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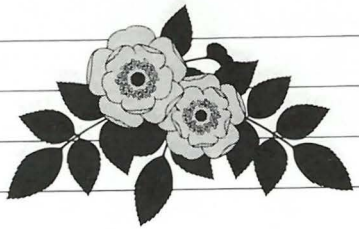

Part-Time Courses 1985–86

Director:
Eric E Robinson MSc

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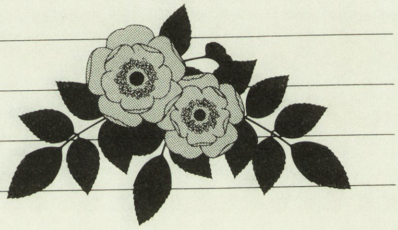

Part-Time Courses 1985–86

Director:
Eric E Robinson MSc

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Although every care has been taken to ensure that the information contained in this Prospectus is accurate at the time of printing it must be understood that changed circumstances may necessitate cancellation of courses or alterations in the programme of courses, course location, course content, fees and other matters dealt with. The Polytechnic cannot undertake to give notice of such cancellations or alterations, and cannot accept any liability arising out of or in connection with them.

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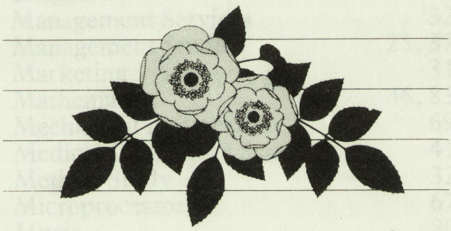

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Polytechnic campus
Lancashire Polytechnic
Preston, PR1 2TQ

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Welcome to Lancashire Polytechnic

As a part-time student at Lancashire Polytechnic you will be joining nearly 2,500 people who have chosen the same method of study. I am sure you will find the coming years an interesting and challenging experience.

There is a long tradition of part-time education in Lancashire, a tradition which the county's polytechnic aims to strengthen and promote. Part-time students represent more than one-third of the polytechnic's student body. I realise that combining study with a job can put extra pressures on the student. You will have different needs to those of the full-time student and where possible courses and study methods are designed to meet your needs.

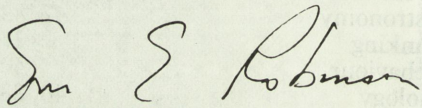
The importance of part-time courses cannot be over stated. The polytechnic offers a wide range of courses many of which are organised with the co-operation of professional bodies.

It co-operates with local industry, commerce and the public services and provides courses appropriate to their requirements. It also responds to the needs of students who wish to embark on a course of study for reasons unconnected with their present occupation.

The choice of Preston as the site for Lancashire Polytechnic was particularly fortunate. The public transport of the area ensures that people from a wide area can attend courses. The polytechnic is within ten minutes walking distance of both the bus and railway stations and provides ample car parking space.

The polytechnic is still growing and each year improvements in the standard of accommodation are made. Part-time students share with full-time students all the benefits arising from the polytechnic's policy of attaching equal importance to local and national needs.

For the future success of the polytechnic it is essential that the needs of students are known. Your comments and criticisms are therefore necessary and welcome.



Eric E. Robinson
Director

The Polytechnic

Lancashire Polytechnic plays a leading role in the provision of higher education in the county. The name Lancashire Polytechnic emphasises the polytechnic's development and role in the county. To help symbolise its work the polytechnic also adopted its distinctive double red rose logo.

At the polytechnic are taught many arts and skills ranging from the fine arts of painting and sculpture to those of high technology, business, communications and the care of the sick and aged.

The polytechnic has accepted a role and responsibility to the people of the north in promoting these arts and skills throughout the region. It is work that is not merely confined to the lecture rooms and libraries of the academic world but also to the shops, offices, factories and houses.

Wherever people have problems that may yield to the application of thought and skill the polytechnic has a role.

As part of its wider responsibilities the polytechnic refuses to be bound by the traditional requirements often placed on students wishing to enter higher education.

The needs of the student and society are of paramount importance. Special consideration will be given to mature students wishing to take courses. The polytechnic may exercise its discretion to admit a student whose qualifications do not conform to the standard minimum entrance requirements but who presents other evidence which, in the opinion of the polytechnic, indicates that he or she has the capacity and attainment to pursue the course of study proposed.

A history of achievement

Lancashire Polytechnic can look back on a long history of service to the people of the county.

The Institution for the Diffusion of Knowledge, to which the polytechnic can trace its roots, was founded in 1828, following a meeting called by Joseph Livesey, the temperance pioneer.

Following the opening of the Harris Free Library in 1879, income fell sharply. The Institution's committee approached the trustees administering the bequest of a local solicitor, E R Harris. More than £75,000 was made available to the Harris Institute. Part of the money was used to finance the building of the Victoria Jubilee Technical School, Corporation Street, Preston, opened in 1897, which is now the Harris Building of the polytechnic. Thereafter it steadily developed as a major technical college until in 1956 the Harris Institute was redesignated as the Harris College.

Preston Polytechnic was designated in 1973 on the basis of the advanced work of Harris College which was to be greatly expanded to include diploma, degree and post-graduate work. The name Lancashire Polytechnic was formally adopted on 1 September 1984.

A developing campus

The polytechnic is based in Preston, the administrative centre of the county. It is largely on one site close to the centre of the town with all the polytechnic's buildings within walking distance.

Since its designation the polytechnic campus has developed rapidly. It has a large library with more than 250,000 bound volumes and places for 700 people to study. The campus includes a number of modern buildings which have been specially designed.

There are extensive computer facilities available for both academic and administrative use. The computer centre's work is based around three PRIME and one SYSTIME computer linked into a network of connections covering the polytechnic and a large number of local schools and colleges.

Over the past decade the Arts Centre has established a growing reputation for its wide range of events. Housed in the former St Peter's Church it offers a multi-purpose performance area and exhibition centre. Conference and catering facilities have also been developing with the polytechnic's position close to the motorway network making it an ideal venue for such events.

Preston is an ancient market town of the fertile agricultural area of West Lancashire. It is on the north west corner of a great industrial region. To the north are the Trough of Bowland and the Lake District – some of the most beautiful landscapes in the British Isles. To the north-west is the Fylde coast, the sea and the holiday resorts of Blackpool and Morecambe.

Preston is a major focus of road and rail communications in the north-west. Motorways provide excellent access to Yorkshire, the Midlands and London and Scotland. London can be reached by rail in under three hours.

Academic work of the Polytechnic

The academic work of the polytechnic is organised around its five faculties. Art and Design; Business and Management; Science; Technology; Social Studies and Humanities and the Combined Studies programme which provides multi-disciplinary courses.

The polytechnic provides a wide variety of courses, many of which reflect its strong links with industry, commerce and public service.

There are more than 35 full-time and sandwich courses offered at Higher National Diploma and degree level. For those wishing to study part-time around 70 courses are offered. Many of the courses lead to professional qualifications and have links with professional bodies and industry. There is also considerable research work undertaken by staff, much of it relating to the needs of local industry.

There are more than 4000 full-time and sandwich course students and about 2500 part-time students. The polytechnic also runs a number of short and specialist courses. Nearly 1000 academic and non-academic staff work at the polytechnic.

In a move to improve and widen access to Higher Education the polytechnic is developing its links with other colleges throughout Lancashire. The aim is to make it possible to undertake the early stages of a degree course at a local college, under polytechnic supervision. Two such agreements have been signed and others are under consideration.

The polytechnic is committed to the provision of courses for adults wishing to return or to continue their education and training. This includes courses on new technology, new commercial and industrial practices, courses designed to fulfil the continuing training requirements of professional bodies, as well as courses taken for interest or personal development right across the range of polytechnic provision. Tony Goddard, the Continuing Education Officer has the role of helping and advising those wishing to improve their skills.

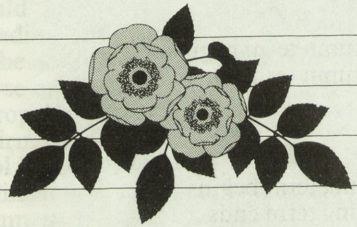
If you need any advice or information about polytechnic courses please contact Don Cullingworth, the Educational Liaison Officer.

Services to Industry and Commerce

The Polytechnic has a wealth of experience in introducing new techniques and is ready to share its expertise with industry, commerce and the public sector.

The polytechnic's Business and Industrial Centre provides this valuable service. If a company requires information, advice or assistance it can now turn to the centre as the first point of contact with the polytechnic and know that a request will be dealt with quickly and sympathetically.

The centre aims to make the Polytechnic's expertise available to the community. It offers a range of services including consultancy, organising training courses and conferences, a student placement service and the production of education and training materials. Contact Nigel Hall, head of the centre, for further details.



Polytechnic Calendar – Part-Time Courses

Enrolment period for part-time students 1985

Monday 23 September	Afternoons and
Tuesday 24 September	evenings only

1985

Autumn Term (11 weeks)

Monday 30 September	Autumn term begins
Friday 13 December	Autumn term ends

1986

Spring Term (11 weeks)

Monday 6 January	Spring term begins
Friday 21 March	Spring term ends

Summer Term (14 weeks)

Monday 14 April	Summer term begins
Friday 18 July	All classes close: end of session

Course Requirements and Admission to Courses

Courses will be provided subject to adequate enrolment and subject to the limits of available teaching accommodation and staff. They may be discontinued at the discretion of the Director at any time during the session should the number of students attending fall below a reasonable level.

The acceptance of a student into a course must have the approval of the appropriate Course Committee Chairman, and students who wish to enrol into a course demanding entry qualifications must produce documentary evidence that they possess the necessary qualifications either at or before enrolment. Applicants who do not meet the above requirements may be admitted to some courses at the discretion of the Polytechnic. If potential students or parents are doubtful about the best course of study to pursue for a particular career they should write in the first instance to the Educational Liaison Officer for advice.

Admissions Policy

Lancashire Polytechnic seeks to provide a complete educational experience for its students leading to successful academic achievement within a socially and culturally active environment. Selection policy is geared towards those applicants who will derive most benefit from their positive participation as a member of the community of this Polytechnic.

Within this policy, Lancashire Polytechnic encourages applications from anyone who sees the ethos of this Polytechnic as particularly suitable for his/her needs, and recognises a special responsibility towards:

(a) Those who for domestic, cultural, physical or other reasons need to come to this Polytechnic;
(b) Those who are seeking to re-enter the education system after a period away from study;
(c) Those with alternative experience in lieu of the normal entry requirements.

Application Procedure

Applications for some courses may be made at any time using the standard part-time application form. Otherwise application to join a course should be made in person during the enrolment period.

Higher Degrees by Research

The Polytechnic offers opportunities for students to register for Research degrees of the Council for National Academic Awards (CNAA) both on a full-time and a part-time basis. A research degree is not a taught course but is awarded on the basis of an individually initiated and registered research project. Students may study either for the degree of Master of Philosopy (MPhil) or Doctor of Philosophy (PhD).

Completion time for higher degrees varies but the minimum registration period for part-time students is 33 months for MPhil and 45 months for PhD. For much of the time you will be working on your own initiative but you will be allocated supervisors who will advise you appropriately.

The normal entry requirement for a research degree is a first or second class UK Honours degree but candidates with other qualifications will be considered on their merits. Lack of formal academic qualifications may be compensated for by appropriate work experience.

Part-time students are expected to be able to devote an average of twelve hours per week to their research project though not all of this time need be spent at the Polytechnic. You would be expected to pay tuition fees equivalent

to three hours attendance at the Polytechnic per week. In the 1984/85 session the cost for this was £50. Additionally, a £90 fee is payable to CNAA if your registration is accepted.

If you are interested in undertaking a part-time higher degree, you should write to Lesley Munro, Deputy Academic Registrar, outlining the area of research which interests you. The Polytechnic will discuss your proposals with you and advise on the possibilities for registration.

Provision for Mature Students

Continuing Education

The Polytechnic is committed to the provision of courses for adults wishing to return to or continue their education and training. Such provision includes courses on new technology, new commercial and industrial practices, courses designed to fulfil the continuing training requirements of professional bodies, as well as courses taken for interest or personal development right across the range of Polytechnic provision.

If the Polytechnic is to remain responsive to social and technical change both nationally and locally, specific provision must be developed to meet immediate problems or needs. Such provision may not be reflected in this prospectus. This particularly applies to short courses (under 60hrs duration), conferences, meetings, lectures etc. If what you require is not mentioned in this prospectus, you should contact the Co-ordinator for Continuing Education. He may well be able to advise or give further information on recent course developments (see also Business and Industrial Centre, page 92).

Adult Access to Polytechnic Courses

Adult students are encouraged to apply for any Polytechnic course, whether part-time or full-time. Subject to the discretion of course tutors, allowance may be made for the modification of formal course entry requirements to take account e.g. of individual experience, continued personal and professional development and qualifications. Each application is treated on its own merits. It will be appreciated that individual adult circumstances and qualities vary considerably as do the requirements of different courses. In September 1984 about 30% of students (full and part-time) were over 25 years of age on enrolment.

If you are uncertain about entry requirements and/or your own suitability, contact the Co-ordinator for Continuing Education; or the Course Tutor named in the prospectus.

Pre-Degree Courses

Pre-degree courses have been developed to facilitate adulty access to some of our degree and other courses. These contain a 'return to study' elements and serve to introduce Polytechnic courses and prepare adults for entry to them.

These are presently two term courses, one evening per week starting in January. For many adults of limited educational background the Open College route may be more appropriate (see below).

Open College

The Polytechnic and Lancaster University jointly validate 'Open College' courses which can be attended on a part-time basis at a number of colleges in the North West Region. These courses provide an alternative to 'A' level qualifications and successful completion of appropriate modules is acceptable to the Polytechnic as evidence of ability to benefit from higher education. Students with appropriate Open College Units will be considered for places on Degree, Higher (National) Diploma or other courses. The Open College is for adults

only (over 21) and the courses are designed and taught with adults in mind.

Full details may be obtained from the Inter College Coordinator, Open College, Nelson and Colne College, Scotland Road, Reedyford, Nelson BB9 7YT (Tel (0282) 66411).

Credit Transfer

It is possible for prospective students who have completed the whole or part of courses elsewhere to be considered for entry with advanced standing to courses at the Polytechnic (i.e entry to the second or subsequent years of a course). In particular, students who have completed Open University course units may be eligible for exemption from parts of courses offered by the Polytechnic.

Prospective students who wish to be considered for entry with advanced standing are advised to contact the admission tutor of the course(s) in which they are interested.

Associate Student Scheme

Adults can attend parts of many Polytechnic courses on an Associate Student basis. An associate student studies alongside the regular students and has the same requirements on attendance, course work and, if desired, examinations for the particular part of the course selected. In some cases a complete award can be gained in this way. Places are subject to the availability of accommodation and facilities.

A wide range of Polytechnic courses offer such units. Contact the Co-ordinator for Continuing Education for details of available Associate Student Units, stating the academic area(s) you are interested in.

Polytechnic Awards in Continuing Education

Polytechnic Certificates, Diplomas and Advanced Certificates and Diplomas can be obtained by putting together associate student units, short courses etc. and an independent learning project. Credit can be given both for previous learning and for life and work experience. Enquiries to the Co-ordinator for Continuing Education.

Advice and Guidance for Adults

Mature students are encouraged to seek an advisory interview with the Co-ordinator for Continuing Education if they are considering entering higher education or are uncertain about which Polytechnic provision may meet their individual needs. Similarly, mature students may wish to seek information on costs and grants before being committed, especially to full-time higher education.

A special booklet is produced, aimed at the mature student considering Polytechnic courses. It can be obtained from:

The Co-ordinator for Continuing Education
Lancashire Polytechnic
Preston PR1 2TQ
Tel. Preston (0772) 22141

Enrolment

Enrolment is valid for only one academic year at a time; enrolment for part-time and block release courses will take place on the following days and during times shown:

Monday 23 September
Afternoon 1.30 to 4.00
Evening 6.00 to 8.30
Tuesday 24 September
Afternoon 1.30 to 4.00
Evening 6.00 to 8.30

Students should enrol during the times and on the dates stated or during the first week of the course at times arranged by the course tutor. Postal enrolments cannot be accepted.

Transfer permits

Students wishing to enter courses graded IV and IIINP who live in areas outside Lancashire must produce transfer permits each year and present them at enrolment. The only exceptions at present are the following local authorities who have a reciprocal agreement with Lancashire or, who do not require students to obtain prior approval in respect of part-time vocational courses only:

Bolton
Bury
Cumbria
Manchester
Rochdale
St. Helens
Salford
Staffordshire
Trafford
Wigan

Application for a permit must be made by the student to the Education Office of the Local Education Authority (the Metropolitan District in the case of Metropolitan Counties) in whose area he or she resides. Failure to produce the necessary permit may result in a very heavy charge being made against the student concerned to cover the course costs normally payable by the Local Education Authority.

Enrolment Procedure

Students should first report to the academic staff of the School in which they wish to enrol. The rooms in which the enrolment takes place will be indicated in the main entrance of the Polytechnic and at other points in the building.

When the enrolment form has been completed and signed by the course tutor it should be taken to the office* indicated by the course tutor immediately. After the form has been received by the office* the administrative staff will provide each student with a document which permits that student to enter classes.

Late Enrolments

Students are allowed to join a course after the start of the session at the discretion of the Course Tutor. Such students must obtain an enrolment form from the School Office or the Polytechnic Registry, for completion in consultation with the Course Tutor, who will also sign the form. The enrolment form must then be presented at the appropriate office* for enrolment and payment of fees.

For this purpose the Registry will remain open until 7.30 pm Monday to Thursday for the first four weeks of the Autumn Term, ie until 24 October 1985.

*The location will be identified by the course tutor.

Students who do not not complete the enrolment procedure will be asked to withdraw from further classes.

Tuition Fees

Tuition fees are payable at the beginning of each course and of each succeeding year of the course. Payment in full is due at enrolment; part-time students with annual fees in excess of £100 can request to pay their fees in instalments. Cheques should be made payable to 'Lancashire County Council' and crossed. A refund of fee may be made in exceptional circumstances beyond the student's control and unforseen at the time of enrolment. Applications for refund should be made in writing to the Academic Registrar, accompanied by the student's receipted copy of the enrolment form.

The only students excused paying tuition fees at the time of enrolment are those whose employers undertake to pay the tuition fees on their behalf; they must produce a letter from the employer to that effect. The student is personally responsible for payment of the fee if the employer refuses to accept responsibility. Fees are graded into categories (grades I-IV) corresponding to the academic level of the course, and the grade of each course is shown in brackets after the course title or after the year of the course.

Note to Local Authorities: The course grade designation IIINP indicates an advanced course which is not poolable under DES regulations. In respect of these courses the normal recoupment procedure will apply.

Students under the age of 18 on 1st September 1985 attending a course graded I – III will not be required to pay any tuition fees, however, registration and examination fees are payable in full. Those attending courses graded IV will be charged £1.65 for a part-time day course or 45p for an evening only course. A special fee is payable by those in receipt of a State Retirement Pension (vocational courses only), £21 per academic year. The figures quoted are for the 1984/85 session and increases approximately in line with inflation can be expected for 1985/86.

The fees below are for the 1984/85 session and increases approximately in line with inflation can be expected for 1985/86.

Tuition fees for full session

	Grades I, II and III *All Part-time day or Part-time day and evening or Evening only* £	Grade IV *Part-time day or Part-time day and evening* £	Grade IV *Evening only* £
Weekly class hours 1	16.70	11.95	10.75
" " " 2	33.30	22.25	21.05
" " " 3	50.00	32.55	31.35
" " " 4	66.70	42.85	41.65
" " " 5	83.40	53.15	51.95
" " " 6	100.00	63.45	62.25
" " " 7	116.70	73.75	72.55
" " " 8	133.40	84.05	82.85
" " " 9	150.00	94.35	93.15
" " " 10	166.70	104.65	103.45
" " " 11	183.41	114.95	113.75
" " " 12	200.00	125.25	124.05

Tuition fees will not be charged in respect of:

(a) those in receipt of supplementary benefit (except Supplementary Pensions) or family income supplement
(b) the wholly unemployed in receipt of unemployment benefit and their dependents
(c) registered adults unemployed in receipt of supplementary benefit.

CNAA Registration Fees

A registration fee is also payable in the case of CNAA first degree courses (currently three instalments of £23 payable at the beginning of the first three years of the course) and in the case of the Diploma in Management Studies (currently £57 payable in two equal instalments at the beginning of each of the two years of the course). CNAA registration fees must be paid on enrolment and are not refundable. Students entering directly into the second year of a degree course are required to pay two instalments (£46) on enrolment, or three instalments for direct entry to the third year.

Business and Technician Education Council Registration Fees

A registration fee (currently £41.00) is payable by all students enrolling on the BTEC Higher National Certificate courses for the first time (except BTEC HNC Business Studies courses, for which the fee is currently £26.00) This fee will register the student with the Business and Technician Education Council for a period of five years. BTEC registration fees must be paid on enrolment and are not refundable. There is also an annual examination fee (currently £10.00) to be paid on enrolment to BTEC for HNC Business Studies courses.

Examinations

Examination Fees

There are no fees for purely internal examinations of the Polytechnic. Students are however required to pay fees for other examinations, including internal examinations which are externally assessed. Full details of the scale of fees are obtainable on enquiry from the Polytechnic Registry and are also stated on the examination entry forms.

Examination fees are payable when the examination entry is submitted. Accounts for examination fees are not normally sent to grant-aiding authorities or employers, but receipts are issued and may be used by students in appropriate cases to recover the expenditure from their Local Authority or other sponsoring body.

Entry to Examinations

Each student is responsible for his own entry to examinations. Students will not be informed individually of the last dates of entry or of timetables of examinations, but these will be published on notice boards.

Examination Results

Pass lists are usually sent to individual students at the end of session. Notification is sent to each student as soon as possible. (It is regretted that in the meantime enquiries about results cannot be answered).

Copies of external examination pass lists will be made available for scrutiny on the main Polytechnic examinations notice board in the Corporation Street building as soon as possible after they are received. Pass lists agreed by Polytechnic Boards of Examiners are also published on the main Polytechnic notice board. The latter are subject to formal confirmation by the Academic

Board and in some cases by other bodies (eg CNAA, B/TEC) as well.

Re-examination

In the event of a Board of Examiners or other examining body agreeing to the re-examination of a student in a subject, the student will be required to pay the full cost of the re-examination, or to share the cost proportionately should more than one student be involved in the same re-examination.

Student Regulations

Attendance and Course Work

Students are required to attend classes punctually and regularly, to carry out satisfactorily such work as is set by their tutors, and to sit the prescribed examinations. There are minimum requirements in all courses in respect of attendance, coursework, laboratory work and project work (where appropriate) and examinations, and the right to continue a course of study depends on the maintenance of satisfactory attendance and academic performance.

In some courses there is a requirement to undertake one or more periods of practical training in industry, commerce or the professions, and progress in the course will depend upon the receipt of a satisfactory report on the standard of work achieved by the student whilst in a practical placement.

General Regulations and Discipline

In any academic community there have to be rules of conduct to ensure the smooth running of the community and to safeguard the freedom of its members.

The Polytechnic pursues policies to promote equality of opportunity for all, without discrimination on the grounds of race, creed or sex and students are required not to promote racial prejudice, hatred or discrimination.

Students are accepted into Polytechnic courses on the understanding that they abide by regulations mentioned in the prospectus or from time to time in force.

The Director has the authority to suspend students from attendance for any cause which he considers adequate. The Council will exclude from the Polytechnic premises any student whose continued attendance is undesirable. Excluded students

automatically lose membership of the Students' Union and Polytechnic societies.

