaving Certificate or Equivalent.
(b) Reference

**Duration**

One Year, one evening per week - Monday

**Course fee**

£330

**Department in Charge: Science, Mathematics & Computing**

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**B82**

**AUTOCAD THREE DIMENSIONAL**

This is a one year evening course. Students are prepared for the City & Guilds of London Institute examination 4353 Three Dimensional AutoCAD and Autolisp Programming. Successful candidates of this course who have also completed either courses B91 or B92 will receive a City & Guilds Diploma in Computer Applications (Level 2)

**Course Objectives**

To enable student to use three dimensional CAD software.

**Course of Study**

- Customising AutoCAD
- Menu Customisation
- CAD Hardware
- AutoCAD Release 12
- Autolisp

**Entrance Requirements**

(a) Leaving Certificate or Equivalent
(b) Reference
(c) City & Guilds 4351 Introductory AutoCAD or Equivalent

**Duration**

One year, one evening per week (Wednesday)

**Course fee**

£330

**Department in Charge: Science, Mathematics & Computing**

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**B83**

**AUTOCAD CUSTOMISATION**

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examination 4384 AutoCAD Customisation.

**Course Objectives**

To enable student to setup and customise AutoCAD and ancillary equipment.

**Course of Study**

- Menu Customisation
- LISP Programming
- Three Dimensional Draughting
- AutoCAD Release 12
- Autolisp

**Entrance Requirements**

(a) Leaving Certificate or Equivalent
(b) Reference
(c) City & Guilds 4351 Introductory AutoCAD or Equivalent

**Duration**

One Year, one evening per week, Thursday

**Course fee**

£330

**Department in Charge: Science, Mathematics & Computing**
B91

WORDPROCESSING & DTP
This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examinations from the 726 Information Technology Program. Successful candidates of this course and one of B92, B81 and B82 courses will receive a City & Guilds Diploma in Computer Applications (Level 2).

- 7261-420 Word Processing 2
- 7261-427 Desktop Publishing 2

Course Objectives
The successful candidate will have competency in the use of wordprocessing and DTP systems.

Course of Study
- Wordprocessing
- Desktop publishing
- Documents Preparation
- Computer Hardware
- Computer Software

Entrance Requirements
Leaving Certificate or Equivalent.

Course fee
£230

Department in Charge: Science, Mathematics & Computing

B92

DATABASES & SPREADSHEETS
This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examinations from the 726 Information Technology Program. Successful candidate B91, B81 and B82 courses will receive a City & Guilds Diploma in Computer Applications (Level 2).

- 7261-421 Databases 2
- 7261-422 Spreadsheets 2

Course Objectives
The successful candidate will have competency in the use of spreadsheet and database systems.

Course of Study
- Databases
- Spreadsheets
- Data Management
- Computer Hardware
- Computer Software

Entrance Requirements
Leaving Certificate or Equivalent

Course fee
£230

Department in Charge: Science, Mathematics & Computing
CRAFT & TRADE RELATED COURSES-EVENING

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

Construction Trades 'A' B102, B104, B106, B300

Construction Trades 'B' B107, B111, B118, B119, B120, B121, B122A, B122B


Engineering Trades B138, B139, B140, B141A-F


Printing and Graphic Communications B180, B182, B183, B184, B185, B186, B187, B188, B191, B192, B194, B197, B200

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B104

COLOUR AND DESIGN IN BUILDING WORK

This course is designed to give craftsmen an opportunity to study colour, texture and pattern and broken colour work in Building.

Duration
One year-30 weeks at 5 hours per week

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

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

Award
City and Guilds of London Institute Certificate 6000-1-09 and 6000-1-5

Course Fee
£330

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B106

SIGNWORK—ADVANCED

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

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

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

Course Fee
£230

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B300

BUILDING MAINTENANCE (MODULAR)

The course is designed to prepare students for corporate membership of the Institute of Maintenance and Building Management and to equip them with additional skills for employment and career development.

Entrance Requirements
(a) Employment in the Construction/Maintenance Industry
(b) Interview
### Course of Study

**B107**

**FURNITURE DESIGN AND CONSTRUCTION (ADVANCED)**

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

**Course Contents**

- Sketching and draughtsmanship
- Sketch Design
- Working Drawings
- Presentation Drawings

**Entrance Requirements**

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

**Examinations**

City and Guilds of London Institute.