Absence because of illness, etc.

In the case of absence through illness, or other unavoidable cause, the student should inform his or her Course Leader immediately in writing. When an infectious illness occurs in a house or lodgings immediate notification should also be sent to a Student Counsellor. Such students must not attend the Polytechnic until a medical certificate is supplied stating that there is no risk of the infection being conveyed to others.

Changes of Address and other Student Particulars

Changes in student particulars occurring during the session must be notified immediately to the Academic Registrar on the form available from the Polytechnic Registry, for example; change of home or lodgings address, change of employer, change of name on marriage.

Safety in the Polytechnic

The Health and Safety at Work Act 1974 imposes stringent requirements on educational institutions to maintain safe plant, safe systems of work, safe premises, etc., as well as the need to ensure adequate instruction, training and supervision to secure safe and healthy working conditions. All students have a duty under the Act to take reasonable care to avoid injury to themselves or others by their activities and to co-operate with those responsible in meeting statutory requirements.

Personal Property

The Council cannot accept responsibility for the safety of students' property. Property found on the premises will be handed to the Student Union caretaker and students wishing to reclaim lost property should address enquiries to the caretaker. The victims of theft should immediately report the circumstances personally to the police and to the Custodian of Premises or Polytechnic offices. The Polytechnic co-operates with the police in their enquiries.

Cloak lockers are available in all areas for students' use. Full-time, sandwich and block release course students may be allocated lockers for the duration of the course. Lockers should be secured by the students' own padlocks.

Lockers must be left empty and unlocked at the end of a course or session as otherwise the locks and contents will be removed.

Parking Facilities

Education Authorities have no obligation to provide parking facilities and the Polytechnic does not possess adequate facilities to meet all demands. Parking is restricted to the official car parks and cycle sheds where vehicles may be left at the owners' risk.

Cars should be driven very slowly in the Polytechnic precincts. Roadway and delivery areas must be kept clear in case of emergencies. Please park compactly and with consideration for others.

General Information

Communal Facilities

The Communal Block provides facilities for the educational, social and recreational enjoyment of the students and staff. Besides administrative accommodation and a fully equipped theatre for both lectures and drama, there is a dining room, coffee lounge and a bar.

The Recreation Hall will be reserved at certain times for examinations, and occasionally for ceremonies or exhibitions, but at other times it is available to student groups, societies and individuals for games and a very wide variety of physical activities. The bridge over the north courtyard leading to the hall contains changing rooms and showers.

St. Peter's Church, converted for use as a Polytechnic Arts Centre, provides facilities for a variety of activities including concerts, exhibitions, displays, debates, lectures, social activities and a Chaplaincy Centre.

Polytechnic Catering Service

The refectory at Corporation Street, provides full breakfast, lunch and evening meal service including a full salad bar and takeaway food facility, and is licensed to serve drinks. Hours currently: 7.30 am to 7.00 pm Monday – Friday.

Snack Bar and Coffee Lounge at Fylde Road with a Fast Food Service. Hours: 9.00 am to 5.30 pm Monday – Friday.

Adelphi Building: Hours: 9.15 am to 10.00 pm Monday – Thursday. 9.15 am to 4.30 pm Friday.

Robin House; Livesey House; Marshall House. Hours: 9.30 am to 4.00 pm Monday – Thursday (earlier Friday).

All have Coffee/Snack Bars.

An extended service for food will be available in the annexes at the commencement of the next academic year.

St. Peter's Arts Centre, Tuesday lunch times service and several evening functions.

A new Staff Coffee Lounge is available for use each day by all Polytechnic staff and is available in the evenings for functions by arrangement with the Catering Officer.

Private functions, Discos, Dances, Meetings, Parties can all be arranged at very reasonable costs.

Students' Union Building

New purpose-built premises are situated in Fylde Road, a few minutes walk from the main Corporation Street site. The building contains administrative offices for Students' Union Elected Officers and Officials; a theatre for discos, dances, debates, film and stage shows; a licensed bar; games rooms, stationery shop, etc., the whole being organised by the Students' Union to provide recreational and cultural facilities for students generally. Within the complex, but provided by the Polytechnic, is a coffee lounge, dining room and snack bar.

Union membership cards are issued at enrolment, thus enabling students to participate in social activities, to join any student club or society and to vote in elections, union meetings and other activities.

Polytechnic Bookshop

The Polytechnic Bookshop, operated by Parrys Ltd., the Liverpool University booksellers, is located next to the Polytechnic main entrance. It is open throughout the day. The bookshop carries a good range of course text books and is able to provide an excellent service for supplying other academic books through its ordering system. Students may also purchase stationery, including special laboratory notebooks through the bookshop.

Outside Accommodation

Some classes are held outside the main Polytechnic premises. These classes are indicated by room number prefixes as follows in the several polytechnic documents dealing with teaching accommodation.

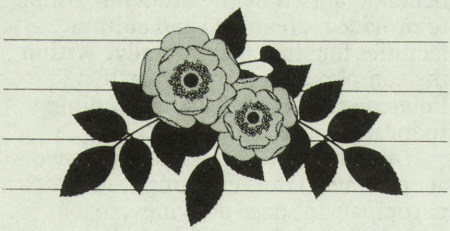
BTU Blood Transfusion Unit, Lancaster.

PRI Preston Royal Infirmary, Deepdale Road, Preston.

Societies and Professional Bodies

Lecture meetings of societies and professional bodies are frequently held in the Polytechnic.

Notice of the lectures will be displayed in the main entrance foyer during the session. Individual students and members of staff are welcome to attend. Application for groups to attend should be made through the Director to the local secretary of the organisation.



FACULTY OF BUSINESS & MANAGEMENT

Dean of Faculty: TJ Squires BCom MSc MA FBIM

The Faculty offers a wide range of full-time, sandwich, block-release, part-time and short courses, leading to qualifications in business studies, management, public administration, the professions and to degrees in Accounting, Business Studies and Law, validated by the CNAA. Students are drawn from a wide area and attractive career opportunities are available on successful completion of the courses. The courses are the responsibility of the six Schools within the Faculty:

School of Accounting and Finance
School of Administrative Studies
School of Economics
School of Law
School of Management Sciences
School of Organisation Studies

The part-time, block release and short courses are designed largely to meet the needs of the local community. They allow people already in employment a chance to gain professional qualifications or further expertise in their chosen career whilst widening the opportunities for those considering new career possibilities or wishing to re-enter employment. Many courses are offered during the evenings so that it is possible to obtain a qualification without interruption to present employment.

The Faculty provides courses of study at all levels of higher education which seek to maximise students' capabilities; entry requirements range from one 'A' level or good BTEC National Diploma/Certificate to degree or equivalent for postgraduate studies. Exceptionally, it may be possible to enter certain courses without these qualifications and such applications are encouraged and will be individually considered.

Close links have been developed with Industry. Commerce and the Public Authorities in Lancashire, Cumbria and other regions and visiting lecturers from these sectors are involved with the Faculty's courses.

Additional information on any of these courses can be obtained from the Faculty Registrar or the Course Leader, telephone Preston 22141.

The Faculty offices (Tel. 262495) together with the School of Law (Tel. 262740) and the School of Management Sciences (Tel. 262892) are located in Adelphi Building, the School of Accounting and Finance (Tel. 262421) and the School of Economics (Tel. 262436) in Marshall House and the School of Administrative Studies (Tel. 262452) and the School of Organisation Studies (Tel. 262455) in Robin House.

BTEC – Higher National Certificate (III)

Courses leading to awards of the Business and Technician Education Council (BTEC) are organised on a faculty-wide basis with specialist areas of study administered by the School of Organisation Studies. General details of the courses are given below and students should refer to the appropriate School section of the prospectus for particular details.

Course Leaders: Board B2
D Counsell
Board B8
M Addison

The Higher National Certificate is validated by BTEC and is awarded on successful completion of a two-year part-time course.

The Boards of Study in BTEC Courses

BTEC offers several areas of business education and the Polytechnic provides courses in:

Business Studies (general management)
and
Financial Studies (accounting and company administration)
and
Public Sector Studies (local government, public corporations, public agencies)

Courses for Distribution Studies are not offered at the Polytechnic.

Since the merger of BEC and TEC these areas of business education are now co-ordinated by the following Boards.

Board B2 Business and Finance (previously Boards B1 and B2)

Board B8 Public Administration (previously Board B4)

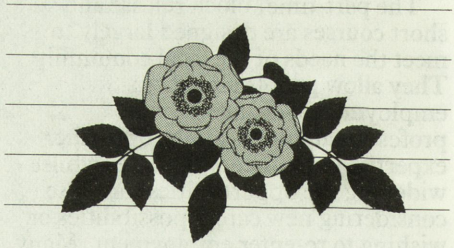
Students who wish specifically to train for careers in Finance or the Public Sector must register with the appropriate Board at the time of enrolment. This then commits them to the study of specialist modules (Board cores) during the course. Other students who intend to take up careers involving marketing, personnel management and general management will register with Board B2.

Minimum admission requirement: HNC students must be at least 18 years of age, have completed the English compulsory secondary school education or its equivalent and be competent in the English language, usually evidenced by 'O' level or other school-leaving certificate. In addition, students must have obtained at least one of the following:

(a) a BTEC National award, or
(b) an ONC or OND in Business Studies, or
(c) an ONC in Public Administration, or
(d) at least one G.C.E. 'A' level together with 3 different subjects at 'O' level (grades A, B or C) (or their equivalent) and have completed a BTEC approved conversion programme of study
or
(e) a qualification which BTEC accepts as equivalent to the above.

Young employees (who have obtained G.C.E. 'A' level) working for organisations which operate their own integrated training scheme may be admitted after attending a Conversion Course at the Polytechnic. This course is normally of one week's duration and is held immediately prior to the commencement of the HNC in late September/early October.

Exceptionally, a student who has reached the age of 21 before the start of the course may be admitted without the minimum entry qualifications at the discretion of the Polytechnic. Such applications must be made in advance of enrolment dates and are considered in terms of alternative qualifications, relevant work experience and an interview at the Polytechnic.



School of Accounting and Finance

Head of School: RW Wallis BCom IPFA

Block Release Courses

Chartered Institute of Public Finance and Accountancy (CIPFA)

Course Leader: GK Woodhall

The Polytechnic operates an internally assessed scheme for the first two years of the professional examinations and also offers the third year which is an externally set examination in three parts, viz, a project, decision analysis and management. All students on the course are employed within the finance function of a public sector organisation, and must register as a student with CIPFA. Address for registration: CIPFA, 1 Buckingham Place, London SW1 6HS.

Professional Examination 1 (II)

Course Tutor: AH Mitson

1985 examinations:
Final block: 5 November – 16 November 1985

1986 examinations:
A twelve week course arranged in four blocks of 4, 3, 3, and 2 weeks duration respectively.

Professional Examination 2 (II)

Course Tutor: M Edwards

1985 examinations:
Final block: 8 October – 19 October 1985

1986 examinations:
A twelve week course arranged in four separate blocks of 4, 4, 2 and 2 weeks duration respectively.

Professional Examination 3 (II)

Course Tutor: GK Woodhall

1985 examinations:
Final block: 22 October – 2 November 1985

1986 examinations:
A twelve week course arranged in five separate blocks of 2, 2, 3, 2 and 3 weeks duration respectively. The dates of attendance are spread throughout the year to ensure regular contact with tutors in relation to the project element.

Students wishing to attend are advised to reserve a place by contacting the Course Leader prior to their attendance.

Note: Students must register with CIPFA and also must satisfy CIPFA's entry requirements, which may require attendance on the Graduate Conversion Course during the Autumn term 1985. Address for registration: The Secretary, CIPFA, 1 Buckingham Place, Westminster, London SW1E 6HS.

Accountancy Training and Continuing Professional Education

Course Organiser: IR Dalzell

Basic Staff Training Courses

A series of courses based upon Institute of Chartered Accountants' package materials are available. These courses are aimed at students and non-qualified staff requiring a thorough introduction to basic principles and practice of particular aspects of accountancy, tax and auditing.

The courses range from ½ day to 5 days depending upon the topic covered and these include – Basic Book-keeping. Basic VAT. An introduction to Auditing. Preparing Company Accounts, and other topics in Taxation, Computing, Auditing and Financial Accounting.

They are run in conjunction with the North West Society of Chartered Accountants but arrangements may be made to provide courses specifically for Industrial and Commercial Organisations where this service is required.

Further details may be obtained from Mr Dalzell.

Continuing Professional Education for Accountants

The School of Accounting and Finance will offer a programme of CPE in line with local needs. It is intended that the programme will include topics of interest to accountants in both the public and private sectors. Suggestions from organisations with particular needs in this area are welcomed.

Part-Time Courses

Association of Certified Accountants: Preliminary Examination, Professional Examination, Final Examinations (II)

Course Tutor: JP Boylan

Part-time day and evening courses will be provided for the examinations of the Association during the 1985/86 session and will normally operate as follows:

Day

Preliminary: One Day per week
Professional: One Day per week
Final: One Day per week

Evening (commencing at 6 pm)

Preliminary: Two or Three Evenings per week
Professional: Two or Three Evenings per week
Final: Two Evenings per week

Exemption from subjects of the Preliminary and Professional Examinations are granted to holders of certain qualifications and students who consider that they may be eligible should write to the Association.

Syllabuses and regulations for admission can be obtained from the Secretary. The Association of Certified Accountants, 29 Lincolns Inn Fields, London WC2A 3EE.

Institute of Cost and Management Accountants: Foundation Examination Parts A and B and Professional Examinations 1, 2 and 3 (II)

Course Tutor: RP Wraith

Part-time day and evening courses will be provided for the examinations of the Institute during the 1985/86 session and will normally operate as follows:

Day:

Foundation A and B: One Day per week
Professional 1, 2 and 3: One Day per week

Evening: (commencing at 6 pm)

Foundation A: Two Evenings per week
Foundation B: Two Evenings per week
Professional 1: Two Evenings per week
Professional 2: Two Evenings per week
Professional 3: Two Evenings per week

Exemption from subjects of the Foundation and Professional examinations are granted to holders of certain qualifications and students who consider that they might be eligible should write to the Institute.

Syllabuses and regulations for admission can be obtained from the Secretary, Institute of Cost and Management Accountants, 63 Portland Place, London W1N 4AB.

School of Administrative Studies

Acting Head of School: Ms AM Murphy
MIL FSCT FABAC

Part-Time Courses

Diploma in Management Studies (II)
– Public Service Management
– Education Management

Course Leader: Dr RJ Kendle

This course covers three years of study on one half-day and one evening per week. A residential period will be held during the programme.

The first stage of the course is intended to provide an opportunity for students normally of different experience and qualification to acquire a uniform background of knowledge before proceeding to the final stage.

1st Year

(Stage 1): nature of management I, behaviour in organisations, public service management I or education management I, financial aspects, economic and legal aspects, statistics and operations research.

2nd Year

(Stage II): nature of management II, manpower studies/industrial relations, public service management II or education management II, financial management, project.

3rd Year

(Stage II): nature of management III, statistics and operations research, public service management III or education management III, project.

The residential parts of the programme are devoted to group activities and participatory work for which part-time study by itself allows inadequate opportunity.

The project allows the student to relate academic material to a practical situation.

The award of the Diploma is conditional upon satisfactory performance in examinations (externally assessed), project and in course work. A student must also fulfil attendance requirements.

For entry to Stage I a student must hold either:

i a degree of a British University or the CNAA or
ii A diploma in Technology of the National Council for Technological Awards or
iii a Higher National Diploma with endorsements or evidence of suitable practical experience or
iv a Higher National Certificate with endorsements or evidence of suitable practical experience or
v Membership of an approved professional body or
vi some other qualification acceptable to the Diploma Committee.

Students should be at least 23 years of age before commencing Stage I.

Students of 27 years or over without the above academic qualifications but with at least four years practical experience of suitable professional or administrative responsibility may be admitted.

The Diploma is awarded by the Council for National Academic Awards (CNAA) and holders may display the letters DMS after their names. In addition with approved managerial experience, they are also eligible for corporate membership of the British Institute of Management (MBIM).

ICSA (Public Services Stream)

Course Leader: WTK Poyner

Students will be prepared for appropriate external papers of Part III and Part IV of the Public Service Stream.

Certificate in Supervisory Studies – National Examinations Board in Supervisory Studies (III)

Course Leader: AJ Duncalf

This is a one year course of a general character to give men and women supervisors an opportunity to study their jobs in relation to modern works organisation. It provides instruction in the general principles of supervision and the basic supervisory skills. It is not only suitable for those established posts in supervision, but also for those who wish to train themselves for promotion to supervisory posts.

The development of students is provided for by participative exercises including discussions, case studies, and role playing exercises. Concentrated residential study is included in the course and a residential period is provided for this purpose.

Candidates for admission to the course should normally be not less than 21 years of age, but those below this age, holding supervisory posts or considered to be potential supervisors may be admitted at the discretion of the Director. No academic qualifications are laid down as entry conditions to the course but students should have an educational background such as will enable them to benefit from the course with a reasonable expectation of success.

The course will normally be held on one full day or one half-day plus one evening per week. Special courses can be developed to meet the needs of particular industries. Flexibility of course content and times of attendance can be obtained to suit specific requirements. The course can be provided on a block release basis, modular basis, or variations of these, depending upon the needs of the industry. Special courses are available to cater for the following categories Manufacturing, Retailing, Health Service, Civil Service, Local Authorities.

Certificate for Office Supervisors

This is a separate Certificate in Supervisory Studies course specially designed for office supervisors who do not yet possess any formal qualification.

Curriculum: office organisation, financial and statistical aspects, communications, personnel aspects and a project.

These subjects are arranged into two examination papers.

Attendance: two evenings a week, or one afternoon and one evening, for one year.

Institute of Administrative Management

Course Tutor: WTK Poyner

Certificate in Administrative Management (III)

This is a one-year course for office supervisors who do not yet possess any formal qualification. Possession of the Certificate will qualify a person to become an Associate of the Institute with the right to use the designatory letters AInstAM.

Curriculum and Examinations: office administration, methods and systems, manpower (personnel) administration, and case study.

Attendance: two evenings, or one evening a week, for one year.

Master of Business Administration

The MBA has achieved wide recognition in industry and commerce (including public sector) as the appropriate designation for a general management education at Master's level.

Through the NWRMC Lancashire Polytechnic is co-operating with Manchester and Liverpool Polytechnics in planning a new MBA which will be validated by CNAA.

At the time of going to press the regional co-operation is at the stage of final curriculum design. It is intended to offer the MBA on a part-time basis extending over a minimum of 2 calendar years.

Minimum entry qualifications: Diploma in Management Studies; BA in Business Studies or a relevant post-graduate diploma or degree. Candidates will, additionally, be expected to demonstrate their ability and relevant experience. Candidates without the relevant academic qualifications may be admitted after satisfactorily completing an appropriate bridging programme.

Subject to CNAA approval the MBA will be offered from September 1985.

Initial general enquiries should be directed to the School of Administrative Studies.

School of Economics

Head of School: Professor F Livesey BA(Econ)

Part-Time Courses

Institute of Bankers: Banking Diploma Stage 2

Course Tutor: D Clusky

Part-time day and evening courses will be provided for students wishing to study for the examinations of the Institute at Stage 2 level.

Qualifications for entry: Institute of Bankers Part 1, Stage 1 or recognised degree.

Attendance:

Stage 2A is normally run on Wednesday afternoon and evening

Stage 2B is normally run on Tuesday afternoon and evening

Stage 2C is normally run on Tuesday evenings.

Classes for Stage 2A and 2B are also available for evening only students. Detailed arrangements can be ascertained from the Course Tutor.

Detailed examination regulations and qualifications for entry are obtainable from the Institute of Bankers, 10 Lombard Street, London EC3V 9AS.

Building Societies Institute, Associateship (III)

Course Tutor: D Clusky

The Polytechnic offers a full scheme of study for the Institute's Associateship Examinations designed to enable students to qualify fully in three years under the new regulations.

Classes will be held on Wednesday afternoons and evenings and will be time-tabled in three groups running simultaneously:

Group A
Economic Affairs
Building Society
Financial Operations
Law and Practice

Group B
Personal Finance and Taxation
Housing
Personnel Management

Group C
3.30 – 5.30 Building Society Marketing and Development
6.00 – 8.00 Building Society Management

It is intended that students starting their BSI Course will join Group A while Groups B and C will consist largely of second and third year students intending to complete their studies. However, it should be possible for students with particular requirements to choose subjects from any group provided they are not timetabled for the same period.

Prospective students are reminded of the Institute's advice that prior study of Accounting is necessary before these subjects are studied in the Institute's Course and the Polytechnic reserves the right to insist that evidence of such prior study be produced before enrolment.

Details of Course arrangements may be obtained from the Course Tutor.

Detailed examination regulations and qualifications for entry are obtainable from the Secretary, The Chartered Building Society Institute, Fanhams Hall, Ware, Hertfordshire, SG12 7PZ.

Chartered Insurance Institute, Associateship Examinations (III)

Course Tutor: D Clusky

Part-time day and evening courses will be provided for students wishing to study for the Institute's Associateship Examinations. Classes will be arranged for the following subjects; and possibly for others where sufficient demand is apparent:

Introduction to insurance, English law, economics, principles and practice of insurance, insurance of the person, property and pecuniary insurances, Quantitative Methods.

Attendance: normally on Tuesday afternoon and evening and Wednesday evening.

Details of course arrangements may be obtained from the Course Tutor.

Information about regulations for admission to the Institute as a student member and about syllabuses may be obtained from the Secretary. The Chartered Insurance Institute, 31 Hillcrest Road, London E18 2JP.

School of Law

Head of School: Mrs PA Thomas LLB LLM

Part-Time Courses

BA and BA (Honours) in Law (II)

Course Leader: P Clark

A part-time course enabling students to obtain either a degree after 4 years or a degree with honours after 5 years.

The course is designed with sufficient student choice so as to appeal not only to people with varying career interests but also to those with a purely personal interest in studying law.

Qualifications for entry:

(a) five GCE passes including at least two at Advanced level, or
(b) four GCE passes including at least three at Advanced level, or
(c) a good standard of pass in ONC or OND in Business Studies or their BTEC equivalent, or
(d) an HNC or HND or their BTEC equivalent, or
(e) such other qualifications, professional or otherwise, as are regarded to be equivalent by the Polytechnic.

Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic. Applicants will normally be required to have obtained a pass in English Language at Ordinary level of the GCE. Applicants without this qualification will have to satisfy the Polytechnic of their competence in written and spoken English.

Exemptions: applicants who have passed examinations in legal subjects at degree or an equivalent standard, may be granted exemption on a subject for subject basis.

1st Year

Curriculum: English legal process, law of contract, legal methods.

2nd Year

Curriculum: constitutional law, criminal law, law of torts.

3rd Year

Curriculum: Options I, II, III.

4th Year

Curriculum: Options IV, V, VI.

Optional subjects available in years 3 and 4.

(1) consumer law, (2) labour law, (3) administrative law, (4) company law, (5) criminology I, (6) public control of land, (7) law of the EEC, (8) criminology II, (9) law of evidence, (10) family law, (11) public international law, (12) revenue law, (13) jurisprudence, (14) land law, (15) equity, (16) policy making in Britain.

Note: In any academic year, the Polytechnic reserves the right not to offer all the optional subjects.

5th Year

Honours Degree: students who have completed the degree may submit a written project of not less than fifteen thousand words and not more than twenty thousand words to obtain an honours classification. Normally the project must be completed in one academic year.

Attendance requirements: Years 1–4. Attendance at lectures and seminars is confined to two evenings per week. Students are expected to spend one further evening using the facilities of the law library. Year 5 Students will be required to consult their project supervisor for a *minimum* of one half hour per week (average).

Weekend Courses: students will normally be required to participate in one such

course during the first year and in one other in one other year of the degree course.

A fee in respect of weekend courses is charged at enrolment.

Examinations: in the first year of the course, mid-sessional examinations are held at the end of the first term, set and assessed internally. Sessional examinations are held at the end of each of the four years of the degree, internally set, externally assessed. In addition students are required to undertake assessed course work which counts 20% of the total marks in each subject.

Professional exemption: the degree qualifies for exemption from Part I of the Professional examinations of the Law Society (solicitors) and, subject to the minimum qualifications established for entry to the Bar, of the Council of Legal Education (barristers).

Master of Philosophy (MPhil) or Doctor of Philosophy (PhD) by Research (I)

Course Leader: Graham Stephenson

Qualifications for entry: to register for the degree of MPhil and MPhil with possibility of transfer to PhD a candidate should normally hold a first or second class Honours Degree of the CNAA or of a university in the UK. Applications from candidates holding qualifications other than those mentioned above will be considered on their merits and in relation to the nature and scope of the programme of work proposed.

Attendance: individually arranged between the student and his supervisor. An MPhil degree can be obtained after about 3 years of part-time study, either during the day or in the evening.

Areas of research: supervision can be offered on a variety of legal areas and topics particularly, consumer law, criminology, torts and contract, legal process, constitutional law, privacy, data protection, criminal law, property law including trusts, legal theory, landlord and tenant, environmental law including planning, welfare law, company law, and evidence. Anyone interested in research leading to an MPhil award in these and other areas should contact the above mentioned to discuss the matter further.

Polytechnic Certificate in Criminology (III)

Course Leader: Dr C Fazey

A one year course in criminology which has been specially designed to further the knowledge of those who have some experience of the criminal justice system or of the delinquents or criminals who might come before the courts.

The course examines the nature and extent of crime in England and Wales, the various reasons which have been put forward to account for crime. The penal system-sentencing and the means of dealing with offenders is also studied in some depth. Particular areas of student interest will be examined in more detail in the third term, such as child abuse, organised crime, computer crime, drug abuse, vandalism or murder.

Attendance: one evening per week (Monday) for three terms.

Qualifications for entry: normally post 'A' level but priority is given to those with experience in areas related to the subject matter whatever their qualifications.

Examinations: assessment is by course work comprising two essays and a project.

Qualification: Polytechnic Certificate in Criminology.

School of Management Sciences

Head of School: P Hewitt BSc MTech

Part-Time Courses

BA and BA with Honours in Business Studies of the Council for National Academic Awards (II)

Course Leader: SM Haddock

A part-time course enabling students to obtain either BA or BA (Hons) in business studies. The course is designed to appeal to mature students, normally over 18 years of age, and should be of interest to a wide range of people including:

(a) men and women already employed in industry, seeking to enhance their qualifications.
(b) non-graduate teachers of business and commercial subjects in schools and colleges.
(c) persons employed in the public sector.

Qualifications for entry:

(a) five GCE passes including at least two at Advanced level, or
(b) a good standard of pass in the ONC or OND in Business Studies or their BEC equivalents, or
(c) an HNC or HND or their BEC or TEC equivalents, or
(d) an acceptable professional qualification gained by examination.

Students will normally be expected to have at least an 'O' level (or its equivalent) in Mathematics and English Language.

Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic and such students should consult the Course Leader for individual consideration.

Exemptions: exemptions from the foundation level, to a maximum of 6 subjects will be granted on a subject basis to holders of appropriate qualifications, eg HNC or HND in Business Studies, ICMA and other professional qualifications.

Prospective students are invited to discuss their qualifications and the attendance pattern with the Course Leader.

Curriculum: Foundation level (normally taken over 2 years) – accounting 1, computer studies, economics 1, law 1, organisation studies 1, quantitative analysis 1.

Intermediate level (normally taken over 1 year) – accounting 2, economics 2, law 2, organisation studies 2.

Degree level (to be taken in 1 year) – three from financial control, human resource management, marketing analysis, management science.

Honours Degree level (to be taken in 1 year) – all students submit a project and take one of the following pairs of subjects:

i business finance and financial management
monetary economics
ii industrial relations
human resources and labour markets
iii buyer behaviour and communications
marketing research
iv operational research
economic and business planning

Attendance: normal modes of attendance are two evenings per week or one afternoon and one evening.

Examinations: internally set, externally assessed.

Institution of Industrial Managers

Course Leader: G Evans

Certificate in Industrial Management (III)

Course Tutor: WE Illston

This is a course covering two years of study on one half day and one evening or on two evenings per week. Intending students should obtain a copy of the regulations and syllabus (Series 5) from the School of Management Sciences, Lancashire Polytechnic, Adelphi Building, Adelphi Street, Preston (Preston 22141).

1st Year

Curriculum: communication work book, industrial finance, microelectronics and data handling, industrial environment, industrial management and organisation.

2nd Year

Curriculum: production and operational management (A) and (B), personnel and industrial relations.

Note: Candidates for the Certificate examination must register as student members of the Institution before 31st October. Application forms can be obtained from the School of Management Sciences, but it is the students responsibility to return them direct to the Institution.

Diploma in Industrial Management

Course Tutor: G Evans

A one year part-time course, normally carried out on one half day and one evening per week. The Diploma course is based on a management in action programme. The Diploma course divides into two major fields of activity. The first allows for the development in depth of a study of Industrial Management Policy, the second covers assignments undertaken during the course, plus an industry based project. A residential weekend period is a compulsory part of the course.

Curriculum: management policy, management practice, project study.

Entry Qualifications: candidates must:

(a) hold the Certificate in Industrial Management and have suitable industrial experience, or

(b) have obtained exemption therefrom and have suitable industrial experience, and

(c) applicants holding the IIM Certificate *must* be registered as an Associate of the Institution within eight weeks of the commencement of the Diploma course.

(d) 'direct entrants' to the Diploma course must submit an application for an appropriate grade of membership *before* attending the selection panel.

Institute of Management Services

Course Tutor: PA Flynn

Management Services Certificate (IV)

A one year part-time course for new entrants which will include a considerable amount of practical work in a fully equipped work study laboratory.

Qualifications for entry: students must satisfy the Polytechnic of their ability to benefit from the course.

Curriculum: computing and foundation studies, method study, work qualification.

Attendance: one afternoon and one evening or two evenings, per week.

Qualification: Management Services Certificate.

Examinations: internal.

Management Services Diploma (III)

A two year part-time course leading to the Management Services Diploma. Applicants must have been accepted as an affiliate of the Institute of Management Services and syllabuses may be obtained from the General Secretary, IMS, 1 Cecil Court, London Road, Enfield, Middlesex.

Qualifications for entry: members of the Institute who:

(a) hold a Degree of HND or City and Guilds 255 or an approved professional qualification or in exceptional circumstances can satisfy the Institute as to their general academic level, and
(b) have obtained the Management Services Certificate.

1st Year

Curriculum: communication work book, industrial finance, microelectronics and data handling, industrial environment, industrial management and organisation.

2nd Year

Curriculum: production and operational management (A) and (B). personnel and industrial relations project.

Qualification: Management Services Diploma.

Examinations: internal.

Institute of Production Control

Diploma in Production Control (III)

Course Tutor: G Evans

The course is designed for people who are training for, or are engaged in, the practice of production control.

The subjects to be studied are as follows:

1st Year

Curriculum: communication work book, industrial handling, industrial environment, industrial management and organisation.

2nd Year

Curriculum: production and operational management (A) and (B). personnel and industrial relations.

The student is required to submit a project during his course of study. Ideally, this will involve the identification of a problem within his own organisation, and an analysis of this problem, using knowledge gained from the course.

The course will run on a part-time and evening basis over a period of two years.

Examinations: three three-hour papers at the end of each year. The project is also examined.

Qualifications for entry: BTEC National Certificate or a City and Guilds Full Technological Certificate or equivalent qualifications. Candidates of mature age who have been engaged in the practice of production control for a number of years will be admitted if they can satisfy the Polytechnic of their ability to profit from the course.

Master of Philosophy Degree (MPhil) or Doctor of Philosophy Degree (PhD) by Research

Course Tutor: to be appointed

The initiation and development of research has a high priority in the policy of the School. Research projects which possess both intellectual and practical merit are particularly encouraged.

Registration

To register for the degree of MPhil and MPhil with possibility of transfer to PhD a candidate should normally hold a first or second class Honours Degree of the CNAA or of a University in the UK. Applications from candidates holding qualifications other than those mentioned above will be considered on their merits and in relation to the nature and scope of the programme of work proposed.

Direct registration for the degree of PhD may be permitted for holders of an appropriate Masters Degree (by examination or thesis) of the CNAA or of a University in the UK.

Programme of Research

A candidate for the degree of MPhil is required to investigate and evaluate, or to undertake a criticial study of a chosen topic or topics and to show lucidity in the presentation of a thesis and understanding of the context and significance of the work.

A candidate for the degree of PhD is expected in addition to complete successfully a programme of work which results in a significant contribution to knowledge.

The School will appoint for each research student a first supervisor and undertakes to provide him or her with a second supervisor from an outside academic body.

The period of study would normally be 3 years for MPhil and 4 years for PhD.

Professional Institutions and Industrial Group Arrangements

The School is currently developing arrangements and procedures which would facilitate the registration of groups of students for MPhil, research linked to Professional/Industrial qualifications. A scheme to link MPhil, research projects with the Advanced Diploma of the Institution of Industrial Managers has been developed. Such schemes will provide for research methods training and project preparation in groups in addition to individual supervision.

School of Organisation Studies

Head of School: MD Gibson BSc MSc DLM AIPM

Part-Time Courses

BTEC – Higher National Certificate Board B2

Course Leader: D Counsell

Curriculum: students take four modules of which three are common to B2 and B8. The Common Core modules are organisation studies, the business environment and introduction to decision studies, B2 (business studies) students take resources for business as their Board Core module, B2 (financial studies) students take financial accounting I as their Board Core module.

Second Year

Curriculum: students take four modules of which people and organisations is a Common Core module for Boards B2 and B8. B2 (business studies) students take business planning as their Board Core module and two Optional modules as follows: (a) personnel administration and industrial relations, (b) marketing analysis and buyer behaviour, (c) personnel administration and marketing analysis, or (d) any two of the following subjects: business law, business computing, government and the economy and British politics and government. B2 (financial studies) students take cost accounting as their Board Core module and two Optional Modules as follows: (a) financial accounting II with either auditing or quantitative analysis or management accounting, (b) office administration with either financial accounting II or British politics and government, (c) finance of foreign trade and law relating to banking (banking students who take group (c) will take investment as their Board Core module).

Exemptions: completion of appropriate module combinations in B2 (business studies) can give exemptions from the Institute of Marketing, Institute of Personnel Management and other professional bodies. Completion of appropriate module combinations in B2 (financial studies) can give exemptions from the Institute of Chartered Secretaries and Administrators and the Association of Certified Accountants.

Progress after BTEC HNC

Each year a number of students who have achieved the BTEC HNC transfer to the course leading to BA and BA(Hons) Business Studies (Part-time), normally entering the Intermediate stage. It is a requirement for such transfers that the student should have passed BTEC HNC modules in Business Law and Business Computing.

For details of the BTEC Board structure and admission requirements see the BTEC entry at the start of this faculty's section of the prospectus.

BTEC – Higher National Certificate Board B8

Course Leader: M Addison

Conversion: by arrangement with BTEC, organisations with appropriate training schemes may submit students without the usual HNC entry qualifications to a one-week full-time conversion course. This course will be held normally during the week before the commencement of the HNC course proper.

1st Year

Curriculum: students take four modules of which three are common to Boards B2 and B8. The Common Core modules

are organisation studies, the business environment and introduction to decision studies. B8 students take public and social administration as their Board Core module.

2nd Year

Curriculum: students take four modules of which people and organisations is the Common Core module for Boards B2 and B8. B8 students take public sector planning as their Board Core module and two Option modules as follows: either local government administration or case studies in administration or office administration with one of the following subjects: government and the economy. British politics and government, personnel administration, policy analysis, environmental policy, methods of social research or financial accounting B8.

Exemptions: completion of appropriate module and combinations in B8 can give exemptions from: The Institute of Chartered Secretaries and Administrators (Exams Part I and II – in full). The Institute of Administrative Management – (full exemption from the Certificate Examination). The Institute of Personnel Management (certain papers).

Substantial exemptions are being planned in relation to the Institute of Health Service Administrators examinations.

For details of the BTEC Board structure and admission requirements see the BTEC entry at the start of this Faculty's section of the prospectus.

Institute of Personnel Management

Course leader: RG Crisp

Professional Educational Scheme – Stages 1, 2 and 3

Stages 1 and 2 – Graduateship (Grad IPM)

Stage 1 aims to enable students to acquire an introduction to the relevant aspects of the main academic disciplines underlying the practice of personnel management and its development, organisation and function, together with an awareness of the major constraints (economic, political, social, financial and legal) which influence its operation. These studies are in three subject areas – personnel management in context, personnel information and decision making and introduction to organisational behaviour. Stage 1 occupies one half-day and evening per week over one year.

Stage 2 aims to increase the students' knowledge of employee resourcing, employee development and employee relations while developing those skills essential to the practice of personnel management. Stage 2 occupies one half-day and evening per week over two years.

In each year of Stages 1 and 2 a two-day sequential (usually residential) study period is compulsory.

Admission: to Stage 1 – 5 GCE passes in different subjects, at least two of which must be at Advanced Level: or successful completion of the IPM 'Certificate in Personnel Practice' or an equivalent or higher-level award acceptable to the Institute.

to Stage 2 – successful completion of, or exemption from, Stage 1. (some exemptions, where Stage 1 subjects appear to have been covered adequately, may be admissable – apply early to Tutor).

General: since applications to IPM HQ take time to process, particularly where they include requests for exemptions, early application should be made in an approach to the Course Tutor. Where subject exemptions at Stage 1 are applied for, please provide copies of the course syllabuses covering those subject areas.

N.B. Student membership of the IPM requires the following: 5 GCE passes as above. Minimum age of 20 years by 30th November which precedes the student's first examination (or exemption).

Student membership *may* be granted to those without the minimum academic qualifications if: the person is at least 23 years of age *and* has at least two years of personnel/managerial experience; but such applicants *must* gain the approval of the Institute prior to starting a course and should approach the Manager (Membership Development), Institute of Personnel Management, IPM House, Camp Road, Wimbledon, London SW19 4UW. Tel 01-946 9100.

Stage 3 Associate/Membership – (AIPM/MIPM)

Stage 3 is concerned with the assessment of professional competence; it is structured learning in the workplace involving a major work-based project and supervision by a tutor of the project period.

Following the submission of the project outline to IPM HQ one year is allowed for completion. No residential period is required.

Admission: students who have successfully completed Stages 1 and 2 (or obtained exemptions) *and* who have at least one year's full-time experience in a personnel management position are eligible to register for Stage 3.

MSc (Management)

Enquiries to: MD Gibson

Lancashire Polytechnic is one of several colleges co-operating with the North West Regional Management Centre and Manchester Polytechnic in offering this programme. Based upon the Action Learning approach it will require participants to focus upon a problem-solving project within their own organisations. In this way skills and knowledge can be developed which are of direct relevance to career needs.

1st Year

After an initial 'orientation phase', which includes a one week residential period, students will be involved full-time in the study of a major problem of strategic importance to their employing organisations. There is an attendance requirement of approximately 1 day per week, normally at Manchester Polytechnic.

2nd Year

Students may choose to complete their dissertations in twelve months on a part-time basis or in six months, full-time study.

Throughout the programme the NWRMC will provide individual project supervision, weekly tutorial assistance and workshops on topics of particular relevance.

The programme is intended for those who are established in a management career in industry, commerce or the public services. Candidates will normally be aged 27 years or over, have had three years managerial experience and hold either a DMS or an Honours degree with substantial management studies or business studies content.

Lancastrian School of Management

Dean of School: to be appointed

Acting Dean and Head of Short Course Unit: CW Cunliffe DipM MInstM MBIM

Administrative Assistant: Mrs SB Myerscough

Centred on Lancashire Polytechnic, the Lancastrian School of Management is responsible for the co-ordination and development of all the comprehensive range of management education and training services sponsored by the Lancashire and Wigan Education Authorities. Residential and day courses in numerous subject areas cater for the needs of all levels of management. The School offers a full consultancy service and will undertake research assignments in the management field.

Organisations can take advantage of the programmes offered, or have courses specifically designed to meet their individual requirements.

Borwick Hall Management Centre, the residential centre for the Lancastrian School of Management, offers excellent lecturing and seminar accommodation in purpose-built accommodation. The Hall is situated at Borwick near Carnforth close to the M6 Motorway and offers full residential and catering facilities.

The Management Centre is available to organisations for any of the planned courses or they may use the facilities for their own development programmes.

For further details please contact:
Mr CW Cunliffe, Head of Short Course Unit,
Lancastrian School of Management,
Lancashire Polytechnic,
8 East Cliff, Preston PR1 3JN
(Preston 22141).

or New Borwick Hall, Carnforth (0524) 734500.

The NW Regional Management Centre

The Lancastrian School is a constituent unit of the new Regional Management Centre and through this organisation the total teaching resources of the North West can be applied to industrial and organisational needs.

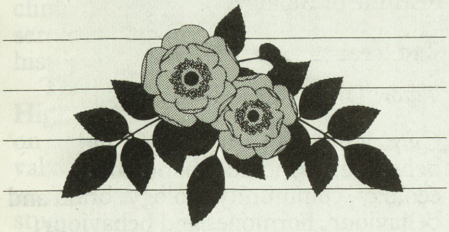
For further details please contact:
The Director,
NWRMC,
Woodlands Centre,
Southport Road,
Chorley PR7 1QR.
Tel. Chorley 66942.

FACULTY OF SCIENCE

Dean of Faculty: PM Young BA MSc

The Academic Board has endorsed the concept of the Polytechnic as a comprehensive institution of Higher Education offering courses with day release, block release, sandwich, full-time and other varieties of attendance and patterns. It is the aim of the Polytechnic that, in order to maximise student opportunity, alternative patterns of courses shall be offered for every qualification. In accordance with this aim the Faculty offers, for the part-time student, graduate, professional and technician type courses in science subjects with opportunities for course transfer as the academic ability and aspiration of a student changes.

Each group of courses is operated by a Course Committee on which the part-time student is represented and which collaborates with industry through appropriate channels. It is recognised that in order to provide for local and national needs in an ever changing situation it will be necessary to develop new courses and possibly phase out existing courses. Staff of the Faculty are willing to discuss with interested groups the possibility of developing new courses, either short cycle or long cycle, to accommodate changing needs.



School of Applied Biology

Head of School: Professor K Goulding
BSc PhD MIBiol

Master of Philosophy Degree (MPhil) or Doctor of Philosophy Degree (PhD) by Research (I)

Course Leader: Dr M Edmunds

Qualifications for entry: entrants should have a degree of a British university or the CNAA with chemistry or a biological science as a main subject, or the Membership of the Institute of Biology, or an equivalent qualification. Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic.

Attendance: individually arranged between the student and his supervisor. An MPhil degree can be obtained after 2 to 3 years of part-time study, either during the day or in the evening.

Qualification: students register with the CNAA and the degree is awarded on submission of a satisfactory thesis and successful completion of a viva.

Areas of Research: include cytotaxonomy of grasses; photosynthesis; heavy metals in terrestrial and freshwater ecosystems; biodeterioration of wood; effects of diet and exercise on energy metabolism in mammals; polymorphisms in invertebrates; gastric ulceration.

Membership of the Institute of Biology in Ecology and Behaviour (II)

Course Leader: Dr M Edmunds

A three-year part-time course leading to Membership of the Institute of Biology which is an Honours Degree equivalent qualification. It is designed for those with an HNC or HND in a biological subject or a Teacher's Certificate with biology as the main subject. The course is intended for non-graduate teachers who wish to broaden their expertise, but would also be useful to those employed in nature conservation, environmental management and pollution control.

Qualifications for entry: applicants must possess, either (i) an HNC or HND in Applied Biology, Medical Laboratory subjects, Chemistry or Applied Chemistry, or (ii) an HND in Food Technology or Agriculture, or (iii) a Teacher's Certificate with biology as a main subject and a pass at GCE 'A' level or equivalent in a biological subject together with a pass at GCE 'O' level in Chemistry, Mathematics and Physics, or (iv) a degree in an appropriate subject. Graduates may be awarded exemption from part of the course.

1st Year

Tutor: Dr EH Evans

Curriculum: principles of biology, statistics, topics in ecology and behaviour, and a case study of a biological problem of major current interest.

Attendance: all day Wednesday and Wednesday evening.

Examinations: MIBiol Part I (1/3 internal and 2/3 external assessment).

Qualifications: Licentiateship of the Institute of Biology.

2nd Year

Tutor: Dr CJ Sutherland

Curriculum: topics in ecology and behaviour to include, population ecology, community ecology; brain and behaviour, hormones and behaviour;

fear and aggression; sexual behaviour and computing.

Attendance: all day Wednesday and Wednesday evening.

Examinations: internal.

3rd Year

Tutor: Dr M Edmunds

Curriculum: topics in ecology and behaviour to include man's impact on nature; social behaviour; physiological and behavioural ecology; teaching ecology and behaviour, and a project.

Attendance: all day Friday and Friday evening.

Examinations: MIBiol Part II (Internal, externally assessed).

Qualification: Membership of the Institute of Biology.

BTEC Higher National Certificate in Medical Laboratory Sciences (III)

Course Leader: Dr P Foster

A two-year course leading to the BTEC Higher National Certificate in Medical Laboratory Sciences, a qualification which is presently acceptable for State Registration. The course is based on a background of sciences appropriate to medical laboratory work together with one specialist subject from the range of clinical chemistry, haematology and serology, medical microbiology, histopathology and cytology.

The course is unit-based and the Higher National Certificate is awarded on successful completion of 10 units value. An integrated hospital training is an essential part of the course and students should normally hold a full-time post in a hospital or other approved laboratory.

Qualifications for entry:

(a) passes in the General Certificate of Education in four subjects of which either:
  (i) chemistry and another science or mathematical subject must have been passed at advanced level, or
  (ii) chemistry must have been studied to advanced level and biology together with one other science (non-biological) or mathematical subject must have been passed at advanced level.

(b) a BTEC National Certificate or Diploma in Sciences which includes the following subject areas, or their equivalents, to the levels indicated below:
  Level II: mathematics
  Level III: mammalian physiology, biochemistry, medical laboratory science.

There are special arrangements for holders of equivalent qualifications – enquiries should be made to the Course Leader.

1st Year

Tutor: Dr P Foster

Curriculum: cell biology, biomeasurement, general and communication studies, and specialist subject.

Attendance: one day (Tuesday) and one evening per week.

Examinations: internal, BTEC moderated.

2nd Year

Tutor: Dr P Foster

Curriculum: biochemistry, physiology, project and specialist subject.

Attendance: one day (Thursday) and one evening per week.

Examinations: internal, BTEC moderated.

Qualification: BTEC Higher National Certificate in Medical Laboratory Sciences with appropriate specialist subject.

BTEC Higher National Certificate in Applied Biology (III)

Course Leader: Dr R Cotton

This will normally be a 2 or 3 year part-time day course and will be taught in conjunction with the Higher National Diploma in Applied Biology which is a full-time course. The course is unit based and the Higher National Certificate is awarded on successful completion of 10–14 units.