**Awards**

City and Guilds of London Certificate in Furniture Design and Construction. Course 5790.

**Duration**

Two years—30 weeks at 4 hours/week (2 evenings) each year.

**Course fee**

£230

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**B111**

**CABINETMAKING/CHAIRMAKING**

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

**Duration**

One year, two evenings per week.

**Subjects**

Practical, Trade Theory & Drawing.

**Entry Requirements**

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

**Course fee**

£330

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**B117**

**WOODTURNING**

This course is of 10 weeks duration and covers the basics of woodturning. Students attend classes one evening per week.

**Course fee**

£100

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**B118**

**TIMBER TECHNOLOGY (INSTITUTE OF WOOD SCIENCE-CERTIFICATE COURSE)**

The aim of the Institute of Wood Science is to advance and encourage the scientific, technical, practical and general knowledge of timber and wood based materials.

This course of study is designed to satisfy that aim, providing a focused training programme for those involved with either the growth, utilisation, sale or treatment of timber and timber products.

**Course outline**

The course prepares participants for the Institute of Wood Science Certificate level examination, is modular in design and comprises five modules:
Module 1 Wood as a Material
Module 2 Timber Trading
Module 3 Drying and Strength
Module 4 Conversion and Preservation
Module 5 Panel Products and Utilisation

Duration
The course will be delivered on two evenings per week and will run for 26 weeks.

Entry Requirements
Mature students will be accepted on the basis of relevant experience and/or interview. New school leavers will be accepted provided they hold a minimum of grade B in a relevant subject in the Intermediate/Junior Certificate and will be subject to interview. They are however encouraged to gain 12 months trade experience before application.

Successful participants are rewarded with an internationally recognised professional qualification in timber technology, membership of the Institute of Wood Science at certificate level, and may use the letters CMWsc.

Course fee
£330

B119
BUILDING TECHNOLOGY
This is a three year evening course in Building Construction and associated subjects in preparation for the Department of Education technological examinations.

Duration
3 years - 3 evenings per week.

Objectives
Elementary level examination at the end of the first year.
Intermediate level examination at the end of the second year.
Advanced level examination at the end of the third year.
Employment in the Construction Industry and possession of a Group or Intermediate Certificate with a Grade C in Mathematics and Mechanical Drawing, or better.

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

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

1st Year
Building Construction, Mathematics and Geometry.

2nd Year

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

Course fee
First Year
£330
Second & Third Year
£230

B120
CRAFT TECHNICIAN CERTIFICATE COURSE IN BUILDING
This is a three-year part-time course. The course has been designed to enable students on completion of their craft studies to further their career prospects in the Building Industry.

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

Stage I:
Building Construction 1, Building Measurement, Estimating and Costing, Site Supervision and Building Science.

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

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

Course fee
First Year £330
Second and Third Year £230

B121 CARPENTRY AND JOINERY—ADVANCED
This course is designed to assist senior apprentices and craftsmen in preparing for the Senior Trade Certificate Examination of the Department of Education and the Advanced Certificate of the City & Guilds of London Institute.

Duration
One year, two evenings per week.

Subjects
Trade Theory, Trade Practice & Drawing.

Entry Requirements
Prospective students must have passed the Junior Trade Certificate Examination in Carpentry and Joinery.

Course fee
£330

B122A WOODCUTTING MACHINISTS
This course is designed to give students an appreciation of the practical use of woodcutting machines to Junior Trade Certificate standard of the Department of Education. Prospective students must be employed in a timber related trade. The course duration is one evening per week over one year.

Course fee
£330

B122B WOOD CUTTING MACHINISTS - CNC
This course is designed to update the skills of Woodcutting Machinists in modern machining techniques including the use of a Computer based Numerically Controlled Router.

Course fee
£100 for 10 weeks

B123 SHORT COURSES IN WELDING PROCESSES- UPDATING OF SKILLS
Short courses in various aspects of Welding may be held during the session in response to demands from industry. Enquiries should be directed to the Department of Metal Fabrication.

B123A METAL ARC AND OXY-ACETYLENE WELDING
This course is designed to meet the needs of craftspersons and senior apprentices employed in the engineering and allied industries. The course covers manual metal arc and oxy-acetylene welding to EN287 and BS4872 standards on low-carbon steel plates and pipes.