Qualifications for entry: passes in the General Certificate of Education in four subjects with: either two biological subjects having been passed at 'A' level or one biological subject and one other science (non-biological) or mathematical subject having been passed at Advanced level. Chemistry should have been studied to Advanced level, if not passed. GCE 'O' level passes should include mathematics and a subject testing the use of English. An alternative route of entry would be via a BTEC National Certificate or Diploma in Science which includes the following subject areas, or their equivalent, to the levels indicated below:

Level I – safety and laboratory practice.
Level II – mathematics, physics.
Level III – physiology or biology.

Other equivalent qualifications to the above could also be considered as entry qualifications.

Curriculum: the core curriculum will normally consist of cell biology, physiology, biochemistry, microbiology, biomeasurement and general and communication studies. This core material may however vary according to the background of the individual student.

The student can also choose optional advanced units from the following: physiology, pharmacology, immunology, biochemical systems, biotechnology. nutrition, microbiology, biodeterioration, plant physiology, plant environmental physiology, pest control.

Attendance: 2 year course 3 half days/ week.
3 year course 2 half days/week.

Examinations: internal, BTEC moderated.

Note. The number of students taking a Higher National Certificate in Applied Biology is likely to be small and the course will have to be taught with the Higher National Diploma course. Thus timetabling of this course must fit in with the Higher National Diploma course. This may mean that the days of the week on which the student attends will vary throughout each year according to the units being studied.

Polytechnic Certificate in Physiology for Nurses (III)

Course Leader: Dr JF Brown

A one-year course, leading to the award of a Polytechnic Certificate which has been specifically designed for Registered Nurses who wish to obtain a deeper understanding of the physiological processes which form the basis of modern nursing practice.

The course will include lectures, practical and tutorial sessions together with a work-related project which examines the physiological principles involved in the day-to-day working experience of the student.

Attendance: one evening per week (Tuesday) for one year.

Qualifications for entry: a registered nursing qualification.

Examinations: internal Polytechnic examinations and assessment of project work.

Qualification: Polytechnic Certificate in Physiology for Nurses.

School of Chemistry

Head of School: Professor A Pidcock DPhil DSc CChem FRSC

Part-Time Courses in Chemistry

Course Leaders: BTEC Higher National Certificate and associated courses in Chemistry Dr JW Dodd
Graduateship RSC Dr D Mason

Master's Degree (MPhil) in Analytical Chemistry of the University of Lancaster (I)

Course Leader: Dr D Brattan

A two-year and one-term course leading to the degree of MPhil.

Qualifications for entry: entrants will be expected to be over the age of 21 and hold either a degree of a British university or the CNAA, with chemistry as a main subject, or the Graduateship of the Royal Society of Chemistry, or an equivalent qualification.

Tutor: Dr D Brattan

Curriculum: selected topics will be studied by a project approach backed by tutorials.

Attendance: flexible, as agreed by Course Leader.

Qualification: students who reach a satisfactory standard will receive the degree of MPhil awarded by the University of Lancaster.

Master of Philosophy Degree (MPhil) or Doctor of Philosophy Degree (PhD) by Research (I)

Course Leader: Dr JD Hepworth

Qualifications for entry: entrants will have a degree of a British university or the CNAA with chemistry as a main subject, or the Graduateship of the Royal Society of Chemistry, or an equivalent qualification. Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic.

Attendance: individually arranged between the student and his supervisor. An MPhil degree can be obtained after about 3 years of part-time study, either during the day or in the evening.

Qualification: students register either with their own university or with the CNAA and the degree is awarded on submission of a satisfactory thesis and successful completion of a viva voce.

Areas of research: (1) design of coordination compounds for use as catalysts; (2) synthetic aromatic and heterocyclic chemistry; (3) chemistry and photochemistry of biologically active sterically hindered basic dyes; (4) removal of metal ions by flotation methods; (5) environmental distribution of trace metals; (6) organo metallic chemistry of platinum group metals.

Graduate Membership of the Royal Society of Chemistry (II)

Course Leader: Dr D Mason

A three-year course leading to the Graduate Membership examinations of the Royal Society of Chemistry. The GRSC Part I examination is taken at the end of the first year and the GRSC Part II examination at the end of the third year.

Qualification for entry: HNC or HC(Chemistry) or equivalent qualification, together with GCE Advanced levels or assessed RSC ancillary examinations in Mathematics and either Physics or another acceptable subject.

1st Year

Tutor: Dr BM Smallwood

Curriculum: review and extension of chemical subjects studied.

Attendance: all day Wednesday.

Examinations: GRSC Part I; internal, externally assessed.

2nd and 3rd Years

Tutor: Dr D Brattan

Curriculum: general topics relevant to professional chemists, recent advances in inorganic, organic and physical chemistry.

Attendance: Year 2 all day Monday and Wednesday evening.
Year 3 all day Wednesday and Monday evening.

Examinations: GRSC Part II.

Qualification: Graduate membership of the Royal Society of Chemistry.

BTEC Higher National Certificate in Science (Chemistry) (III)

Course Leader: Dr JW Dodd

A two year course leading to the BTEC Higher National Certificate in Science (Chemistry).

Qualification for entry: BTEC National Certificate in Science, ONC Sciences, passes in GCE 'A' level Chemistry and either Mathematics or Physics or completion of Open College course with passes in four appropriate Stage A units and at least one appropriate Stage B unit.

Students who wish to proceed beyond the HNC to professional qualifications of the RSC must pass GCE 'A' level Mathematics or its equivalent, have taken a course in physics at GCE 'A' level standard and have passed a further subject (e.g. physics, biology, general studies) at GCE 'A' level or equivalent standard.

1st Year

Tutor: Dr BM Smallwood

Curriculum: inorganic, organic and physical chemistry, general and broadening studies, laboratory techniques.

Attendance: all day Tuesday and Tuesday evening.

Examinations: internal, BTEC moderated.

2nd Year

Tutor: Dr AD Jones

Curriculum: further inorganic, organic and physical chemistry, laboratory techniques.

Attendance: all day Thursday and Thursday evening.

Examinations: internal, BTEC moderated.

Qualification: BTEC Higher National Certificate in Science (Chemistry).

Licentiateship of the Royal Society of Chemistry (III)

Course Leader: Dr D Mason
Tutor: Dr R G Brown

A one-year course in which the BTEC HNC endorsement subject advanced analytical chemistry is studied. Successful completion of this course, together with approved ancillary mathematics and physics, fulfils the academic requirements for the Licentiateship of the Royal Society of Chemistry.

Qualifications for entry: students must have reached a standard in chemistry which is equivalent to that of a BTEC HNC and have satisfied the RSC ancillary requirements (see under HNC Science (chemistry)).

Curriculum: classical methods, titrimetry, gravimetry, separative methods, ion exchange, solvent extraction, gas and liquid chromatography, molecular spectrophotometry, UV-VIS-IR methods, fluorimetry, atomic spectroscopy, spectrometry, flame and flameless atomic absorption, flame emission and plasma emission, electrochemical methods, potentiometry, coulometry, polarography, amperometry, radiochemistry, thermal methods.

Attendance: all day Monday and Monday evening.

Examinations: BTEC HNC endorsement subject, advanced analytical chemistry.

Qualification: Advanced Analytical Chemistry endorsement subject for Licentiateship of the Royal Society of Chemistry.

School of Mathematics and Statistics

Head of School: Dr RR Harris BSc PhD ARCS FIMA FIS

Part-Time Courses (Day and Evening)

BTEC Higher National Certificate in Mathematics, Statistics and Computing (III)

Course Leader: TS Griggs

This is a two year course suited to those whose work in industry or commerce has a mathematical foundation. The treatment of the curricula is such as to ensure that the students can apply their knowledge of mathematics, numerical methods, computing and statistics to problems they meet in their employment. It is a qualification that is accepted nationally and recognised by the Institute of Mathematics and its applications as giving exemption from some of its professional examinations.

Entry requirements: any appropriate National Certificate with a suitable level of Mathematics.

or GCE 'A' level in Mathematics together with three other subjects at 'O' level.

or Polymaths

or a qualification deemed to be equivalent to any of the above.

The two year course comprises Year A and Year B these being studied in alternate years.

Year A: calculus, statistics, communication studies.

Year B: numerical methods, computing, algebra, organisational studies.

Attendance: all day Thursday and Thursday evening.

Examination/Assessment: the Communication and Organisation Studies Units are subject to continual assessment, the remaining units are subject to both continual assessment and end of Unit examinations. The examinations are internally set, externally moderated.

Qualification: Higher National Certificate in Mathematics, Statistics and Computing.

Polytechnic Certificate in Mathematics and Statistics (III)

Course Tutor: D Haslam

A one-year evening course designed to provide an opportunity for those wishing to continue their mathematical education beyond the standard of 'O' level.

It should appeal to:

(i) those working full-time in industry who consider it advantageous to be able to increase their present mathematical skills,

(ii) those mature students working in commerce and industry who are considering the possibility of studying for an Open University degree,

(iii) teachers who are retraining to teach mathematics and statistics at secondary school level.

Entry requirements: no formal qualifications are necessary.

Qualification: Polytechnic Certificate in Mathematics and Statistics.

Certificate in Statistics of the Institute of Statisticians

Course Tutor: LR Peace

A 25 week course providing basic statistical training. It is ideally suited to anyone who wishes to learn about statistics and its relevance to the society we live in.

Entry requirements: no formal qualifications or knowledge of statistics are necessary.

Course of study: basic statistics, tabulation, presentation and interpretation, report writing, measures of average and dispersion, index numbers and time series, regression and correlation.

Attendance: Monday evening.

Examination: an externally set examination is taken in April.

Qualification: Certificate in Statistics of the Institute of Statisticians.

School of Physics and Astronomy

Head of School: Professor D Melville BSc PhD FInstP

Part-Time Courses in Physics and Astronomy

Master of Philosophy Degree (MPhil) or Doctor of Philosophy Degree (PhD) by Research (I)

Course Leader: Professor D Melville

Higher degrees may be obtained by performing appropriate research work and following a programme of guided reading/lectures. Opportunities for research vary from time to time but will normally exist in the following fields: (1) liquid crystals, (2) magnetism and magnetic materials, (3) advanced composite materials, (4) infrared studies of active galaxies, (5) interstellar spectroscopy, (6) circumstellar shells and star formation.

Qualifications for entry: entrants will have a degree of a British university or the CNAA with physics or astronomy as a main subject, or the Graduateship of the Institute of Physics, or an equivalent qualification. Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic.

Attendance: individually arranged between the student and his supervisor. An MPhil degree can be obtained after 3 years of part-time study, either during the day or in the evening. Suitable candidates may transfer to a PhD degree and complete their studies in a minimum of 4 years part-time.

Qualification: students register with the CNAA and the degree is awarded on submission of a satisfactory thesis and successful completion of a viva.

Bachelor of Science Degree (BSc) in Physics of the Council for National Academic Awards (II)

Course Leader: Dr A Christy

A four-year course leading to the BSc degree in Physics.

The course is designed to meet the needs of two main groups of students:

(a) non-graduate teachers of physics and electrical subjects in schools and colleges of Further Education.

(b) employees in the applied physics and light electrical sectors of local industry.

The course is designed so that graduates from the course will:

(1) have a good grounding in the fundamental principles of physics and their applications,

(2) have sufficient knowledge of practical electronics and computer systems to be able to apply the modern techniques used in physical research and technology,

(3) have first hand knowledge and laboratory experience of the main practical skills in physics as practised by professional physicists in both industry and research establishments,

(4) have an in depth knowledge of a number of areas of applied physics of particular relevance to industrialists or teachers.

Qualifications for entry to the first year of the course: a wide range of entry qualifications can be considered, examples of which include:

(a) General Certificate of Education passes in at least five subjects, including two at Advanced level of which one must be Physics, Mathematics, Physical Science or Engineering Science.

(b) a qualified Teacher's Certificate, including Physics or Mathematics as a Main level or Advanced level subject.

(c) a qualified Teacher's Certificate together with a General Certificate of Education pass at Advanced level in Physics or Mathematics.

(d) a good Ordinary National Certificate or Ordinary National Diploma in Applied Physics, Sciences or Engineering.

(e) Higher National Certificate in Applied Physics or Engineering.

(f) passes at merit standard in three BTEC Units at level III. These must include Mathematics III and Physics III.

(g) completion of Open College course with passes in four appropriate stage A units and two appropriate Stage B units.

For the purposes of (a) and (c) above, the Open University Foundation courses S101, M101, T101 will be considered equivalent to a General Certificate of Education pass at Advanced level.

All students who satisfy the above admission requirement but who do not possess the equivalent of 'A' level Physics will be required to undertake and pass by Christmas in the first year a self-teaching package in Supplementary Physics.

Exemptions: suitably qualified entrants may be awarded exemption from the whole or part of the first year course. All applicants to the course will be interviewed individually to assess the possibility of exemptions and may be required to take an examination before such exemptions are granted. Applicants who hold an HNC or HND in Applied Physics or Physical Science (Physics) may be able to gain exemption from the whole of the first year.

Transfers: students may transfer from similar courses at this or other institutions; the point of entry to the course being recommended by the Course Leader after consultation with

the Course Leader of the student's previous course.

Duration of the course: the course extends over four academic years each year comprising 30 weeks teaching. The attendance each week will be on a full day and the same evening giving a weekly attendance of 9 hours per week. During 1985–86 the first year will be offered on Tuesdays and the second year on Thursdays. The regulations of the course allow for resit examinations but the maximum period of registration is seven years.

1st Year

Tutor: Dr A Christy

Curriculum: physics I, practical physics I, mathematics I, computing.

Examinations: 3 × 3 hour examination papers.

2nd Year

Tutor: Dr RW Chantrell

Curriculum: physics II, practical physics II, mathematics II, numerical methods and computing, context of science I.

Examinations: 3 × 3 hour examination papers.

3rd Year

Tutor: Dr PA Bates

Curriculum: physics III, practical physics III, digital and linear devices, context of science II.

Examinations: 3 × 3 hour examination papers.

4th Year

Tutor: Dr PA Bates

Curriculum: pure physics, applied physics, digital systems, or techniques for observational astronomy, practical physics IV.

Examinations: 3 × 3 hour examination papers.

Qualification: Bachelor of Science degree awarded by the Council for National Academic Awards. Eligible for Associate Membership of the Institute of Physics.

BTEC Higher National Certificate in Science (Physics)
(A two year course in Applied Physics with Electronics)

Course Leader: Dr PR Bissell

The aim of this two year course is to train technologists who can support the work of graduate engineers and scientists in industry. The course gives a broad training in the principles of physics, electronics and mathematics together with a specialisation in one of the following areas subject to demand: physical techniques for the investigation of materials, nuclear instrumentation and technology, applied acoustics, instrumentation, further electronics. After gaining the BTEC Higher National Certificate students may be allowed to transfer to the second year of the BSc part-time degree course in physics.

Qualifications for entry: to the first year of the course:

(a) BTEC National Certificate or Diploma programmes which include:
either (i) Physics III (U78/470) and Mathematics II (U76/031) and U76/032).
or (ii) Mathematics III and Physics II (76/003) and Electronics III (76/009) or Electrical Principles III (U75/010).

or (iii) Mathematics III and Electronics III (U76/009) and Electrical Principles III (U75/010).
or (iv) Units deemed equivalent to (i), (ii), (iii).

(b) GCE Studies as follows:
either (i) pass in GCE 'A' level Physics together with at least one year's study of mathematics beyond ordinary level.
or (ii) pass in GCE 'A' level Mathematics together with a study of physics to 'A' level.
or (iii) qualifications deemed equivalent to (i) and (ii).

Note: students with GCE background will be expected to have reached an appropriate standard of general education (e.g. obtained a pass in 'O' Level English Language).

1st Year

Tutor: Dr PR Bissell

Curriculum: physics (III); physics principles A (IV); mathematics A (III); electronics A (III); techniques for material investigation A (IV); instrumentation A (IV); laboratory techniques; communication studies.

Attendance: one day and evening per week.

Examinations: internal, BTEC moderated.

2nd Year

Tutor: Dr PR Bissell

Curriculum: physics principles B (IV); mathematics B (IV); electronics B (IV); use of computers (II); history of science. In addition a study of one of the following specialisations will be undertaken. Techniques for material investigation B (V); electronics C (IV); applied acoustics (IV); nuclear instrumentation and technology (V); instrumentation B (V); numerical methods and computing (IV).

(Numbers in brackets indicate the level of the course).

Attendance: one day and evening per week.

Examinations: internal, BTEC moderated.

Qualification: BTEC Higher National Certificate in Physical Science (Physics).

BTEC Higher National Diploma in Science (Physics)
(A two year course in applied physics with electronics).

Course Leader: Dr PR Bissell

The aim of the course is to extend the training of technologists in industry who have already obtained the Higher National Certificate in Physics.

Qualifications for entry:
(i) a BTEC Higher National Certificate in Physical Science (Physics).
(ii) a qualification deemed to be equivalent.

Tutor: Dr PR Bissell

Two year curriculum: vacuum technology (III); project (V); a choice of units from the following which have not been included previously in the HNC programme making a total of 7½ units or more in total (all are single units with the exception of maths C and physics C which each count for 1½ units).

Physics C (V); maths C (B); numerical methods and computing (IV); instrumentation B (V); electronics C (IV); nuclear instrumentation (V); applied acoustics (IV); techniques for investigation of materials B (V); health and safety at work (F/S).

(Numbers in brackets indicate the level of the course).

Attendance: 1 day and evening (by arrangement).

Examinations: internal, BTEC moderated.

Qualification: BTEC Higher National Diploma in Physical Science (Physics). Eligible for Associate Membership of the Institute of Physics.

Evening Courses

Polyphysics (IV)

Course Leader: Dr E Webster

This is a preliminary course in physics aimed at providing students with sufficient background material to embark on a degree in physics. Students are provided with written text material, practical and tutorial sessions being held at the Polytechnic.

Qualifications for entry: none.

Curriculum: mechanics, optics, electricity and magnetism, properties of materials, nuclear physics and electronics.

Attendance: one or two evenings per week.

Examinations: continuous assessment.

Special Courses

Special courses are arranged from time-to-time on the following topics:

Astronomy
Radioisotopes for teachers
Introductory Electronics and Nucleonics
Noise
Photometry
The use of Small Computers in the School Science Laboratory
Microbiology for Teachers
The use of the Electron Microscope in Biology
The IEEE Interface Bus.

School of Psychology

Head of School: Dr D Müller PhD BEd ABPsS

Part-Time Courses

Polytechnic Certificate in Psychology for Nurses (III)

Course Leader: Dr F Clough

A one-year course leading to the award of a Polytechnic Certificate, which aims to develop and update nurses' understanding of psychology and its nursing applications, whilst also providing a sound basis for further professional studies.

Teaching will be by lectures and seminars, and includes group-work designed to develop practical skills in interpersonal communication; project-work allows students to study in more detail an area of medical relevance suited to their own professional interests.

Attendance: one evening per week (Thursday) for one year.

Qualifications for entry: (normally) a registered nursing qualification.

Examinations: internal examinations and assessment of project work.

Qualification: Polytechnic Certificate in Psychology for Nurses.

Polytechnic Certificate in Child Development (IV)

Course Leaders: Dr J Archer, Dr S Glenn

A one-year course, leading to the award of a Polytechnic Certificate, designed for people working with children and those with an interest in obtaining an

understanding of psychological processes in child development.

The course will include lectures, practical demonstrations and group discussions, together with assessed written work.

Attendance: one evening per week (Tuesday) for 27 weeks.

Qualifications for entry: open entry.

Assessment: based on the submission of written assignments which are internally assessed.

Qualification: Polytechnic Certificate in Child Development.

MPhil/PhD by Research (I)

Course Leader: Dr J Archer

Qualification for entry: to register for the degree of MPhil or MPhil with the possibility of transfer to PhD, a candidate must normally hold a first or upper second class degree in Psychology or Joint-Psychology from a British university or the CNAA. Other professional qualifications will be considered on their merits. Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic.

Attendance: individually arranged between the student and his or her supervisor. An MPhil degree can be obtained after 3 years of part-time study, either during the day or in the evening.

Qualification: students register with the CNAA and the degree is awarded on submission of a satisfactory thesis and completion of a viva.

Areas of research: staff interests cover a wide range of subjects. A detailed booklet entitled 'Research & Consultancy in Psychology at Lancashire Polytechnic' is available on request from the course leader (address: School of Psychology, Lancashire Polytechnic, Preston PR1 2TQ.).

FACULTY OF TECHNOLOGY

Dean of Faculty: DW Walsh BSc MSc MBCS

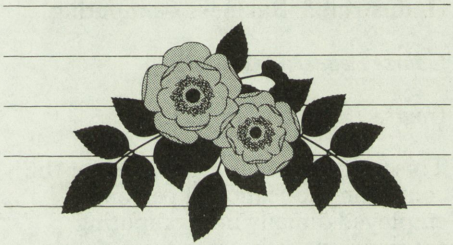
The Faculty supports the concept of the Polytechnic as a comprehensive institution of Higher Education offering courses with a variety of modes of attendance. In order to maximise student opportunity the Faculty offers day-release, sandwich, full-time and part-time courses. For part-time students graduate, professional and technician courses are available, enabling them to gain further expertise in a chosen career or to develop new skills. There are also opportunities for course transfer as the academic ability and aspiration of a student changes.

A range of collaborative schemes in engineering and technology have been developed between the Polytechnic and other co-operating colleges in Lancashire. These schemes allow similar part-time courses to be operated at institutions throughout the county and provide the opportunity for students to study some units at their local colleges and perhaps transfer to the Polytechnic for more specialist sections of the course.

Technology courses are the responsibility of the four Schools within the Faculty.

School of Computing
School of Construction and Surveying
School of Electrical and Electronic Engineering
School of Mechanical and Production Engineering

Each group of courses is operated by a Course Committee on which the students are represented. It is recognised that as part-time and short courses are designed largely to meet the needs of the local community and its industry it will be necessary to introduce new courses and perhaps to phase out existing courses as the demand changes. Staff of the Faculty are willing to discuss with interested parties the possibility of developing new courses, either short cycle or long cycle, to accommodate changing needs.



School of Computing

Head of School: WM Walmsley BSc MSc PhD MIEE CEng

Part-Time Courses (Day and Evening)

BTEC Higher National Certificate & Diploma in Computer Studies (Industrial & Business Computing)

Course Leader: WR Madill

Course Tutor: Dr HS Jackson

This part-time course provides for the continuing education of personnel employed directly in a computing environment or in other areas closely associated with the application of computers in business and industry.

The course covers design and implementation of computer based information systems in both business and industrial sectors.

The BTEC Higher National Diploma course in Computer Studies is a 3 year part-time course, the first two years of which are in common with the Higher National Certificate course. The final (HND) year extends the subject matter to a greater depth and provides specialist studies in both industrial and business computing.

Entry requirements: students will be admitted to the course at the discretion of the Course Committee. They must show adequate ability in the use of English and should normally possess one of the following:

(a) a BTEC National Certificate in Science, Engineering, Business Studies or Computer Studies.
(b) GCE passes in four subjects, one subject being at Advanced level and one subject being Mathematics.
(c) completion of Open College courses with passes in appropriate units totalling four Stage A units and at least one Stage B unit.
(d) any qualifications or suitable experience deemed to be equivalent to one of the above.

Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic and students with other than the entry qualifications listed above are invited to contact the Course Leader to discuss their own individual circumstances.

Higher National Certificate in Computer Studies (2 years part-time study)

Curriculum: topics covered include computer systems, programming methods, systems programming, data processing, systems analysis and design, human aspects of information systems, information systems design.

Higher National Diploma in Computer Studies

Curriculum: the HND course comprises, a third year of additional study after completion of the HNC described above.