Entrance Requirements:
Employed in one of the engineering or allied trades.

Duration:
One evening per week (7.00pm to 10.00pm) from September to Easter.

Course of Study
Practical manual metal arc and oxy-acetylene welding on low-carbon steel plate and pipe.

Course fee
£230
**B123B**

**GAS SHIELDED ARC WELDING**
This course is designed to meet the needs of craftspersons and senior apprentices in Engineering and Allied industries in metal arc gas shielded and Tungsten arc gas shielded welding to Asme IX, EN287 and BS 4872 tests on stainless steel, low-carbon steel and aluminium.

**Entrance Requirements**
Employed in one of the engineering or allied trades.

**Duration**
One evening per week (7.00pm to 10.00pm) from September to Easter.

**Course of Study**
Practical metal arc gas shielded welding on low-carbon steel and Tungsten arc gas shielded welding on aluminium and stainless steel.

**Course fee**
£230

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**B123C**

**M.M.A. ADVANCED PLATE AND PIPE WELDING**
This course is designed to meet the needs of craftspersons and senior apprentices in engineering or allied trades in manual metal arc welding to Asme IX, EN287 and BS 4872 tests on low-carbon steel plate and pipe.

**Entrance Requirements**
Employed in one of the engineering or allied trades.

**Duration**
One evening per week (7.00pm to 10.00pm) from September to Easter.

**Course of Study**
Practical manual metal arc welding on low-carbon steel plate and pipe.

**Course fee**
£230

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**B123D**

**PIPE FABRICATION**
This course is designed to meet the needs of craftspersons and senior apprentices in pipe fabrication and is suitable to those employed in the following areas: pipe fitting, welding, sheetmetal work, metal fabrication.

**Entrance Requirements**
Employed in an engineering or allied trade area.

**Duration**
One evening per week (7.00pm to 10.00pm) from September to Easter.

**Course of Study**
This course will cover repousse work, hollowing, planishing, raising, metal shrinking/stretching, decorating and double curvature work, moulding, mechanical and thermal joining processes.

**Course fee**
£230

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**B123E**

**LIGHT GAUGE FABRICATION**
This course has been designed to meet the needs of people in the engineering and allied industries who wish to gain an understanding and appreciation of the methods of working and joining metals such as copper, low-carbon steel, aluminium and brass.

**Entrance Requirements**
Employed in the engineering or allied industries.

**Duration**
One evening per week from 7.00pm to 10.00pm for 20 weeks, beginning September/October.

**Course of Study**
This course will cover repousse work, hollowing, planishing, raising, metal shrinking/stretching, decorating and double curvature work, moulding, mechanical and thermal joining processes.

**Course fee**
£230

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**B123F**

**WELDING REPAIR AND MAINTENANCE**
This course is designed to meet the needs of persons in the areas of repair and maintenance welding for the engineering industry. The materials used will be low-carbon steel, stainless steel, aluminium, copper, brass and cast iron joined by the manual metal arc, M.I.G./M.A.G., T.I.G. and oxy-acetylene welding processes.

**Entrance Requirements**
Employed in the engineering or allied industry with some knowledge and experience of welding.

**Duration**
One evening per week (7.00pm to 10.00pm) from September to Easter.

**Course of Study**
Theory of and the practical methods used to repair low-carbon steel, stainless steel, aluminium, copper, brass and cast iron materials.

**Course fee**
£230
**ART METAL CASTING**

**Objective**
To introduce Artists and Sculptors and others involved in making statuary and Objets d'Art, to good design practice and the principles involved in casting in Brass, Bronze and Aluminium.

**Duration**
One evening per week for 8 weeks or other suitable arrangements.

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

**Course fee**
£100

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**SHEET METAL WORK**

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

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

**Subjects**
Trade Theory & Drawing.

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

**Course fee**
£330

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**SHEET METAL WORK—UPDATING OF SKILLS**

**This course is designed for the Sheetmetal work crafts person who require to update their practical skills.**

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

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

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

**Course fee**
£100

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**ART METAL CASTING**

**Objective**
To introduce Artists and Sculptors and others involved in making statuary and Objets d'Art, to good design practice and the principles involved in casting in Brass, Bronze and Aluminium.