Topics include business computing, industrial computing, software engineering, graphics and artifical intelligence.

A student who has completed an HNC in computer studies at another centre may be admitted directly to this HND year at the discretion of the Course Committee.

British Computer Society Exemption: The Higher National Diploma carries exemption of the British Computer Society Part I examinations.

Attendance: 1 day and 1 evening per week.

Assessment: the course is assessed in various ways each appropriate to a

particular area of study. These include coursework carried out both by private study and in laboratory/tutorial periods, open book examination and, where appropriate, time constrained examination.

Note: At the time of going to press (November 1984) this course is being redesigned. As a result applicants may wish to contact the Courses Administrator for further details.

CNAA Diploma in Professional Studies in Education (Computing)

Course leader: J Mallatratt

This is a two year afternoon and evening course specifically designed to enable qualified teachers to re-train with a view to teaching Computer Studies to 'O' level and beyond.

The course, which is normally attended in-service, is provided for teachers who have an acquaintance with computing and who wish to increase their knowledge and obtain a formal qualification. Because of the high proportion of students in schools undertaking examination studies in computing there is a requirement for teacher education at the Diploma level.

The computing science components of the course have greater weight than the pedagogical issues; although every attempt is made to acknowledge the educational environment in which the teacher operates.

Areas of study include problem analysis and programming, computer systems and their structure, data processing, computers in education, computers in society, computer graphics, information systems, curriculum design and evaluation and project work/school experience.

The course is taught by a series of lectures, tutorials and practical sessions. Practical sessions make use of the Polytechnic's extensive computing facilities in order to give 'hands-on' experience.

Attendance: one afternoon and one evening per week for two academic years plus one week full-time in Year 2. The period of full-time attendance is timetabled so as to minimise the difficulties inherent in releasing teachers full-time from their posts; it is normally held in early July.

Assessment: by a mixture of course-work, presentations, project work and examination.

Qualification: Diploma in Professional Studies in Education (Computing) of the Council for National Academic Awards.

Polytechnic Certificate in Educational Computing

Course Leader: J Mallatratt

A two term afternoon and evening course specifically designed as an introduction to computer studies for teachers who have little or no previous computing experience. The course provides a first level qualification in educational computing and is taught in conjunction with the first two terms of the Diploma in Professional Studies in Education (Computing) described above.

Attendance: one afternoon and one evening per week for two terms, normally Autumn and Spring.

Assessment: by a mixture of course-work, presentations and examination.

Qualification: Polytechnic Certificate in Educational Computing of Lancashire Polytechnic.

Note: Acceptance on these educational computing courses does not commit a Student's school or Local

Authority to support student release from school or payment of course fees for attending the course.

Whilst the Polytechnic will give any supporting information that may be required these issues are a matter of negotiation between the School, Local Authority and the teacher concerned.

BTEC Post Experience Programme (Computing Modules)

Course Leader: F Fowler

The School offers a modular programme of post experience studies which lead to the accumulation of credits which may count towards the award of a Business and Technician Education Council post experience Certificate or Diploma.

Modules within the BTEC post experience scheme include computer studies, computer programming, information technology for managers, implementing small business systems and word processing.

Modules are offered on a basis of part-time attendance at the Polytechnic (normally evenings) and are typically of 60 hours duration. Students attend 3 hours per week for 15 weeks and are expected to pursue some further directed study in their own time.

These modules are intended as a first level introduction to computer studies, concentrating mainly on Business Applications.

A full list of Centres offering BTEC post-experience modules is available from the Courses Administrator.

Technological collaboration

The School has laboratories which are used for specialist software and hardware development. In addition, a wide range of computing facilities exists within the Polytechnic and it is the policy of the Institution to make these available to business and industry in the region. The Polytechnic's Business and Industrial Centre can advise on the terms and conditions under which the organisations may avail themselves of a wide range of services to business and industry.

The School has an extensive short courses programme whereby specialist courses are designed and run for the benefit of in-company training on site or in the Polytechnic.

Further details

Further details of all the School's courses and services may be obtained from Mrs AZ Thomson, Courses Administrator, School of Computing, Lancashire Polytechnic, Preston PR1 2TQ. Telephone 0772 22141.

School of Construction and Surveying

Head of School: TM Ryan BSc (EstMan) FRICS FCSI

Part-Time Courses in Building Production Management

Course Leader: MJ Murray

Chartered Institute of Building Direct Membership Examination

Course Tutor: WH Davies

A one year course of study leading to the Chartered Institute of Building Direct Membership Examinations. The course structure requires attendances for two one-week sessions, one in September and one in June, plus one day per month. Candidates are advised to consult the Examination Regulations of the Institute with regard to the interview requirement before discussing the entry to the course with the Course Tutor.

Curriculum: building technology and practice, building production and project management and economics and quantitative analysis.

Attendances: two one-week block sessions and one day per month.

Examinations: Direct membership of the Chartered Institute of Building.

Qualification: Membership of the Chartered Institute of Building.

Chartered Institute of Building, Member Examination Part II (II)

Course Tutor: WH Davies

A course of study at first degree level, leading to the Member Examination Part II. The structure of the examination offers grouped and non-grouped subjects. The Institute's regulations should be consulted with regard to appropriate exemptions.

Curriculum: Grouped subjects: building technology II, building management II, contract administration. Non-Grouped subjects: building economics and finance, project evaluation and development.

Attendance: Tuesday day and evening.

Examinations: Member Examination Part II of the Chartered Institute of Building.

Qualification: Membership of the Chartered Institute of Building after successful completion of Part III requirements.

Part-time Courses in Building

Course Leader: MJ Murray

Chartered Institute of Building, Member Examination Part I (II)

Course Tutor: T Lonsdale

A course of study designed to prepare students for the Institute's examination.

Curriculum: building technology and practice, building management, quantity surveying and estimating, including work study and data processing, building law IV (BTEC), economics of industry IV (BTEC), measurement IV (BTEC), science and materials III (BTEC).

Attendance: one day and one evening, probably Wednesday.

Examination: Member Examination Part I of the Chartered Institute of Building.

Qualification: Member Examination Part I of the Chartered Institute of Building.

The Chartered Institute of Building now offers a special Diploma in building maintenance management. The appropriate course can be provided to satisfy the published syllabus for candidates meeting the requirements of the regulations, and are integrated with other relevant courses.

Chartered Institute of Building, Associate Examination (III)

Course Tutor: T Lonsdale

A two-year course which leads to the Associate examination of the Chartered Institute of Building which is an examination for student and licentiate members and other exempted candidates who wish to proceed to the Associate class membership by direct examination.

Curriculum: Group II: technology (2 papers), services and equipment (1 paper), measurement and economics (2 papers).

Attendance: Tuesday and Thursday day and evening.

Examination: Associate Examination of the Chartered Institute of Building.

Qualification: Associate of the Chartered Institute of Building.

BTEC Higher National Certificate in Building Studies (III)

Course Tutor: MJ Murray

A two-year course for technicians in building, architecture, building and quantity surveying and building control. It leads to the award of the Higher National Certificate in building studies and links qualification of the Chartered Institute of Building, the Institute of Quantity Surveyors, the Society of Architectural and Associated Technicians, the Society of Surveying Technicians, and the Incorporated Association of Architects and Surveyors.

The Business and Technician Education Council (BTEC) Higher National Certificate in Building Studies has replaced the Higher National Certificate course.

Qualifications for entry: students admitted to the course must possess either (1) the Ordinary National Certificate/Diploma in Construction or Building, (2) BTEC National Certificate or Diploma in Building, or (3) other approved examination passes and special case entries, eg completion of appropriate Open College course.

1st Group

Tutor: MJ Murray

Curriculum: a programme of three essential units and two optional units of study which will vary with the occupational group of the student. Units include; building technology, building services and equipment, contractual procedures and legislation; maintenance of buildings, measurement, structural mechanics, design procedures, economics of industry.

Attendance: Thursday day and evening.

Examinations: internal with BTEC moderation.

2nd Group

Tutor: MJ Murray

Curriculum: a programme of two essential units and three optional units of study which will vary with the

occupational group of the student. Units include: building technology, integrated studies; site studies (production), environmental science, tenders and estimating, design technology, building law, building regulations, design of structural elements.

Attendance: Tuesday day and evening.

Examinations: internal, externally assessed with BTEC moderation.

Qualification: the BTEC Higher National Certificate in Building Studies.

BTEC Higher National Certificate in Building Studies – Post Advanced Craft Students (III)

Course Tutor: MJ Murray

A unique course leading to the BTEC Higher National Certificate in Building Studies is available and is run jointly between the Polytechnic and the WR Tuson College, Preston. The course is specially designed for holders of an Advanced Certificate in a Building Craft and details may be obtained from the Colleges collaborating in this scheme.

Attendance: Thursday day and evening.

Examinations: internal, externally assessed with BTEC moderation.

Qualification: The BTEC Higher National Certificate in Building Studies.

Building Services Engineering

Course Tutor: MJ Murray

A series of short course modules in building services engineering which are at the level of the Corporate Membership Examination of the Chartered Institution of Building Services.

Modules are available in applied heat transfer, building services engineering, the built environment, electrical power and utilisation of plant, construction of buildings, building services engineering management.

Attendance: Monday afternoon and evening, Tuesday evening depending on modules taken.

Examinations: external.

Part-time Courses in Quantity Surveying

BSc in Quantity Surveying
(subject to CNAA approval)

Course Leader: RC Smith

The course offers students the opportunity to obtain a degree on a part-time day release basis. The course is of five years' duration and is intended for students employed in quantity surveying and allied professions. Provision has been made within the scheme to accept students onto the course at stages other than the first year, and a measure of exemption may be granted to holders of quantity surveying qualifications (see below). It is anticipated that the professional bodies will grant full exemption to holders of the degree, who will be subject only to a test of competence to gain full professional status.

Qualifications for entry: normally students should possess one of the following:

(i) a General Certificate of Education in England, Wales and Northern Ireland with:
   (a) passes in five subjects including two subjects at Advanced level; the five

subjects to include English Language and Mathematics

(b) passes in four subjects including three subjects at Advanced Level; the four subjects to include English Language and Mathematics

(ii) The Scottish Certificate of Education with:

(a) passes in five subjects including three at the Higher Grade; the five subjects to include English Language and Mathematics

(b) passes in four subjects all at Higher Grade; the four subjects to include English Language and Mathematics

(iii) an Ordinary National Certificate or Diploma with a minimum of 60% in the assessed examination subjects and a GCE pass in English Language

(iv) a BTEC Certificate or Diploma in the field of science or technology which includes passes with merit in three Level III units in appropriate subjects acceptable to the Course Committee and a GCE pass in English Language

(v) a qualification which is deemed by the Course Committee to be equivalent to one of those described above.

Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic.

Entry to the course with exemptions: students with relevant qualifications and/or experience may be offered exemptions from part of the course and admitted at a stage deemed appropriate by the Course Committee. Examples of relevant qualifications are as follows:

Admission to the second year: Higher National Certificate in Building with a minimum of 60% in assessed examination subjects together with supplementary subjects of Law and Economics and a GCE pass in English Language.

Higher Certificate in Building Studies with 4 units with merit and 3 units at level IV or above together with Law and Economics and a GCE pass in English Language.

Admission to the third year: Part I Examination of the Royal Institution of Chartered Surveyors (Quantity Surveying Division).

Higher National Diploma in Building with a minimum of 60% in assessed examination subjects and a GCE pass in English Language.

Higher Diploma in Building Studies with merits in the following: Building Construction (A) IV and (B) IV, Measurement IV, Economics of Industry IV and Building IV together with a GCE pass in English Language.

Note: Higher Diploma from courses continuing in a group based programme of studies will be considered on the same basis as Higher National Diploma in Building.

Transfer from Other Courses: students who have been reading for a degree in Quantity Surveying or in a cognate subject at another institution may be admitted to the appropriate year of the course.

Mature Students: exceptionally, a mature student who does not satisfy the normal academic requirements may be admitted to the first year of the course, provided the student has the necessary motivation, and the Course Committee is satisfied that he/she would be able to follow the course successfully.

Selection Procedure: careful consideration will be given to each candidate's academic qualifications which together with an interview will determine suitability. Reference will also be made to a candidate's employer to help establish his/her qualities and work situation.

First Year

Tutor: RC Smith

Curriculum: foundation block, project documentation, construction techniques, construction engineering, economics, law.

Attendance: all day Friday and one week full-time.

Examinations: end of session.

Second Year

Tutor: RC Smith

Curriculum: project documentation, construction techniques, construction engineering, economics, law, information processing.

Attendance: all day Monday and one week full time.

Examinations: end of session.

Third Year

Tutor: BC Heath

Curriculum: project documentation, construction techniques, construction engineering, information processing, law, economics, resource planning, resource pricing, financial planning.

Attendance: all day Tuesday and one week full time.

Examinations: end of session.

Fourth Year

Tutor: BC Heath

Curriculum: project documentation, construction techniques, financial planning, law, resource planning, resource pricing, project cost appraisal, expenditure planning and control, project planning and design, project value appraisal.

Attendance: all day Wednesday and one week full time.

Examinations: end of session.

Fifth Year

Tutor: DA Wilde

Curriculum: project cost appraisal, construction law, expenditure planning and control, project planning and design, project value appraisal, project simulation studies.

Attendance: all day Thursday and one week full time.

Examinations: end of session.

Polytechnic Diploma in Quantity Surveying (II)

Course Leader: DA Wilde

A course for Quantity Surveyors leading to the award of The Polytechnic Diploma in Quantity Surveying. The course has been approved by The Institute of Quantity Surveyors for certain exemptions from their professional examinations. The course will also prepare students for the external examinations of the Royal Institution of Chartered Surveyors. (Quantity Surveying Division).

Students may join or leave the course at Part 1, Part 2 and Final levels.

Qualifications for entry: applicants must possess one of the following:

(a) GCE in four subjects, three being at 'A' level.
(b) GCE in five subjects, two being at 'A' level.
(c) OND in Building or Construction.
(d) a good ONC in Building or Construction.
(e) BTEC Higher National Certificate/Diploma with 4 units

with merit and 3 units at Level IV or above and GCE 'O' Level English Language.

(f) completion of appropriate Open College course, individual courses to be approved by the Royal Institution of Chartered Surveyors.

Part 1 Course

Year Tutor: DA Wilde

Curriculum: construction technology, measurement of building work, land surveying, science of services, economics, mathematics, law.

Attendance: one day and one evening per week, Wednesday or Thursday.

Duration: 18 months.

Examinations: internal with external moderation.

Part 2 Course

Year Tutor: RC Smith

Qualifications for entry: applicants must possess one of the following:

(a) Polytechnic Diploma in Quantity Surveying Part 1.
(b) RICS Part 1 examination (QS).
(c) HND Building or HNC (with supplementary subjects).
(d) BTEC Higher National Diploma with merits in specified subjects.

Curriculum: construction technology, measurement of building work, construction management, building services, economics, contract law and arbitration, estimating and tendering procedure.

Attendance: one day and one evening per week, Monday or Tuesday.

Duration: two years.

Examinations: internal with external moderation.

Part 3 Course

Year Tutor: BC Heath

Qualifications for entry: applicants must possess one of the following:

(a) Polytechnic Diploma in Quantity Surveying Part 2.
(b) IQS Second examination (or equivalent exempting qualification).
(c) RICS Part 2 examination (QS).

Curriculum: construction technology and services, measurement of building work, civil engineering construction and measurement, construction management, construction contracts and administration, development economics and law, cost control.

Attendance: one day and one evening per week, Thursday or Friday.

Duration: two years.

Examinations: internal with external moderation.

Part-Time Courses in Planning

BTEC Higher National Certificate in Planning (III)

Course Leader: P Allouis

A two-year course for planning technicians leading to the award of a BTEC Higher National Certificate and exemption from the practical test in the examinations of the Royal Town Planning Institute.

Qualifications for entry: a BTEC National Certificate or Diploma in Surveying, Cartography and Planning or a minimum of four GCE 'O' level passes including Mathematics and

English and one 'A' level subject, or any other qualification considered by the Polytechnic and the Business and Technician Education Council to be equivalent, eg completion of an appropriate Open College course.

1st Year

Tutor: P Allouis

Curriculum: plan making process, development control, transport planning, computing, graphics, planning assignments.

Attendance: Wednesday, day and evening, plus a one-week residential course.

Examinations: internal with BTEC moderation.

2nd Year

Tutor: P Allouis

Curriculum: planning theory, development control, statistics, data management, graphics, planning assignments.

Attendance: Wednesday, day and evening plus a one-week residential course in each session.

Examinations: internal, externally assessed with BTEC moderation.

Qualification: the BTEC Higher National Certificate in Planning.

Part-Time Courses in Civil Engineering

BTEC Higher National Certificate in Civil Engineering Studies (III)

Course Leader: PL Hickling

A two-year programme for civil engineering technicians, leading to the award of the BTEC Higher National Certificate in Civil Engineering Studies. This qualification entitles the holder to apply for membership of the Society of Civil Engineering Technicians at the grade of Technician Engineer. Options are available for structure/office based technicians, site based technicians and highway technicians.

Admission and credit: normal admission requirements are possession of a BTEC National Certificate or Diploma in Civil Engineering or Building Studies, including appropriate pre-requisites. Provision also exists for the admission of students with at least one appropriate 'A' level, and there are procedures for deciding on unusual cases of admission qualifications.

1st Year

Tutor: PL Hickling

Curriculum: essential units are civil engineering construction IV, contract administration IV, design of structural elements IV and soil mechanics (properties) IV, together with one optional unit related to the student's employment. If the units applied or structural mechanics III, mathematics III and surveying III have not been previously studied, they must be incorporated in the programme.

Attendance: Monday, day and evening.

Examinations: internal with BTEC moderation.

2nd Year

Tutor: PL Hickling

Curriculum: essential unit: project V, plus a choice of four optional units related to the student's employment.

Attendance: Wednesday, day and evening.

Examinations: internal with BTEC moderation.

Qualification: the BTEC Higher National Certificate in Civil Engineering Studies.

Combined Courses in Urban Studies (part-time)

Course Leader: R Barham

Year Tutors: 1st year and 2nd year J Angell; 3rd year O Keskin; 4th year R Barham.

A course complex comprising lectures and tutorials in preparation for examinations of the Royal Institution of Chartered Surveyors (RICS), Incorporated Society of Valuers and Auctioneers (ISVA) and Rating and Valuation Association (RVA). The Divisions for which the course is appropriate are:

General Practice: RICS Part I, II and Final; ISVA Part I, II and Final.

Planning and Development: RICS Part I, II and Final.

Building Surveying: RICS Part I, II and Final.

Rating and Revenues: RVA Intermediate Part I and II, Final Part I and II.

Qualifications for entry: current details of entry requirements of the professional bodies concerned may be obtained by writing to addresses shown below. The general entry requirements are as follows:

(i) RICS: GCE passes in five subjects including a minimum of two at 'A' level or an appropriate BTEC Higher National Diploma/BTEC Higher National Certificate or a BTEC Ordinary National Certificate with Merits.

(ii) ISVA: GCE passes in five subjects or an appropriate BTEC certificate or diploma.

(iii) RVA: GCE passes in five subjects including a minimum of one at 'A' level.

Curriculum: general practice (RICS), general practice (ISVA), planning and development (RICS), building and surveying (RICS), rating and revenues (RVA). More details are given on the course leaflet which may be obtained by telephoning or writing to the Course Leader or one of the year tutors.

Attendance: RVA: One day and one evening for two terms for each stage. RICS and ISVA: One day and one evening per week for five terms for the first stage and three terms for the remaining stages.

1st Year, Monday; 2nd Year, Tuesday; 3rd year, Wednesday, Final Year, Thursday.

Examinations: RICS, Part I, II and Final; ISVA, Part I, II and Final; RVA Intermediate Part I and II, and Final Part I and II. Candidates select appropriate professional examinations.

Addresses of Professional Bodies: RICS, Norden House, Basing View, Basingstoke RG 21 2HN.
RVA, 115 Ebury Street, London SW1W 9QT.
ISVA, 3 Cadogan Gate, London SW1X 0AS.

Enrolment: Enrolment to the first year of the course is in September. Thereafter, students are transferred to the next level of the course at Easter (except RVA students). Enrolments in September for Part II and Finals candidates will only be accepted in exceptional circumstances.

Evening Courses

Quantity Surveying

Course Leader: DA Wilde

Courses for Quantity Surveyors leading to the professional examinations of The Royal Institution of Chartered Surveyors.

Curriculum: certain subjects of the Part 1, Part 2 and Part 3 courses including measurement, services, economics, law, tenders and estimating, contract administration, civil engineering technology and measurement.

Attendance: one evening per week per subject.

Examinations: set externally by the professional bodies.

Test of Professional Competence

Year Tutor: BC Heath

A 20-week course designed to meet the requirements of Quantity Surveying students sitting the RICS Test of Professional Competence Examination.

Attendance: one evening per week.

Examinations: set externally by the professional bodies.

Civil Engineering Law and Contract Procedure (IIINP)

Course Leader: PL Hickling

A 30-week course on law and contract procedure to suit the needs of members of the Institution of Civil Engineers and others involved in the administration of Civil Engineering projects.

Curriculum: English legal system, law of contract, contract administration, arbitration, tort, industrial law.

Attendance: one evening per week, Thursday.

Examination: set by the Institution of Civil Engineers.

Certificate in Site Management Studies (IV)

Course Tutor: WH Davies

A 30-week course to suit the needs of persons with at least two years experience in building site management above trade foreman level. The course prepares students for entry to the Diploma in Site Management Studies. No formal qualifications are required but applicants must be over the age of 23.

Curriculum: communications, safety, planning, organisation, industrial relations and productivity techniques.

Attendance: two evenings per week, Wednesdays and Thursdays.

Examinations: internal – modular.

Qualification: Certificate in Site Management Studies (CIOB). Site Managers Safety Certificate (CITB).

Diploma in Site Management Studies (IIINP)

Course Tutor: WH Davies

A 30-week course to suit the needs of holders of the Certificate in Site Management Studies leading to eligibility for Associate Membership of the Chartered Institute of Building.

Attendance: two evenings per week, Tuesday and Wednesday.

Examinations: internal – modular.

Qualifications: Diploma in Site Management Studies (CIOB).

Site Management OPEN TECH Project

Course Tutor: WH Davies

The Construction Industry Training Board offer the above course by post. The Polytechnic is designated a regional centre to provide counselling and assistance. Applications should be made to CITB but enquiries to the Course Tutor.

Attendance: Contact by post with tutors. 2 day residential course at Bircham Newton.

Examinations: by assessment of coursework.

Qualifications: leads to award of Diploma in Site Management Studies (CIOB).

Special Courses

Royal Town Planning Institute First Professional Examination

Course Leader: Dr MA MacKeith

A 16-week tutorial course to prepare students for the first Professional Examination of The Royal Town Planning Institute.

Curriculum: the physical environment, development, society and environment.

Attendance: one half day per week.

Examination: students will normally take the RTPI First Professional Examinations on completion of the tutorial course.

Royal Town Planning Institute Final Examination

Course Leader: Dr MA MacKeith

A 16-week tutorial course to prepare graduates and others qualified to enter the RTPI Final Examinations.

Curriculum: required topics from the RTPI syllabus.

Attendance: one half day per week.

Examinations: students will expect to take each part of the RTPI Final Examinations after one full tutorial course.

Royal Institution of Chartered Surveyors – Direct Membership Examination (QS Division)

Course Tutor: RC Smith

A 40-week part distance learning/part attendance at the Polytechnic course for students who are qualified to take the written examination.