**Duration**
One evening per week for 8 weeks or other suitable arrangements.

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

**Course fee**
£100

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**MATERIAL FABRICATION**

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

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

**Subjects**
Trade Theory & Drawing.

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

**Course fee**
£330

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**PLUMBING**

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

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

**Subjects**
Trade Theory & Drawing.

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

**Course fee**
£330

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**CRAFT TECHNICIAN CERTIFICATE COURSE IN PLUMBING**

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

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

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

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

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

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

| Course fee | £330 |

### B133

**TENDERING AND ESTIMATING PRACTICE (MECHANICAL SERVICES INDUSTRY)**

- **Duration**: One year - one evening per week.
- **Subjects**: Tendering Procedures, Tender Documents, Contracts, Take-Off Practice, Pricing Folder, Labour Rates, Bill of Quantities, Material and Labour Schedules, Presentation of Tender and Estimating Project.
- **Entry Requirements**: Department of Education Senior Trade Certificate.
- **Course fee**: £230

### B136

**CRAFT TECHNICIANS CERTIFICATE IN GAS TECHNOLOGY**

Students employed in the Gas and Mechanical Services industry are prepared for the D.I.T. Gas Technician Certificate.

- **Entry Requirements**: Department of Education Senior Trades Certificate or, equivalent.
- **Course fee**: £330

### B137

**EFFICIENT ENERGY PRACTICE**

This course has been specifically designed to provide a means of meeting the demand for efficient operation and control of heating and energy using existing processes and installations. It will provide an understanding of several different skills and disciplines required in the control and management of energy.

- **Entry Requirements**: Employed in the Industry.
- **Course fee**: £230
Entry Requirements

Suitable employment in Engineering, Construction or Building Management.

Duration

One year, one evening per week - September to Easter.

Course fee

£230

**B300**

**BUILDING MAINTENANCE (MODULAR)**

The course is designed to prepare students for corporate membership of the Institute of Maintenance and Building Management and to equip them with additional skills for employment and career development.

Entrance Requirements

(a) Employment in the Construction/Maintenance Industry
(b) Interview

Course of Study

This is a part-time modular course which offers programmes at Certificate and Diploma levels. The purpose of the Certificate Programme is to re-introduce students to a course of study at a speed and level which meets their needs and to provide a pre-entry qualification for the Diploma programme.

Certificate Level Programme


Diploma Level Programme

Modules include Maintenance of Buildings, Planning and Management, Personnel and Industrial Relations, Finance and Costings, Legal and Contractual Responsibilities, Marketing and Sales, Improved Methods of Materials Support.

Services

Classes are held in the evening from 6 - 9 pm and average 36 hours per module. A Continuing Professional Development (CPD) Certificate will be awarded to students who successfully complete individual modules.

Course fee

£140 per module

**B138**

**ENGINEERING QUALITY ASSURANCE**

This course provides a background for those who have responsibility for setting specifications for performance in manufacture or service industry and techniques for measuring their achievement.

Objective

The City & Guilds of London Institute Parts I & II, 743 Quality Control Certificate.

Duration

One year.

Entrance Qualifications

Craft, Technician, Engineering and Management personnel with suitable background and experience.

Course fee

£230

**B139**

**QUALITY ASSURANCE MANAGEMENT**

This programme provides further study for those who have completed the City & Guilds 7430 Parts 1 and 2 Certificate and defines the role of management in the supervision of Quality Assurance Principles and Techniques. Particular emphasis will be placed on the Irish market while generally considering new legislation and E.U. directives. Certification is by the Irish Quality Association.

Entry Requirement:

City & Guilds Certificate 7430 Parts 1 and 2. Applications will also be considered from candidates employed in the area with relevant experience.

Course Duration

One evening per week for the full session.

Course Content

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

Course fee

£230
**ENGINEERING SYSTEMS MAINTENANCE**

This course is designed for apprentices, craftspersons and craft based technicians who already have or wish to acquire a competence in General Maintenance Technology and Practice.

**Objective**

City & Guilds of London Institute Part II 2140 Certificate in Engineering Systems Maintenance.

Candidates who successfully complete each element will be issued with a record of achievement and will qualify for the Certificate when they have passed the two core subjects and any three of the optional subjects.

**Core Subjects**

- General Maintenance Technology
- Maintenance Organisation

**Optional Subjects**

- Pneumatics
- Hydraulics
- Mechanical Power Transmissions
- Electrical Systems
- Machine Tool Systems Part 3
- Plant Installation and Commissioning Part 3

Each subject will involve attendance of between 1.5 and 3 hours per week.

**Course fee**

£230

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**NC/CNC MACHINE SETTING AND OPERATION**

This is a one-year course to prepare mechanical engineering craftspersons for the City & Guilds 2303 Level III Certificate. It provides an introduction to CNC machines and their programming.

**Course fee**

£230

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**NC/CNC—PART PROGRAMMING**

The City & Guilds of London Institute 2303 Level III Certificate.

**Course Content**

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

**Course Duration**

One year (one evening per week).

**Entry Requirements**

City and Guilds of London Institute 2303 Certificate (£141A).

**Course fee**

£230

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**NC/CNC—ADVANCED PART PROGRAMMING**

The City & Guilds of London Institute 2304 Level IV Certificate.

**Course Content**

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

**Course Duration**

One year (one evening per week).

**Entry Requirements**

City & Guilds of London Institute 2303 Level III Certificate.

**Course fee**

£230
**ENGINEERING CRAFT STUDIES-INSPECTION**

**Objective**

The City & Guilds of London Institute Mechanical Engineering Craft Studies Certificate 2050, Part II and Part III. This course combines both the theoretical and practical aspects, making use of a well-equipped metrology laboratory.

**Course Duration**

Two years (2 evenings per week)

**Entry Requirements**

Craft apprenticeship, technician or other engineering qualifications.

**Course fee**

£330

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**FLIGHT OPERATION OFFICER (DISPATCHER COURSE)**

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

The course follows the guidelines of ICAO standardised course 201

**Duration**

Two years, two evenings per week.

**Entrance Requirements**

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

**Course fee**

£330

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

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

**Entrance Requirements**

Personnel employed in Planning Departments in the Industry and holders of Part II Examinations of the City & Guilds of London Institute Certificate Course (2580).

**Duration**

1 year, 2 evenings per week.

**Course fee**

£330
B153

JET ENGINE OVERHAUL PROCEDURES
This course provides instruction in Jet Engine design and overhaul procedures.

Entrance Requirements
Employment in the Industry.

Duration
1 year, 1 evening per week

Course fee
£230

B154

AERONAUTICAL ENGINEERING CRAFT STUDIES

Stage 1
This is a one year course requiring attendance for two evenings (6 hours) weekly per session. The course is designed to prepare students for Part I of the City and Guilds of London Institute Examinations in Aeronautical Engineering Industry.

Entrance Requirements
Junior or Intermediate Certificate and be employed in the Aeronautical Engineering Industry.

Stage 2 (Mechanical)
This one year course is designed to prepare students for Part II of the City & Guilds of London Examinations in Aeronautical Engineering Craft Studies (Course No. 2080). Classes are held on three evenings per week from October to May.

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

Course fee
- First Year £330
- Second Year £230

B155

BASIC AERONAUTICAL ENGINEERING CERTIFICATES

AIRFRAMES PRESSURISED (B.A.E.C.2)
PISTON ENGINES (B.A.E.C.3)
TURBO—PROP & TURBO—JET ENGINES (B.A.E.C.4)
HELIPTERTERS (LESS ENGINES) (B.A.E.C.5)
ELECTRICAL (B.A.E.C.6)
RADIO (B.A.E.C.7)
INSTRUMENTS (B.A.E.C.8)
AVIONICS (B.A.E.C.9)
INSPECTION & REPAIR OF METAL AND COMPOSITES AIRCRAFT STRUCTURES B.A.E.C.10

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

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

Course fee
£230

B156A

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

Duration of Course
1 year, one evening per week

Course fee
£230

B156B

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

Course Duration
1 year, 1 evening per week.