Curriculum: tendering and pricing, project cost management, law, finance, organisation and management.

Attendance: one day per month plus three day block in June.

Examinations: students will take the external Direct Membership Examination of the RICS.

School of Electrical and Electronic Engineering

Head of School: Professor NG Burrow
BSc(Eng) PhD AKC CEng MIEE FIERE

Part-Time Courses

Course Leader: T Wilson

The Engineering Council

The Charter of the above Council empowers it to establish and maintain the qualification and designatory letters Chartered Engineer (CEng), Technician Engineer (TEng) and Engineering Technician (Eng Tech). The Council is also required to establish and maintain a Register of individuals gaining these qualifications. Corporate membership of the institutions listed below qualifies for the status TEng or Eng Tech.

Institution of Electrical and Electronics Incorporated Engineers
Society of Electronic and Radio Technicians

Full details of membership requirements can be obtained from IEEIE, 2 Savoy Hill, London WC2R 0BS, or SERT, 57–61 Newington Causeway, London SE1 6BL.

BTEC Higher National Certificate in Electronic Engineering
BTEC Higher National Certificate in Electrical and Electronic Engineering
BTEC Higher National Certificate in Communication Engineering

Course Tutor: MS Peak

The programmes of study offered consist of a number of combinations each comprising 10 units and offer specialisation in electronics (analogue and digital), microprocessor systems, software engineering, communcation systems, electrical power equipment and utilisation of electrical energy.

For the award of a Higher National Certificate passes in 10 units in an appropriate combination are required and normally the programme of study will be arranged over two years with attendance on one day and one evening per week.

Further information on BTEC courses is given on page 74.

Qualifications for entry: an appropriate BTEC National Certificate or Diploma or an approved equivalent qualification eg completion of an appropriate Open College course. Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic.

1st Year

Curriculum: units include, mathematics, electrical principles, digital systems, use of computers, electronics or electrical power equipment.

Attendance: all day Wednesday and one evening; or all day Thursday and one evening.

Assessment/Examinations: based on in-course assessment, course work and examinations associated with each unit, internally set, and BTEC moderated.

2nd Year

Curriculum: units will be chosen from mathematics, electrical and electronic principles, microprocessor systems and applications, electronics, power electronics, communication systems, software engineering, electrical power equipment, utilisation of electrical energy, management studies.

Attendance: all day Wednesday and one evening; or all day Monday and one evening.

Assessment/Examinations: based on in-course assessment, course work and examinations associated with each unit, internally set, and BTEC moderated.

Qualification: BTEC Higher National Certificate in Electronic Engineering, or BTEC Higher National Certificate in Electrical and Electronic Engineering or BTEC Higher National Certificate in Communication Engineering.

BTEC Higher National Diploma in Electronics
BTEC Higher National Diploma in Electrical and Electronic Engineering

A course of programmes is available, leading to a higher diploma, with specialisation in electronics, communications and microprocessors, or electrical engineering, electronics and microprocessors.

For students entering with a Higher National Certificate in Electronics or a Higher National Certificate in Electrical Engineering a further 10 units are required and normally this programme of study will be arranged over 2 years with attendance on one day and one evening per week.

For students entering with other qualifications then an appropriate programme of study may be arranged.

1st Year

Curriculum: units will be chosen from microprocessor based systems, communication systems, colour television principles, radio systems, analogue and digital systems, use of computers, transmission and distribution of electrical energy.

Attendance: all day Monday and one evening.

Assessment/Examinations: based on in-course assessment, course work and examinations, internally set and BTEC moderated.

2nd Year

Curriculum: units will be chosen from, microprocessor based systems, testing measurement and fault diagnosis, analogue and digital systems, colour television principles, project.

Attendance: probably all day Tuesday and one evening.

Assessment/Examination: based on in-course assessment, course work and examinations, internally set and BTEC moderated.

Qualification: BTEC Higher National Diploma in Electronics or in Electrical and Electronic Engineering.

'Microprocessors and their Applications'

A range of courses on these topics will be offered during the 1985/86 session. Attendance is on one day or one evening per week. A leaflet giving full details is available from the School Office (ext 2201).

School of Mechanical and Production Engineering

Head of School: J Tirrell BSc CEng MIMechE

Part-Time Courses

BTEC Higher National Certificate Programmes in Mechanical Engineering, Mechanical and Production Engineering, and Computer Aided Engineering

Course Coordinator: G Podmore

The integrated course scheme incorporates programmes in mechanical engineering, mechanical and production engineering, and computer aided engineering. It should be appreciated that student numbers may be such as to limit the range of programmes offered each year. All students will be counselled prior to entry to the course and a decision on the most appropriate programme to be followed will be taken in view of the student's qualification and career interest. Continuous internal assessment will occur throughout each unit of study and on successful completion of the unit, students will be awarded a pass with distinction, a pass with merit or a pass. On passing the appropriate number of units, students will be eligible for the award of a BTEC Higher National Certificate. Further information on BTEC courses is given on page 74.

Qualifications for entry: (a) a BTEC National Certificate or Diploma in Engineering, or (b) an Ordinary National Certificate or Diploma in Engineering, or (c) GCE passes in five subjects, two of which must be mathematics and physics (or engineering science), one of these two having been passed at Advanced level and the other having been studied to the same level, or (d) a Mechanical Engineering Technicians' Certificate Parts I and II (CGLI Course No 293), or (e) other qualifications deemed equivalent. Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic.

1st and 2nd Years

Tutors: F McIntyre, Dr EH Smith

Curriculum: students will select appropriate units in accordance with their agreed programme of studies.

All programmes contain appropriate units of mathematics, science, materials, computing, and management and communication studies. Other units will vary with the requirements of the programme, and the subject areas of the units which may be selected include: thermomechanics of fluids, engineering design, manufacturing technology, aircraft systems, aircraft manufacturing technology, electrical science, instrumentation and control, design for manufacture, computer aided engineering, computer aided manufacture, computer aided design, robotics, quality assurance, nc technology, and project work.

Attendance: one day and at least one evening per week.

Assessment: a combination of continuous assessment methods and formal examinations to suit each unit.

Qualification: BTEC Higher National Certificate in Mechanical Engineering or Mechanical and Production Engineering or Computer Aided Engineering.

BTEC Higher National Diploma in Mechanical Engineering, Mechanical and Production Engineering

Course Leader: G Podmore

This unique scheme provides an opportunity for students who have successfully completed a BTEC Higher National Certificate in mechanical or mechanical and production engineering to advance their technician education by part-time study.

Lancashire colleges, including Accrington, Blackburn, Blackpool, Burnley and Lancaster and Morecambe are collaborating with the Polytechnic to offer programmes of study leading to the award of a BTEC Higher National Diploma in Mechanical and Production Engineering. The course scheme will be administered by the Polytechnic with advice from associated colleges. Students wishing to enrol on a Higher National Diploma programme of study should direct their enquiries to the Course Leader who will counsel students on appropriate sets of units for study and appropriate colleges at which those units may be undertaken.

Attendance: one full day or part of a day also evening according to counselled advice.

Qualification for entry: an appropriate BTEC Higher National Certificate or an approved equivalent. Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic.

BTEC Higher National Certificate in Engineering Design

Tutor: G Podmore

British industry has indicated to the Business and Technician Education Council its concern with the future supply of engineers and technicians to work in engineering design.

In response to this concern the Polytechnic is offering a two year course in engineering design, which has been structured as a group course, rather than the normal unit based BTEC course.

Curriculum: the curriculum is built around the teaching of designing which in turn is project based. A predominance of time in each year's study is placed on the core projects. Engineering design studies introduce students to matters directly related to on-going projects, while supporting studies provide a broad background in mathematics, science, computing and general engineering.

Attendance: one day and at least one evening per week.

Entry qualifications: an appropriate BTEC National Certificate or an approved equivalent. Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic.

Special Courses

Over the years the School has provided courses specifically designed to meet the needs of local industry. Recent additions to equipment within the School permits enhancement of the range of courses which can be offered.

The School would welcome discussions with representatives from industry concerning their requirements in any of the following areas:

Computer aided design
Computer aided programming
Programming nc machinery
Robotics
Fluid power engineering
Modern materials
Computer aided manufacture
Interactive computer graphics

Application of microprocessor to control
Heat transfer
Design of fluid power control systems
Tribology

The level of course (management appreciation, 'hands-on' training workshops etc) and mode of attendance (part-time day/evening, one day seminar, block-release, 'on-site', etc) can be varied to meet the customers requirements.

In the first instance contact should be made through Mr J Tirrell, School of Mechanical and Production Engineering. Ext 2117.

Technological Collaboration

The Schools within the Faculties of Science and Technology welcome collaboration with industry. A summary of some of the facilities available are described briefly.

Biology

There are specialist laboratories and equipment for work in biochemistry, physiology, microbiology and ecology. Specialist equipment includes refrigerated high speed centrifuge, autoanalyser, liquid scintillation counter, electrophonetic apparatus, electrophysiology recording assemblies, sterilisation and incubation facilities, warm and cold rooms, fluorescent microscope equipped for photomicrography, ultramicrotome, oxygen and carbon dioxide measurement apparatus, integrating respirometer, and orbital incubators. There is also an Animal House and a small Greenhouse.

Chemistry

There is a wide range of equipment for qualitative, quantitative and structural analysis including infrared spectrometers, nmr (proton, carbon-13, Fourier transform), gas chromatographs, (flame ionisation, hot-wire and electron capture detectors) liquid chromatographs, atomic absorption spectrometers, differential scanning calorimeters, apparatus for thermogravimetric analysis, a range of polargraphs, a range of radiochemical equipment, a range of electrochemical equipment.

Physics

There is a wide range of teaching and research equipment including a scanning and a transmission electron microscope, general electronic equipment and spectrographs, plate measuring devices, photographic equipment, cryostats, high vacuum equipment, sound pressure level meters and noise analysis equipment, ultrasonic and non-destructive testing equipment and multichannel pulse height analysis facilities for gamma ray spectroscopy. Subject to availability the equipment may be used by qualified technologists. Training courses on special techniques will be given as required.

The magnetism research group has an interest in fine particle magnetic systems, particularly magnetic recording media and magnetic fluids. There is a wide range of techniques and equipment available within the group to investigate the magnetic behaviour of materials including magnetisation, initial susceptibility, AC and time dependent effects. The group has wide experience in the development of magnetic instrumentation.

The Polytechnic facilities for astronomy include a meteorogical station and three observatories. Facilities available to students include a 20cm refractor, an 8cm reversible transit instrument, a 39cm astrograph and multi-aperture telescope. There is a wide range of supporting equipment.

Construction and Surveying

Testing work on construction processes and materials is carried out and staff are keen to join with professional and construction firms in developing new techniques and improving old ones, especially in the area of construction management, plant operation, quantity surveying, architecture, property development and town planning.

Other services which are available include concrete and soils testing, land surveying, building services engineering and load testing on structural materials.

The School has a growing stock of microcomputers and is introducing computer applications into courses.

This work provides a source of advice and help to firms considering the acquisition of computers for business use.

Electrical and Electronic Engineering

There are well equipped laboratories dealing with the subjects of microprocessors and their application, measurement, control electronics, communications, computer-aided design, computer-aided testing, machines and power. These facilities are available to firms in the region by arrangement.

Mathematics, Statistics and Computing

There are laboratories with specialist equipment for use in statistics, numerical analysis and real time computing. In addition, a wide range of computing facilities exist within the Polytechnic. Short courses in mathematical methods, statistics, industrial computing and commercial requirements, and consultancy work in all fields of mathematical science and computing is encouraged.

Mechanical and Production Engineering

The laboratories house equipment suitable for test and development work in connection with materials testing, stress analysis, fluid mechanics, applied thermodynamics, control and vibration, bearing selection and design, metrology and machine tool technology. These facilities are offered to industrial organisations and have in the past contributed usefully to the solution of their technical problems. The Polytechnic is a member of the Department of Industry's 'Interlab' scheme.

Facilities exist for computer-aided design, computer-aided manufacture and robotics studies. The School possesses a wide range of commercial software and numerically controlled machine tools.

Facilities also exist to assist with the application of microprocessors to the control of production equipment.

There is an active interest in applied research within the School and many staff are involved in projects for local industry.

Business and Technician Education Council and its Awards

Business and Technician Education Council (BTEC), Central House, Upper Woburn Place, London WC1H 0HH. Tel: 01 388 3288.

The Business Education Council (BEC) and the Technician Education Council (TEC) merged on 1 October 1983 to form the BTEC (Business and Technician Education Council). One of the first major changes resulting from the merger will be the reintroduction of the word 'National' into the titles of technician awards made after 1 January 1984.

The main BTEC awards are:

BTEC General Certificate/Diploma in Business Studies; BTEC National Certificate/Diploma; BTEC Higher National Certificate/Diploma; BTEC Post Experience Certificate/Diploma.

The Polytechnic offers Higher National Certificate and Higher National Diploma courses leading to BTEC awards.

Entry requirements for Higher BTEC courses: minimum entry requirements for Higher National Certificate/ Diploma courses are:

(i) the relevant Certificate or Diploma, with supplementary studies if necessary, or
(ii) studies to GCE Advanced level and passes in at least one relevant subject at that level, or
(iii) an attainment equivalent to the above.

General Structure of Courses and Assessment: Polytechnic Higher National Certificate and Dipoloma courses are structured on a Unit basis.

Higher National Certificate and Diploma programmes may contain Level II, III, IV and V course units. The concept of the Level of a unit is vased on prerequisites and depends on recognition of progression in a programme. An appropriate Level III course unit would normally need to be completed before a Level IV unit is undertaken.

Each course unit will be independent and contain its own course assessment and examinations. On the successful completion of each unit, students will be given a grading which will be Pass with Distinction, Pass with Merit, or Pass. Students who achieve the appropriate number of passes will be awarded either a Higher National Certificate or a Higher National Diploma.

Options within courses: Since each course contains a number of units which offer opportunities for optional studies a Higher National Certificate or Higher National Diploma course might be better described as a course complex embracing a number of programmes of study. Among the programmes of study within Higher National Certificate course complexes will be programmes appropriate for students with academic facility and interests and who would have opted for HNC courses prior to TEC (BTEC) rationalisation. There will also be programmes appropriate for the student with practical facility and interests who would have opted for CGLI courses. The unit structure enables programmes to be devised which could be tailor-made to specific industrial needs. It is, therefore, in the student's interest to consult his employer before seeking enrolment.

Higher National Certificates

The Higher National Certificate Programme normally comprises a minimum of ten units and consists of approximately 600 hours of part-time study in the Polytechnic for the average student.

The combination of 60 hour units reflects the numbers and levels indicated below.

Minimum number of units in programme	10
Minimum number of units at levels IV and V	6
Number of Level V units normally expected	2
Maximum number of free standing units and units at levels II and III	4

Higher National Diplomas

Higher National Diploma Programmes vary according to the aims of the course. Programmes providing a suitable education for senior technicians normally comprise 1200 – 1500 hours of study. Programmes designed for students aiming to transfer to degree or professional courses may involve more than 1500 hours of study in the Polytechnic. The mode of study may be full-time/sandwich or part-time. The latter mode of study offers an opportunity for the student with a Higher National Certificate to continue part-time studies for a Higher National Diploma.

The composition of a Higher National Diploma programme comprising 20 units each of 60 hours (1500 hours total) would be:

Minimum number of units in a programme	20
Minimum number of units at levels IV and V	12
Number of level V units normally expected	4
Maximum number of free standing units and units at levels I and II	8

General and Communication Studies

All programmes leading to higher awards contain material related to supervisory or communication studies or studies complementary to the main theme of the programme.

Development

The latest information about particular BTEC courses in the Polytechnic may be obtained from the appropriate Head of School or Course Leader.

FACULTY OF SOCIAL STUDIES & HUMANITIES

Dean of Faculty: HE Probyn BA MPhil

Social Studies

Courses in social sciences are conducted and include degree, diploma and certificate courses in applied social studies, social work and community health (district nursing and health visiting). At the present time the bulk of the work is carried out in Livesey House, a four-storey block adjacent to the main campus, in which are to be found general and specially equipped lecture and tutorial rooms, study rooms, a common-room with coffee bar, and academic and secretarial staffrooms.

Many of the courses offered at present lead to professional status, and consequently students spend an appreciable amount of time in practical work placements in social work agencies, schools, social service departments, etc. Strong links have been forged with education and social service authorities and training officers in industry and commerce, who together seek places on our courses for their staff and provide career opportunities for many of our students. Staff carry out research projects which are closely linked with the teaching undertaken by them which is of benefit both to students on our courses and local industrial, commercial and social enterprises.

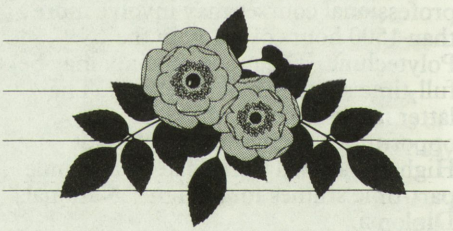
Language and Humanities

The School offers a wide range of courses for full-time students on diploma courses, and on a part-time basis with special relevance to the needs of teachers and of industry.

The School also offers the courses of the Institute of Linguists up to final diploma level.

Through the combined studies programme the School provides part-time degree level courses in English, history, linguistics, and geography. Also, from time-to-time short courses are offered.

The School is planning a postgraduate Diploma in Research in the Humanities which it is hoped, should be available from September 1985.



School of Social Studies

Head of School: S Henig MA

Part-Time Courses

Health Visitor's Certificate (III)

Course Leader: Mrs EM Pajak

Course Tutors: Mrs EM Pajak; Ms K Fowler; Ms M Mott; Ms J Chessell

A two-year part-time course involving parts of three days per week of combined theoretical and practical training leading to the award of a Certificate in Health Visiting by the Council for Education and Training of Health Visitors.

Qualifications for entry: candidates must be State Registered Nurses with approved midwifery experience and possess in addition (a) five GCE subjects at 'O' level, or (b) other approved educational qualifications, and/or (c) satisfy the Council as to their educational fitness for the course by means of an entrance test.

Examinations: divided between the two years, internal, externally assessed, and written environmental and health visiting studies. Periodic assessment is maintained throughout the course.

Qualification: the Health Visitor's Certificate.

Diploma in Professional Studies in Nursing

Course Leader: Mrs EM Pajak

Course Tutors: Mrs S Challender; R Kelly

Duration of the course: a two-year part-time course, one day/week leading to the award of a Diploma in Professional Studies in Nursing by the CNAA.

The course aims to increase the nurse's capacities to fulfil her role and make a more effective contribution to the work of the nursing profession. It will form a link between basic nurse education, first level specialisation and higher levels of study in nursing. Students may wish to proceed to Nurse Tutor courses or to degree and higher degree studies. The Diploma will be an essential stage in this process of individual and professional development.

Areas of study:

Year I

1 Nursing
2 Social context of welfare
3 Psychology
4 Biology

Year II

1 Health
2 Acute care settings
3 Long-term dependence
4 Loss and adjustment

Qualifications for entry: the normal entry requirements for the Diploma course are:

(a) Registration on a part of the Register maintained by the General Nursing Councils or certification by the Central Midwives Board or possession of qualifications acceptable to the General Nursing Councils or Central Midwives Board for the purpose of registration or certification, and
(b) normally at least two years of relevant post-registration practical experience, and
(c1) successful completion of a post-registration course of study acceptable to the Polytechnic, or

(c2) two passes in GCE Advanced level, or their equivalent, or
(c3) exceptionally, considerable experience at a suitable level of responsibility relevant to the Diploma course.

A student may be admitted to the Diploma course without requirements (c1), (c2) and (c3), who satisfies the Polytechnic that she or he has the ability to successfully undertake the Diploma course.

Selection procedure: no applicant for the course will normally be accepted without an interview with at least two members of the course team. One member of the interviewing panel will be a member of the Division of Community Health Studies.

Examination/Assessment: internal by examination and course work assessment, externally moderated.

Qualification: Diploma in Professional Studies in Nursing (CNAA).

Block Release Course

Practical Work Teacher Course (District Nursing)

Course Leader: Mrs S Challender

Course Tutor: Mrs B Charlton

A Block release course for qualified district nurses (SRN/RGN) who wish to teach the practice of District Nursing in a clinical setting.

Entrance qualifications: SRN, National District Nursing Certificate plus 2 years recent full time practice as a District Nursing Sister/Charge Nurse undertaking an appropriate range of duties.

This should include: attachment to a Primary Health Care Team, controlling a caseload and with management responsibility for a nursing team.

Selection procedure:
(a) completion of Polytechnic application form and professional insert.
(b) professional reference from a Nursing Officer (District Nursing).
(c) self appraisal by the applicant.
(d) selection test and interview.

Course duration: 6 weeks theoretical study (in blocks) followed by a period of supervised teaching practice.

Examination: assessed course work undertaken in the theoretical part of the course plus assessment of teaching practice.

Qualification: Practical Work Teacher Certificate.

Certificate in Social Service (CSS)

Course Leader: BL Gray

Special Options:
(i) Management
(ii) Management helping strategies
(iii) Working with groups

These options are taught over the Autumn and Spring terms. Structural and syllabus content of each option is available from Brian Gray, Room 119, Livesey House, Lancashire Polytechnic, Heatley Street, Preston.

Qualification for entry: for most students the Special Option represents the third and final phase of an in-service, professional training leading to the Certificate in Social Service awarded by CCETSW. There are sometimes a few places available for students wishing only to take a single option. Such a candidate must be in the employment of

a voluntary or statutory social service agency who will release and support him during the course. The chosen option must be directly applicable to his present work.

Selection procedure:
(a) Lancashire CSS Scheme application form obtainable from Mr A Heede, CSS Correspondent, Room 705a Duchy House, 96 Lancaster Road, Preston. (Tel. 264297).
(b) Closing date for return of completed application forms – 31 March.
(c) Lancashire CSS Scheme interview procedure.

Assessment: ongoing project and case work must reach the standard required by the Scheme Assessment Board to qualify for a letter endorsing 'Pass' in the Special Option.

School of Language and Humanities

Head of School: D Lamont MA PhD

Part-Time Courses

Institute of Linguists Intermediate and Final Diplomas (Inter: IIINP, Final II)

Course leader: AG Weymouth

These are advanced courses in modern languages and offer students a challenging and stimulating programme leading to the examinations of the Institute of Linguists. The common feature of these courses is the emphasis which is placed on a high level of fluency in the target language together with a sound knowledge of the social, political and economic structure of the country itself. The Final Diploma has graduate status in teaching as well as in other professions. Languages offered are French, German and Spanish.

Qualifications for entry: a good standard in the language which approximates 'A' level (Inter) or evidence of two or more years post 'A' level study (Final). Final acceptance on the course does not necessarily entail taking the examination at the end of the year.

Attendance: Intermediate, French – Tuesday 6 – 8.00 pm. Final, French – Thursday 2 – 7 pm; German – Monday 6 – 8.00 pm; Spanish – Thursday 6 – 8.00 pm.

Lancashire County Council will normally support applications from teachers wishing to attend these courses and, subject to headmasters' approval, will consider half-day release.

Examinations: These are held twice yearly, in December and June. Non-

graduate language teachers may take the Final paper after one year.

Special Courses in Foreign Languages for Industry

Throughout the session, the School will run intensive short courses in languages to suit the requirements of particular industries. The courses are at beginner or advanced levels in French, German and Spanish. They can be held either in the evening or during the day and normally consist of 34 two-hour classes.

These courses will be arranged according to demand and firms or inividuals are invited to write to Mr David Swift.

Foundation Course in Music

Course Leader: Miss J Burke

A one-year part-time day/evening course intended primarily for students preparing for entry to one of two more advanced part-time music courses available at the Polytechnic. The course provides the opportunity for students to develop practical skills, to increase competence in written musical techniques and to relate music encountered in performance to the wider repertoire.

Most of the classes will take place on Tuesday but detailed arrangements for the timetable will be made later.

Entry requirements: applicants should have reached an appropriate standard of education and be able to demonstrate strong potential musicianship. They should be able to meet one of the following requirements:

(a) one GCE 'A' level pass.
(b) passes in a practical subject and in theory of music in the examinations of one of the principal music examining boards. One of these passes should be at Grade 8, but a pass in Grade 7 will usually be accepted.
(c) qualifications which may be deemed equivalent to the above.
(d) exceptionally, students may be admitted at the discretion of the Polytechnic without the above qualifications where a suitable level of musical ability and serious commitment to music can be shown.

Outline of syllabus:

(i) Practical study: the subjects available will include those listed for the Diploma course. Students will be organised in groups according to instrument and classes will be arranged with specialist tutors.
(ii) (a) musical techniques: basic harmony and melody.
(b) aural training.
(c) history of music.

This class will be available during one afternoon or one evening.

Diploma in Music (IIINP)

Course Leader: Miss J Burke

A part-time day or evening course leading to examination for external Diplomas of the Royal Academy of Music, Royal College of Music, Trinity College, London, and Guildhall School of Music.

Entry requirements: Teachers' Diploma: candidates are required to have attained appropriate standards of musicianship and general education. One of the following is normally required:

(a) a Polytechnic Foundation Course in Music.
(b) an 'A' level in Music.
(c) Grade 8 pass in a practical subject awarded by one of the principal music examining boards. In addition a pass in Grade 8 Theory of Music, or a suitable Grade examination in Harmony would be desirable.

(d) professional or academic qualifications of which music formed a major part.
(e) qualifications which are deemed equivalent to (a), (b), or (c).

Applicants who do not meet the above requirements may be admitted at the discretion of the Polytechnic, eg musicians with professional experience, either as performers or teachers.

Performers' Diploma: normally, applicants would be expected to have passed a Teacher's Diploma already and/or to show evidence of the ability to undertake more advanced study.

Organisation of the course:

(i) (a) Practical Studies I – Teachers' Diploma.
(b) Theoretical Studies I – Paperwork for practical diplomas.
(ii) Practical Studies II – Performers' Diploma.
(iii) Theoretical Studies II – Academic Music Diploma.
(iv) General Musicianship for Teachers.

The usual diploma course consists of both Practical Studies I and Theoretical Studies I, taken over a period of 2 years. The other courses are more specialised. They are available to new students of suitable ability or as further study for successful diploma students.

General Musicianship for teachers – serving teachers who wish to enter for this diploma LTCL (GMT) should ask for further information.

Theoretical Subjects I
(Wednesdays 6 – 9 pm or Thursday 10 am – 1 pm.)

1 Musical Techniques:
(a) 4-part harmony in various styles,
(b) 2-part writing.
2 Knowledge of the repertoire:
3 Form and analysis.
4 Principles of teaching.

(Optional classes are available for students involved in Early Music).

Theoretical Subjects II

In this academic music diploma course classes are timetabled with BMus (2 sessions per week).

The examination normally prepared for is AMusICL and the standard is considerably higher than that of the paperwork for practical diplomas.

The main areas of study are harmony and counterpoint, pedagogy and history of music (orchestration is optional).

Practical Studies:
(a) Tutorials.
(b) Group study – a high standard of individual performance is expected. Group study includes, where appropriate, playing in ensemble or taking part in 'master classes'.

The subjects available are piano (harpischord and piano accompaniment will normally be treated as performers' diplomas), organ, singing, guitar, orchestral instruments, brass, and 'early music' instruments.

(c) Aural – this may be timetabled with either practical studies or paperwork.

Bachelor of Music (London) II

Course Leader: Miss J Burke

A part-time evening course leading to the examination for the external degree of Bachelor of Music of London University.

There are three stages on the course, corresponding with the three years of the full-time degree:

(i) Preliminary
(ii) Finals – Part I
(iii) Finals – Part 2

Students may take one or two years over each stage, depending on eligibility and the needs of the individual. Certain qualifications (some degrees, graduate

diplomas and fellowships) may exempt students from the Preliminary Examination altogether.

Students in this course must also register as students of London University in order to sit the examinations for the degree. This registration must be completed early in the year in which the first examination is to be taken. Before registration, a certificate of eligibility must be obtained and for this it is necessary to fulfil the entrance requirements.

Entrance requirements: these are similar to standard requirements for entry to a degree course, with the addition of a GCE pass (or equivalent) in one of a number of approved foreign languages.

Certain diplomas and academic or professional qualifications entitle applicants to exemption from the requirements in whole or in part. Full information can be found in the current regulations and syllabus for BMus obtainable from London University.

Intending applicants are welcome to discuss any problems regarding entry qualifications with Polytechnic music course tutors.

The course takes place on two evenings (6 – 9 pm), or alternatively, on one evening and one afternoon per week.

LEA Grants – serving teachers may be eligible for financial support.

Bachelor Music (Durham) (II)

Course Leader: Miss J Burke

Students may if they wish enrol for the Durham external degree in preference to the London BMus. There are more written examinations for the Durham degree, and more emphasis on musical technology (harmony, counterpoint, etc).

Entrance requirements: 5 GCE subjects of which 2 must be at 'A' level, or 4 GCE subjects of which 3 must be at 'A' level.

Outline of the Syllabus for the London External BMus

Stage I: Preliminary (one or two years of study)

Entrance requirements (as before).

On this course, students are prepared for the four examination papers by lectures and seminars in the four subjects:

History of music.
Aural
Musical techniques (harmony and counterpoint)
Analysis

Stage 2: Finals – Part I (one or two years of study)

Entrance requirements: a pass in the Preliminary examination, or certain Fellowship and Music qualifications which exempt students from the Preliminary.

There are no written examinations at this stage; the work submitted is based on individual study and research.

(i) an essay (approx. 6000 words) on a topic chosen by the student and approved by the BMus Board of Studies.
(ii) a portfolio consisting of 4 exercises in musical techniques.

Stage 3: Finals – Part 2 (one or two years of study)

Entrance requirements: Part I of BMus Finals

The final examination consists of 2 papers, 2 assignments and viva voce.

(i) exam paper on a chosen period of music history.
(ii) exam paper on a chosen period of Twentieth Century music.
(iii) a portfolio including 6 exercises in Analysis.
(iv) a special subject, either
  (a) composition, or
  (b) performance, or
  (c) essay (ca 6000 words).
(v) Viva voce – Practical Tests.

COMBINED STUDIES PROGRAMME

Dean of Combined Studies Programme:
TC Curtis PhD FRHistS

Part-Time Courses

BSc Honours and BSc, BA Honours and BA in Combined Studies
Diploma of Higher Education in Combined Studies

Senior Tutor: PM Edwards
Tutor: J Darcy

This new part-time degree programme consists of a wide range of subjects in humanities, sciences and social sciences brought together in a unified scheme.

The degree has been structured to provide students with maximum opportunity to pursue their own academic interests and to study at their own pace. Depending on the subjects studied, students may take classes in the evening (6.00 pm – 9.00 pm) or during the day, or may opt for a mixture of both day and evening sessions.

All subjects are available in the day-time mode since part-time students simply join the full-time classes. The evening-only route, however, is more limited. Courses leading to a BSc, for example, are not yet available in the evening; this also applies to some courses leading to a BA.

Course structure: at Level One students read three subjects of equal weight chosen from the following:

†Accounting
*American Studies
Astronomy
Biology (Level One only)
*Biochemistry
Chemistry
Computing
Economics
Education Studies
†Educational Computing
English
French
Geography
†History and Theory of Art and Design
History
†Law
Linguistics
Mathematics
†Microelectronics
Organisation Studies
Physics
*Physiology
Politics
Psychology

*Available only at Levels 2 and 3
†Subject to approval.

Some subjects have a distinct scientific basis (eg astronomy, chemistry, physics), others are literary or language orientated (eg economics, politics, history). Further subject details are available on request. The courses are organised in such a way that students may specialise, if they wish, in any one of these areas, obtaining a BA or a BSc degree.

It is also possible to consider combinations of subjects which offer a more diverse field of study, such as, for example, mathematics with English, geography with biology or education studies with chemistry.

At levels Two and Three students normally continue with two of the subjects studied at Level One. In some circumstances, however, they can take up a new minor subject from those listed above.

After Level One, BSc students and BA evening only students proceed on a joint-honours basis (ie two subjects of

equal weight). For the BA route, day and day/evening students may opt for a major-minor programme in which they devote approximately 75% of their study to one of their two subjects.

At Levels One and Two of the degree, all students are required to submit contextual studies course work, designed to add breadth and perspective to their chosen subject combinations.

Additionally, BSc students follow a course in computing.

After successful completion of all three Levels of the Degree students obtain the award of Bachelor of Arts or Bachelor of Science (both with Honours).

Those students who choose to end their studies at Level Two are normally awarded the Diploma of Higher Education.

Course duration: this is dependent upon the number of courses taken in each academic year. For an evening student, a programme spread over, say, six years would generally involve attending classes on two evenings a week. Successful previous study beyond 'A' level normally entitles students to exemptions from parts of the degree programme. For example, direct entry into Level Two may be granted in specific subjects where previous study is compatible in content and status with Level One course.

Career enhancement: a degree brings salary enhancement and improved promotion prospects in a number of professions.

Many employers, sensibly, are more concerned with the class of an applicant's degree, and with his or her proven skills of intelligent thought and self-expression, than with the particular subjects studied. A narrowly 'vocational' degree is not necessarily a surer path to employment than a wide-ranging degree which develops intellectual confidence and the power to communicate.

A good Honours Degree is a springboard to a variety of postgraduate professional qualifications: in teaching, social work, librarianship and journalism, for example. These are generally one-year full-time courses for which grants are available.

Studying closer to home: credit transfer to and from other institutions can be negotiated individually; Open University students, for example, have frequently transferred to full-and part-time courses in the past.

Moreover, formally approved arrangements exist with several Colleges of Higher Education (including Edge Hill, Crewe and Alsager, City of Liverpool, Nelson and Colne) to facilitate course transfers and credit exemptions.

One new development is the provision of Level One courses at other regional centres. These are already being taught at Nelson and Colne College and should be available at other local colleges in the near future. Further details are available on request.

Entry qualifications: some subjects require specific entry requirements: mathematics, for example, to at least 'O' level is needed for most of the sciences. Normally, however, applicants must meet one of the following general entry requirements:

(i) GCE passes in at least four subjects, including three at Advanced level.
(ii) GCE passes in at least five subjects, including two at Advanced level,
(iii) a good ONC or BTEC equivalent.
(iv) Open College qualifications: four Stage A units and two Stage B units.

In certain cases, however, other qualifications (eg OU credits or appropriate professional experience) may be deemed acceptable. Open

University students who have been awarded two or more credits in relevant areas may be exempt from the first level of the Degree, as might students who have successfully completed Year 1 courses at another institution.

The Polytechnic will also view sympathetically applications from mature students (ie over 21 years) without formal entrance requirements provided that they can supply evidence of their ability to sustain study at honours degree level. Such students may find it beneficial to first enrol on the Polytechnic part-time Pre-Degree Course which is taught in the two terms preceding the start of the Degree Course in September.

Application procedure: standard part-time application forms are obtainable from the Educational Liaison Office and should be returned to the Academic Registrar. Applicants are normally invited for interview. Potential applicants, however, are encouraged to arrange informal and advisory interviews with the Senior Tutor.

Special Course

Pre-Degree Studies

Course Co-ordinator: MG Abramson

Course outline: the Pre-Degree Course is a two-term, part-time course designed for mature students to phase their entry into higher education. It is taught by a series of informal two-hour seminars designed to enhance students' confidence and assess their academic potential.

In the first term students concentrate on study skills and library techniques and are also introduced to a variety of academic disciplines. In the second term students select five subjects for further study.

At present the following subjects are available:

Astronomy
Economics
Education Studies
English
French
Geography
History
Law
Linguistics
Mathematics and Statistics
Politics
Psychology
Sociology

It is anticipated that other disciplines may be included as Pre-Degree Studies expands to meet demand.

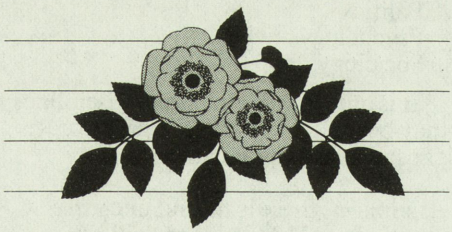
Assessment: there is no end of course examination, but students will be required to prepare for seminars and compose four formal written assignments. one in term one and three in term two. These assignments are not intended as formal academic hurdles but as a way of enabling students to make a realistic assessment of their own capacity for degree-level study.

What can the course lead to? The course is non-qualificatory and its

completion does not provide a formal entry qualification into higher education nor an alternative to specific requirements. The course is not designed to dovetail specifically into the Polytechnic's own degrees and students will be introduced to other study alternatives (eg Open College, Open University). However, those students who satisfactorily display their potential to sustain degree-level study may be seriously considered for places on several of the Polytechnic's full-time or part-time degrees, should they wish to apply. For those students wishing to apply to other institutions, a detailed assessment will be prepared and made available to admission tutors.

Course duration: 44 hours over the Spring and Summer terms, 7.00 – 9.00 pm, one evening a week at the Preston Campus.

Application procedure: further information, course pamphlets and part-time application forms are available from the Combined Studies Office (Preston 22141, ext 2488) or from the Educational Liaison Office.



The Library and Learning Resources Service

Librarian: JR Edgar MA FLA

It is a feature of higher education that students are required to develop habits of independent learning; greater emphasis is placed on the student working on his/her own, reading the literature on his/her subject with an alert and critical mind. The Polytechnic has therefore developed an up-to-date Library and Learning Resources Service (LLRS) which aims to provide a dynamic user-oriented service rather than one which merely acts as a collector and organiser of materials.

Nowadays information and ideas of direct relevance and interest to the students and staff of the Polytechnic are published not only in the traditional way (books and journals), but also in a diverse range of other forms, including audio and video tapes, slides, records, films, electronic sources, etc. These and other media are being added to stock in response to the educational and research needs of the users of the LLRS.

The Library is located in St Peter's Square, alongside the Polytechnic Arts Centre and the Students' Union. Science, technology, the social sciences, economics, business studies, management, law, and art and humanities are well represented in the stock. The valuable collection of the Preston Incorporated Law Society has been deposited with the Polytechnic and is housed in the Library.

The LLRS building, opened during the 1978/9 session, has three floors, seats for 668 readers and a capacity for over ¼ million volumes. Specialised accommodation includes tutorial and audio-visual facilities and a large number of study carrels have been provided. The bookstock of the LLRS, amounting to 228,000 volumes, 1,600 current periodical titles and 100,000 audio-visual items is supplemented by co-operative arrangements with other local libraries, and by access to the national inter-library loan network via the North-West Regional Library Bureau and the British Library Lending Division at Boston Spa, Yorkshire.

The LLRS is concerned to meet the needs of part-time students. All new students are offered an introductory visit to the library. Seminars and tutorials on the use of libary material are provided for many courses by a team of Subject Librarians. An extensive range of printed guides to LLRS stock and services are available to assist students to make the most effective use of published information and library resources. Other services include study and reference facilities, the loan of books and other materials, self-service photocopying, and a 'restricted loan collection' of books in heavy demand. The particular problems of part-time student access to such key texts has been recognised with the establishment of a special collection for the exclusive use of part-time students.

There is also an extensive network of public libraries in the North-West that can be used by part-time students. Preston, for instance, is particularly well provided with the Preston District Central Library (formerly the Harris Library) holding large fiction and non-fiction lending collections, a reference library and a record lending library.

Further information about the use of the Polytechnic Libraries, and other libraries in the area, is available from the Enquiries Desks.

Computer Centre

Head of Computer Centre: Alan Roff BA MA FSS

General purpose computing facilities within the Polytechnic are available to all sections of the establishment for teaching purposes, for research and for administration. The Centre is responsible for administering these facilities and seeks to provide an effective and interesting environment in which computing facilities may be used as an integral part of the education process.

Computers have a profound effect on the workings of modern industry, government, commerce and the professions. Traditional activities in these areas have been radically altered by the introduction of automated techniques and most people will become involved in some way with these machines during their working lives. Consequently computing is taught, where relevant, on all courses and students are encouraged to apply computing methods to investigate situations in their main subjects.

All students are welcome to make use of the facilities of the Computer Centre and of the advisory facilities available there. The Centre has 5 terminal teaching rooms, a graphics room, a microcomputer room, a user work area, data preparation area, offices and reception.

The designation of Lancashire Polytechnic as a major centre for information technology has led the Polytechnic to accelerate existing plans to make further developments in the area of computing. These plans include additional staffing and a substantial enhancement of the equipment.

The staffing of the Centre is organised in two sections – operations and developments. Operations is responsible to the Computer Manager for data preparation, terminal supervision, computer reception and room bookings, as well as operating the computer systems and communications. The Developments section is responsible for designing, implementing and maintaining all the systems and applications software. It also advises and assists users on available software and on preparing programs and data to run on the system.

Groups of terminals are available in all faculties throughout the Polytechnic in addition to those in the Computer Centre. The existing computer systems which provide a powerful computing facility able to support over 300 terminals cioncurrently are as follows:

(a)	PRIME 9955 Computer	10 megabytes memory, 840 megabytes on line disk storage. 160 terminal lines. Educational use.
(b)	2 x PRIME 750 Computers	Each: 5 megabytes memory, 600 megabytes on line disk storage. 80 terminal lines. Educational use.
(c)	2 x VAX 11/ 750 Computers	Each: 4 megabytes memory, 400 megabytes on line disk storage. 32 terminal lines. Educational use.
(d)	PRIME 9650	4 megabytes memory, 460 megabytes on line disk storage. 80 terminal lines. Administrative, word processing use.

Each of the computers has magnetic tape back up and a central printer. An AO plotter is available to all educational users.

Some 600 terminals and workstations are connected to these systems mostly via a GANDALF Double PACX IV

switch allowing each terminal to access all educational machines.

A wide range of applications and systems software is available on the PRIME Machines and a team of professional Programmer/Analysts are responsible for developing and maintaining the software systems for use within the establishment. All the major programming languages are available including COBOL, FORTRAN, BASIC, PASCAL, and CORAL-66 in an on-line form. Various low level languages and microcomputer cross assemblers are also available to provide an excellent environment for program development. In addition, users can employ a wide range of software packages applicable in diverse areas such as business, the sciences and geography. These packages, many of which are widely used in commerce and industry are able to meet the needs of those who wish to use the computer purely as a resource in their subject area as well as those who require a deeper understanding of the computer in their work.

Student Welfare Services

Head: Miss Frances Higgins MA(Psychol) BA(Soc Admin) DASE EdG DipVG

The Polytechnic is aware of the experiences, the challenges and difficulties students can face in entering a course of study in higher education. To help meet these needs, a comprehensive structure of student welfare services has been developed – Accommodation, Chaplaincy, Careers Counselling and Appointments (dealing with career employment and further educational opportunities, postgraduate awards, etc.) Counselling (covering academic/educational, personal, social, emotional and financial needs or difficulties) and Health Services. Part-time students are very welcome to make use of these services.

Further details are available to students when registering their courses. The Student Welfare Service Office is at: Room B209, Harris Building.

Polytechnic Creche

The needs of students and staff with young children are well catered for at the Polytechnic. A creche is provided for toddlers. While their parents are working at the polytechnic, children can be left under the expert care of fully qualified nursery staff. The creche is for children aged between two and five years and is open each day during term time.

There are places for 20 children in specially converted premises in the Brennand House student residence which is within walking distance of most Polytechnic buildings.

Children are cared for in a friendly atmosphere by qualified staff – Mrs Christine Cross, Mrs Brenda Taylor, and two assistants. Two staff are on duty at all times.

The creche operates on a two session system. From 8.45 am to 1.00 pm and 1.00 pm to 5.15 pm. Children may be left in the morning or afternoon session or for all day.

The charges for each session are:
Children of staff: £2.50 per child
Children of students: £1.25 per session.

Lunch is taken between 12.00 and 1.00 pm and a lunch charge of 40p is made. Children also receive one-third of a pint of milk each day.

For further information please contact:
Val Weldon,
Lancashire Polytechnic,
Preston PR1 2TQ
Tel Preston (0772) 22141, ext 2860

St Peter's Centre

The Centre, at the rear of the Arts Centre, opposite the library, is available to all staff and students of the Polytechnic. They are served by an inter-denominational team of Chaplains co-ordinated by a full-time Anglican Chaplain who is available at the Centre or in the library some evenings or at home on others, to talk over any subject, offer help if confused culturally or spiritually and to put you in touch with ministers from various denominations and religious faiths.
Contact: David Clegg, St Peter's Centre, Tel ext 2063. Home 734478, or
Revd Terry Rodgers, Roman Catholic. Tel 726370, or
Revd Arthur Roberts, Free Church. Tel 719449.

Physical Education and Recreation

Head of Section: J Montgomery BEd DipPE DipSpEd CertEd

The section is based on the indoor facilities situated adjacent to the Foster Building on the main Polytechnic campus. These facilities provide a small Sports Centre which comprises of a Sports Hall (34 metres × 19 metres), a General Activities Room (15 metres × 9 metres), and a Fitness and Conditioning Area (12 metres × 9 metres), along with male and female changing rooms with showers and toilets, as well as the physical education staff office. Squash courts and a swimming pool lie within half-a-mile of the Polytechnic and are hired along with playing areas for outdoor team games.

It is the policy of the section to provide an enjoyable, balanced and wide programme of activities to help meet the physical, social, emotional, aesthetic and occupational needs of individual students through recreative and competitive situations. The Students' Union run their own sports clubs through their Sports Council and the opportunity exists to participate in British Polytechnic Sports Association competitions.

At present the following activities are catered for: athletics, badminton, basketball, conoeing, cricket, dance, fencing, fitness-training, five-a-side football, golf, hockey, jogging, martial arts (judo and taekwon-do), mountaineering, netball, rugby (union and league), sailing, skiing, soccer, squash, swimming, table-tennis, tennis, trampolining, volleyball, weight-training and yoga.

Inter-departmental competitions and individual tournaments prove to be very popular with students and some of the more active staff. Well established competitions run in soccer (indoor and outdoor); rugby; basketball; cross-country running, badminton, tennis and skiing.

The Polytechnic is situated within easy reach of the Lake District National Park and the Yorkshire Dales National Park. These two contrasting areas along with the more immediate countryside provide a rich environment for a full range of land and water based outdoor pursuits activities.

The recreative and sporting programme is available to all full-time and part-time students as well as staff. For further information and all bookings contact the Physical Educational Staff in the Section's office adjacent to the Sports Hall entrance (Ext 2039).

Services offered to Schools and Industry

Business and Industrial Centre

The Centre offers a wide range of services to industry, commerce and the public sector including:

Consultancy and testing
Short courses and conferences
A student placement service

If an organisation requires information, advice or assistance it can turn to one central point of contact with the Polytechnic which has over 750 staff whose combined experience cover all aspects of industry, commerce and public service, and the most advanced machinery available for analysis and testing of products. The Centre provides access to these valuable resources for companies both large and small.

Courses are designed to individual specifications and conferences are arranged to ensure that employers and employees can keep up to date with new techniques, new technologies and new legislation.

The industrial training service enables around 300 students to acquire practical experience with an appropriate employer. Students are placed in companies both in the UK and abroad for periods up to twelve months.