Course fee
£230
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Objective</th>
<th>Course Duration</th>
<th>Attendance</th>
<th>Subjects</th>
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<td>£330</td>
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<td>B170</td>
<td><strong>MOTOR VEHICLE PARTS PERSONNEL</strong></td>
<td>The City &amp; Guilds of London Institute 3840, Vehicle Parts Personnel, Part 1.</td>
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<td>£330</td>
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<tr>
<td>B173A</td>
<td><strong>MOTOR VEHICLE CRAFT STUDIES—DIAGNOSTIC TECHNIQUES</strong></td>
<td>The City &amp; Guilds of London Institute 3810 Part III.</td>
<td>Four years, 30 weeks each year.</td>
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<td>Diagnostic Techniques (engine), Diagnostic Techniques (transmission), Automatic Gearboxes.</td>
<td>£330</td>
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<tr>
<td>B173B</td>
<td><strong>MOTOR VEHICLE CRAFT STUDIES—COMPRESSED AIR SYSTEMS; C.L. ENGINES; FUEL INJECTION EQUIPMENT</strong></td>
<td>The City &amp; Guilds of London Institute 3810 Part III.</td>
<td>One year of 30 weeks.</td>
<td>Three evenings (9 hours) each week.</td>
<td>Compressed Air Brakes, Compression Ignition Engines, Fuel Injection Equipment, C.I. Engines.</td>
<td>£330</td>
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<td>B173C</td>
<td><strong>MOTOR VEHICLE CRAFT STUDIES—ELECTRICITY/ ELECTRONICS</strong></td>
<td>The City &amp; Guilds of London Institute 3810 Part III.</td>
<td>One year of 30 weeks.</td>
<td>Three evenings (9 hours) each week.</td>
<td>Motor Vehicle Electricity and Motor Vehicle Electronics.</td>
<td>£230</td>
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<td>B174</td>
<td><strong>AUTO-ENGINEERING TECHNICIANS</strong></td>
<td>Department of Education Advanced Motor Car Engineering Technological Certificate and the City &amp; Guilds of London Institute Motor Vehicle Technicians Full Technological Certificate (3900), Parts II and III.</td>
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<td>£330</td>
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<td>B176</td>
<td>AUTOMOBILE ENGINEERING UPDATING COURSES—</td>
<td>Updating of trade personnel in modern developments relating to engines,</td>
<td>Two days to a</td>
<td>Motor Car Engineering, Automobile Electricity/Electronics, Heat</td>
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<td>CONTINUING EDUCATION PROGRAMME</td>
<td>transmission systems and electronics.</td>
<td>a few weeks—day</td>
<td>Engines, Applied Mechanics, Garage Organisation and Management</td>
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<td>and/or evening.</td>
<td>and Computer Studies.</td>
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<td>B177</td>
<td>TECHNOLOGICAL CERTIFICATE IN AUTOMOBILE</td>
<td>Department of Education Elementary, Intermediate and Advanced</td>
<td>5 years of 30</td>
<td>Motor Car Engineering, Engineering Science and Mathematics,</td>
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<td>ENGINEERING</td>
<td>Technical Certificates in Motor Car Engineering.</td>
<td>weeks each year,</td>
<td>Automobile Electricity, Engineering Laboratory, General Studies</td>
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<td>4 evenings (12</td>
<td>including English, Drawing and Sketching, Garage Organisation and</td>
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<td>hours) each week.</td>
<td>Management.</td>
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<td>B178A</td>
<td>MOTOR INDUSTRY MANAGEMENT CERTIFICATE</td>
<td>This three year course prepares students for membership examinations of</td>
<td>£330</td>
<td>Motor Industry Management, Motor Industry Law, Motor Industry</td>
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<td>the Institute of the Motor Industry.</td>
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<td>Administration and Organisation, Accountancy, Computer Studies.</td>
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<td>B178B</td>
<td>MOTOR INDUSTRY MANAGEMENT HIGHER CERTIFICATE</td>
<td>This one-year course prepares students for the Higher Certificate of</td>
<td>£230</td>
<td>Management of the Institute of the Motor Industry.</td>
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<td>B179</td>
<td>ROAD TRANSPORT STUDIES</td>
<td>This three year course prepares students for the membership examinations</td>
<td>£330</td>
<td>Management Supervision and Practice, Financial and Commercial</td>
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<td>of the Institute of Road Transport Engineers and Certificate of Professional Competence of the Department of the Environment.</td>
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<td></td>
<td>£230</td>
<td>Management, Workshop Organisation and Administration, Legal Aspects</td>
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<td>of Motor Trade and Transport Legislation - Technical and Administrative,</td>
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<td></td>
<td>Transport Operational Principles, Computer Studies.</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td>Entrance Qualifications</td>
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<td>B180</td>
<td>BOOK AND ARCHIVE RESTORATION</td>
<td>The purpose of this one year course is to train students in the repair and presentation of books, documents, etc. It is of particular value to the staffs of hand bindaries, local record offices and those libraries concerned with the care of manuscripts and archives. Attendance is required on one evening per week. Students will be required to provide some of the materials used.</td>
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<td>B182</td>
<td>PRINT FINISHING</td>
<td>This one year course covers techniques and materials used in the production of books, magazines, and a wide range of miscellaneous work handled in the print finishing department. Stress is laid on hand and machine operations, e.g., wire stitching, sewing and folding, machine and hand feeding, gathering, glueing and mounting.</td>
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<td>£230</td>
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<td>B183</td>
<td>INTRODUCTION TO PRINTING TECHNOLOGY</td>
<td>A one year course to prepare students for the Introduction to Printing Technology P.E.I./B.P.I.F. examinations to be accepted as a candidate for the following:-(a) Estimating examination of the British Printing Industries Federation. (b) Printing Office Procedure examination of the British Printing Industries Federation.</td>
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<td>£230</td>
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<td>B184</td>
<td>COST ACCOUNTANCY FOR PRINTERS</td>
<td>A one year course designed to prepare students for the examinations of the British Printing Industries Federation.</td>
<td>Royal Society of Arts Certificate in Accounting and Office Procedure, or equivalent.</td>
<td>£230</td>
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<td>B185</td>
<td>ESTIMATING FOR PRINTERS</td>
<td>A one year course designed to prepare students for the examination of the British Printing Industries Federation.</td>
<td>Leaving Certificate and Introduction to Printing Technology of the British Printing Industries Federation or equivalent.</td>
<td>£230</td>
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<td>B186</td>
<td>PAPER TECHNOLOGY</td>
<td>A two-year course for personnel employed in Printing, Paper and Packaging Industries. Students are prepared for the examination of the Institute of Paper.</td>
<td>Leaving Certificate or equivalent.</td>
<td>£230</td>
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<td>B187</td>
<td>DESIGN FOR PRINT</td>
<td>This is a two year course to give students knowledge/skills in the following subject areas: Basic Design, Copy Preparation, Typographic Design, Printing Processes, Book and Magazine Layout, Advertising Design, Packaging Design, Graphic Design.</td>
<td>Leaving Certificate or Department of Education Senior Certificate in a graphic arts subject or other equivalent qualification.</td>
<td>£230</td>
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**B188**

**INTRODUCTION TO MANAGEMENT (GRAPHIC INDUSTRIES)**

A one year course to prepare students for the City & Guilds of London Institute Certificate in Introduction to Management (Graphic Industries).

Entrance Qualifications: Department of Education Senior Trade Certificate in a Printing discipline or an equivalent qualification.

Course fee: £230

**B197**

**DESKTOP PUBLISHING**

This course is for personnel requiring training in Desk Top Publishing. Design is an important feature of the course. A second year course may be available for those wishing to pursue computer aided design.

Course fee: £330

**B191**

**BOOKBINDING AND PRINT FINISHING RETRAINING**

This one year evening course for personnel employed in the Printing Industry provides instruction in the latest techniques, and covers the whole range of materials and technology used in print finishing processes.

Course fee: £230

**B192**

**LITHOGRAPHY AND PHOTO-LITHOGRAPHY RETRAINING**

This one year course for personnel employed in the Printing Industry provides instruction in the latest techniques of lithographic plate making and press operation.

Course fee: £230

**B200**

**SCREEN PRINTING**

This is a one year course which covers the following topics: Screen Preparation, Printing Techniques, (manual/semi-auto) Single and Multi Colour Work, Materials and Substrates.

Course fee: £230

**Entrance Requirements**

Full apprenticeship and/or employment in the industry

Course Duration: One year, three hours per week

Course content:


Course fee: £230
The information contained in this booklet is intended as a guide for persons seeking admission to the Institute and is not intended as an element of a contract between the Institute and the student or his/her employer or sponsor. The Institute reserves the right to change or modify any of the courses or the information without prior notice. Applicants are advised to check the details of any course before enrolling for it.