For further information contact: Mrs Jean Minall Tel 262002.

Educational Liaison Office

Pupils in Schools and students in Colleges of Further Education frequently need information and advice about courses available at Lancashire Polytechnic and Polytechnics generally and the Educational Liaison Office provides prospective students and careers staff with details of courses and admission procedures. The Liaison Office will answer queries by letter, telephone, or in person and prospectuses and course literature are available free to enquirers. Another function of the Educational Liaison Office is to establish and maintain personal contacts between the staff of schools and colleges and the Polytechnic.

Visits of staff, groups of students or individual students to the Polytechnic are welcomed and every attempt is made to cater for the special interests of a party of visitors.

For further information contact: DR Cullingworth, Educational Liaison Officer, Lancashire Polytechnic, Preston PR1 2TQ. Tel. (0772) 22141.

Full-Time and Sandwich Courses

The Polytechnic offers a variety of full-time and sandwich courses which are listed below. Details are contained in a full-time and sandwich course prospectus which may be obtained by writing to the Educational Liaison Officer.

Accountancy, Business Studies Professional and Secretarial

BA (Hons) in Accounting
BA (Hons) in Law
BA (Hons) in Business Studies (Sandwich)
BSc (Hons) in Business Information Technology (Sandwich)*
BTEC Higher National Diploma in Business Information Technology*
BTEC Higher National Diploma in Business Studies Boards B2, B8 (Full-time or Sandwich)
Bilingual Administrators
Accountancy Foundation Course for ICA, CIPFA, ACA, ICMA
Graduate Conversion Course in Accounting (1 term)

Art and Design

BA (Hons) in Fashion (Sandwich)
BA (Hons) in Fine Art
BA (Hons) in Graphic Design (Sandwich)
BTEC Higher National Diploma in Design Crafts (Wood/Metal/Ceramics)
Foundation Course in Art and Design

Computing and Mathematics

BTEC Higher National Diploma in Computer Studies
BTEC Higher National Diploma in Mathematics, Statistics and Computing*

Construction

Polytechnic Diploma in Building Management and Economics
BTEC HND in Building Studies (Full-time or Sandwich)

Engineering

BSc (Hons) in Electrical and Electronic Engineering (Sandwich)
BTEC Higher National Diploma in Electronic Engineering
BEng (Hons) in Mechanical Engineering (Sandwich)
BTEC HND in Mechanical and Production Engineering (Full-time or Sandwich)
BTEC HND in Engineering Design (Full-time or Sandwich)
BTEC HND in Computer Aided Engineering (Full-time or Sandwich)
BTEC HND in Computing Technology

Languages and Humanities

Polytechnic Bilingual Secretary Diploma (post-grad)
Polytechnic Bilingual Secretary Diploma (post A level)

Journalism

Certificate of the National Council for the Training of Journalists
Polytechnic Diploma in Radio and TV Journalism (post-grad)

Management

Diploma and Certificate in Management Studies (DMS) (post-grad)

Sciences

BSc (Hons) in Psychology
BTEC Higher National Diploma in Science: Chemistry (Sandwich)
BTEC Higher National Diploma in Science: Physics (Sandwich)
BTEC Higher National Diploma in Applied Biology
Graduate Membership of the Royal Society of Chemistry (Sandwich)
Polytechnic Diploma in Biochemistry

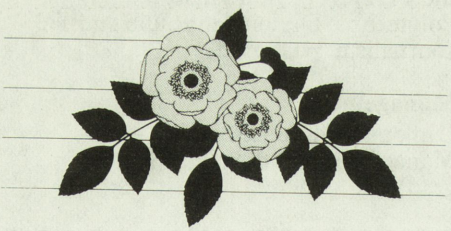
Social Studies and Social Work

BA (Hons) Applied Social Studies (options in Social Work or Social Policy and Administration)
Polytechnic Diploma in Applied Social Studies (post-grad) (CQSW)
Polytechnic Diploma in Social Work (CQSW)
Health Visitor's Certificate
National Certificate in District Nursing (SRN/RGN)

Combined Studies

DipHE, BSc, BSc(Hons) and BA, BA(Hons) in Combined Studies, Accounting*, American Studies, Astronomy, Biochemistry, Biology, Chemistry, Computing, Economics, Education Studies, English, French, Geography, History, Law*, Linguistics, Mathematics, Organization Studies, Physics, Physiology, Psychology, Politics.

*Subject to approval.



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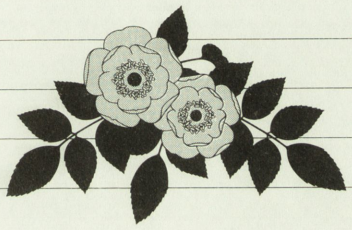
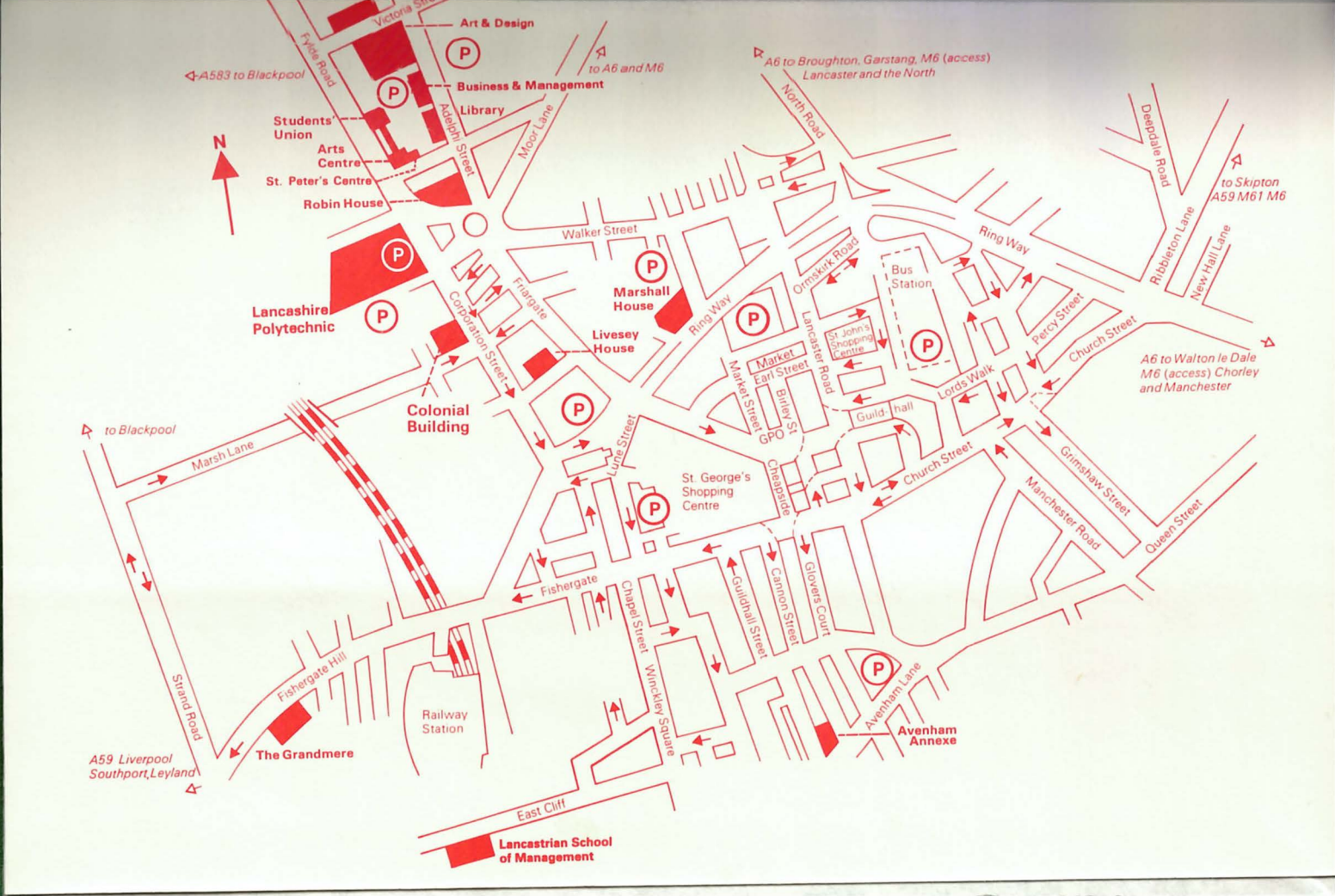
LANCASHIRE POLYTECHNIC



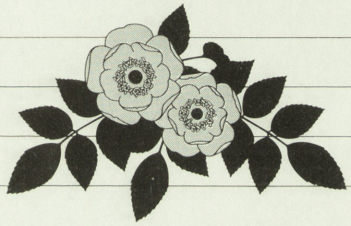
Full-Time Courses 1985-86

Director:
Eric E Robinson, MSc


Art & Design
Business & Management
Library
Students' Union
Arts Centre
St. Peter's Centre
Robin House
Lancashire Polytechnic
Colonial Building
Marshall House
Livesey House
Walker Street
Friargate
Corporation Street
Ring Way
Ormskirk Road
Bus Station
St John's Shopping Centre
Market
Earl Street
Market Street
Birley St
GPO
Lancaster Road
Guild-hall
Lords Walk
Percy Street
Church Street
Deepdale Road
Ribbleton Lane
New Hall Lane
North Road
Victoria Street
Fylde Road
Adelphi Street
Moor Lane
Lune Street
St. George's Shopping Centre
Cheapside
Grimshaw Street
Manchester Road
Queen Street
Fishergate
Chapel Street
Winckley Square
Guildhall Street
Cannon Street
Glovers Court
Avenham Lane
Avenham Annexe
Railway Station
Fishergate Hill
Strand Road
Marsh Lane
East Cliff
Lancastrian School of Management
The Grandmere
N
A583 to Blackpool
to A6 and M6
A6 to Broughton, Garstang, M6 (access) Lancaster and the North
to Skipton A59 M61 M6
A6 to Walton le Dale M6 (access) Chorley and Manchester
to Blackpool
A59 Liverpool Southport, Leyland

Although every care has been taken to ensure that the information contained in this Prospectus is accurate at the time of printing it must be understood that changed circumstances may necessitate cancellation of courses or alterations in the programme of courses, course location, course content, fees and other matters dealt with. The Polytechnic cannot undertake to give notice of such cancellations or alterations, and cannot accept any liability arising out of or in connection with them.

LANCASHIRE POLYTECHNIC



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Preston, PR1 2TQ

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The Polytechnic

Lancashire (formerly Preston) Polytechnic is one of the 30 Polytechnics of England and Wales. The Polytechnics represent a new concept in higher education.

They are comprehensive in the sense that they offer a wide range of types of courses leading to post-graduate, degree, certificate, diploma and professional qualifications.

They organise their courses so that the awards can be gained by a variety of attendance patterns and students attend on a full-time, sandwich, block release, part-time day or part-time evening basis.

They have a preponderance of courses with a strong vocational orientation and there is a particularly close relationship between the Polytechnics on the one hand and industry, commerce and the professions on the other.

The ambience of the Polytechnics is therefore unique, optimising possibilities for interaction between academe and the general public and between students with differing backgrounds and subject interests.

The Academic Programme of Lancashire Polytechnic has expanded almost explosively over the last few years creating an enormously increased range of opportunities for students. At the same time, the 38 acre site in the heart of Preston — an urban situation second to none — has been changing rapidly. The new Student Residences, Students' Union, Library, Art and Design and Business and Management buildings and the inherited buildings of the former Harris College, constitute a compact and attractive educational campus. At the centre of the campus is an early 19th century 'Waterloo' church. This has been restyled as the Polytechnic Community/Arts Centre and it provides a setting for music, drama, poetry readings and exhibitions.

Governance

The governing Body of the Polytechnic is the Polytechnic Council which has responsibility for 'the general direction of the Polytechnic'. It includes members appointed by the Lancashire County Council — which is the administering Authority — representatives of industry, commerce and the professions, and polytechnic staff and students. The Academic Board, under the Chairmanship of the Director, is responsible for the planning, co-ordination, development and oversight of the academic work of the Polytechnic. The Board is composed of senior academic and administrative officers, members appointed by and from the full-time staff, members appointed by the Students' Union, and co-opted members.

Academic Structure

The structure of the Polytechnic is based on five Faculties: Art and Design; Business and Management; Science; Technology; and Social Studies and Humanities. Each Faculty has a number of Schools and Divisions. The School is the departmental unit in the structure.

Combined Studies courses are administered by a programme office outside the Faculty structure.

View of the Maudland Building



Preston and the Surrounding Countryside

Situated on the banks of the Ribble and on the London and Midlands to Scotland railway route, Preston is the centre of a network of communications. Being midway between the capitals of England and Scotland it was often in the past visited by royal and distinguished persons — not always welcome! — in their progress north and south. The M6 motorway now passes through, linking Preston with the industrial Midlands and London and with the Lake District. Eventually there will be a motorway link with Scotland. London and Glasgow can be reached in less than three hours by rail.

Within the town, and its immediate surroundings in Lancashire, is a wide range of industrial and commercial interests, and the headquarters of many firms with national and international reputations. Among the many important industries centred on the town are heavy and precision engineering, the manufacture of aircraft, heavy commercial vehicles and cars, printing presses, chemicals, electrical equipment, synthetic fibres, paper and footwear. On the outskirts is the uranium plant of British Nuclear Fuels, supplying fuel elements for nuclear reactors.

Preston is surrounded by some of the most beautiful open countryside in the North of England. About 15 miles to the west are several fine coastal resorts, the best known of these being Blackpool. Less than 50 miles to the north is the heart of the renowned and beautiful Lake District. The Trough of Bowland and the Bleasdale and Longridge Fells lie nearby, providing rambling facilities in undulating and wooded country.

Preston's new Guild Hall offers a wide variety of entertainments. It houses a modern theatre and regular concerts are given by the Royal Liverpool Philharmonic orchestra. Leading artists in the world of popular entertainment also appear and national championships in various indoor sports are frequently staged there.

Preston Town Centre — Market Square



General Information

Calendar 1985-86

1985

Autumn Term (11 weeks)

Monday, 30th September	Autumn Term begins
Friday, 13th December	Autumn Term ends

1986

Spring Term (11 weeks)

Monday, 6th January	Spring Term begins
Friday, 21st March	Spring Term ends

Summer Term (14 weeks)

Monday, 14th April	Summer Term begins
Friday, 18th July	End of session

Calendar 1986-87

1986

Autumn Term (12 weeks)

Monday, 29th September	Autumn Term begins
Friday, 19th December	Autumn Term ends

1987

Spring Term (12 weeks)

Monday, 12th January	Spring Term begins
Friday, 3rd April	Spring Term ends

Summer Term (12 weeks)

Monday, 27th April	Summer Term begins
Friday, 17th July	Summer Term ends

N.B. These are outline calendars only. Individual course dates may deviate to some extent from these dates, although most courses will be contained within the outline calendars.

St. George's Shopping Centre, Preston

Courses

The Polytechnic offers a wide variety of courses both full-time and part-time, ranging from below degree level standard to post graduate level.

Degree Courses and the CNAA

The degree courses offered are mainly conducted under the auspices of the Council for National Academic Awards (CNAA). The CNAA was established in 1964 by Royal Charter and ensures that its degrees are equivalent in standard to university degrees by means of a rigorous examination of degree submissions and of the staff and facilities of the institution proposing to offer the courses.

Higher National Diploma Courses, BTEC

Among the full-time courses of less than degree standard the most numerous were the Higher National Diplomas, awarded since the 1920s by Joint Committees of the Department of Education and Science and professional institutions. Courses at this level have now been placed under the aegis of the Business and Technician Educational Council (BTEC), and a new range of higher diplomas awarded by this body is emerging. Whilst the normal minimum entry requirements for degree courses includes two 'A' levels, the requirement for these diploma courses normally includes only one 'A' level (or an equivalent, e.g. an OND or ONC).

Professional Qualifications

The Polytechnic also offers courses leading to membership of professional bodies, or granting partial exemption from the examinations of such bodies. These courses are usually accepted as being of degree level standard as far as entry to study for higher degrees, salary purposes etc., are concerned. Many students who have completed Higher National Diploma courses go on to complete courses of this nature and thus obtain qualifications of degree standard, although initially they did not have the necessary minimum entry requirements for a degree course.

Post Graduate and Post Experience Courses

In addition to the above courses, there is a variety of courses for those who already possess a first degree or other qualification or suitable job experience. Diplomas in Social Work leading to the Certificate of Qualification in Social Work of the Central Council for the Education and Training in Social Work, the Diploma in Management Studies, and the Diploma for Bilingual Secretaries taken by graduates with language qualifications, are examples of courses of this kind. It is also possible to work for a higher degree by research at the Polytechnic, either on a full-time or part-time basis.

Transferability between Courses

Because of the variety of courses in the Polytechnic, transfer between different courses is a possibility and this creates flexibility that can often be advantageous to students. In some cases there is provision for students who initially enter HND courses to transfer after a period to an appropriate stage of a degree course in similar subjects, provided their work is of a sufficiently high standard. Alternatively, a student who finds the standard of a degree course too rigorous may, in appropriate circumstances, transfer to an HND course.

Mixed Course Application

Application may be made for admission to more than one course. The standard application form has a space for the candidate to state alternative courses for which he would

like to be considered in addition to his first choice. A candidate may be considered separately for the different courses and may be offered a place on more than one course.

Sandwich Courses

Many of the full-time Polytechnic courses are of the 'sandwich' type. The term 'sandwich' indicates that periods of full-time academic study at the polytechnic alternate with periods of training in industry or the professions. A sandwich course may be of the 'thick' or 'thin' variety. A thick sandwich course includes a period of a complete year of industrial training, whilst in the thin sandwich variety two or more shorter periods (usually of 6 months duration) alternate with periods of academic study within the Polytechnic. The sandwich courses in the School of Art and Design are exceptions in that they may include a single 26 week period in industry.

Sandwich Course and other Training Placements

The Polytechnic normally helps students to obtain the professional or industrial placement for the period of training which forms an integral part of the course. During the time spent in the placement a sandwich course student will normally be paid a salary by the organisation for which he or she is working, whereas he or she will probably receive a local authority maintenance grant to cover the period in college. A few students are sponsored by a particular organisation which agrees to provide the whole of the training experience, although a student may well be supported by the local authority during the period at the Polytechnic. A small number of sandwich course students are 'industry-based', that is to say their employees provide not only the training placement but also continue to pay the student a salary during the whole period spent in the Polytechnic.

Some courses, notably social work courses, are not 'sandwich' courses in the strict sense of the term, but do include professional training as an integral part of the course. Here a student spends part of the week in college and part in the training placement, or periods of a few weeks at a time in the placement. Financial support in these cases is usually given by the same body throughout the course, including the placement element. The basis of this support may be either secondment by an employer or a local authority grant.

Provision for Mature Students

Continuing Education

The Polytechnic is committed to the provision of courses for adults wishing to return to or continue their education and training. Such provision includes courses on new technology, new commercial and industrial practices, courses designed to fulfil the continuing training requirements of professional bodies, as well as courses taken for interest or personal development right across the range of Polytechnic provision.

If the Polytechnic is to remain responsive to social and technical change both nationally and locally, specific provision must be developed to meet immediate problems or needs. Such provision may not be reflected in this prospectus. This particularly applies to short courses (under 60 hours duration), conferences, meetings, lectures etc. If what you require is not mentioned in this prospectus, you should contact the Co-ordinator for Continuing Education. He may well be able to advise or give further information on recent course developments. (See also Business and Industrial Centre, page 98).

Adult Access to Polytechnic Courses

Adult students are encouraged to apply for any Polytechnic course, whether part-time or full-time. Subject to the discretion of course tutors, allowance may be made for the modification of formal course entry requirements to take account of e.g. individual experience, continued personal and professional development and qualifications. Each application is treated on its own merits. It will be appreciated that individual adult circumstances and qualities vary considerably as do the requirements of different courses. In September 1983 nearly 30% of students (full and part-time) were over 25 years of age on enrolment.

If you are uncertain about entry requirements and/or your own suitability, contact the Co-ordinator for Continuing Education; or the Course Tutor named in the prospectus.

Pre-Degree Courses

Pre-degree courses have been developed to facilitate adult access to some of our degree and other courses. These contain 'return to study' elements and serve to introduce Polytechnic courses and prepare adults for entry to them. These are presently two term courses, one evening per week. For many adults of limited educational background, the Open College route may be more appropriate (see below).

Open College

The Polytechnic and Lancaster University jointly validate 'Open College' courses which can be attended on a part-time basis at a number of colleges in the North West region. These courses provide an alternative to 'A' level qualifications and successful completion of appropriate modules is acceptable to the Poytechnic as evidence of ability to benefit from higher education. Students with appropriate Open College Units will be considered for places on Degree, Higher National Diploma or other courses. The Open College is for adults only (over 21) and the courses are designed and taught with adults in mind.

Full details may be obtained from the Inter College Co-ordinator, Open College, Nelson and Colne College, Scotland Road, Reedyford, Nelson, BB9 7YT (Tel: (0282) 66411).

Credit Transfer

It is possible for prospective students who have completed the whole or part of courses elsewhere to be considered

for entry with advanced standing to courses at the Polytechnic (i.e. entry to the second or subsequent years of a course). In particular, students who have completed Open University course units may be eligible for exemption from parts of courses offered by the Polytechnic.

Prospective students who wish to be considered for entry with advanced standing are advised to contact the admission tutor of the course(s) in which they are interested.

Associate Student Scheme

Adults can attend parts of many Polytechnic courses on an Associate Student basis. An associate student studies alongside the regular students and has the same requirements on attendance, course work and, if desired, examinations for the particular part of the course selected. In some cases a complete award can be gained in this way. Places are subject to the availability of accommodation and facilities.

A wide range of Polytechnic courses offer such units. Contact the Co-ordinator for Continuing Education for details of available Associate Student Units, stating the academic area(s) you are interested in. This can be a useful preliminary step to coming on to a full-time course.

Polytechnic Awards in Continuing Education

Polytechnic Certificates, Diplomas and Advanced Certificates and Diplomas can be obtained by putting together associate student units, short courses etc. and an independent learning project. Credit can be given both for previous learning and for life and work experience. Enquiries to the Co-ordinator for Continuing Education.

Advice and Guidance for Adults

Mature students are encouraged to seek an advisory interview with the Co-ordinator for Continuing Education if they are considering entering higher education or are uncertain about which Polytechnic provision may meet their individual needs. Similarly, mature students may wish to seek information on costs and grants before being committed, especially to full-time higher education.

A special booklet is produced, aimed at the mature student considering Polytechnic courses. It can be obtained from:

The Co-ordinator for Continuing Education
Lancashire Polytechnic
Preston PR1 2TQ

Admission to Courses

Entry Requirements

The normal requirements for admission to full-time and sandwich courses are:

Degree courses (for Degree Courses in Art and Design please see course information section)	*5 GCE passes in appropriate subjects, including 2 'A' levels or BTEC Certificate or Diploma of appropriate standard or ONC/OND of appropriate standard or completion of Open College course with appropriate passes in 4 Stage A units and at least 2 Stage B units.
BTEC Higher National Diploma Courses	*5 GCE passes in appropriate subjects, including 1 'A' level or BTEC Certificate or Diploma or ONC/OND or completion of Open College course with appropriate passes in 4 Stage A units and at least 1 Stage B unit.

*In the 'O' level examinations only grades A-C will be accepted as constituting a pass. A CSE grade 1 pass is regarded as GCE 'O' level equivalent.

Equivalence of the Scottish Certificate of Education to the General Certificate of Education

The Ordinary grade examination for the Scottish Certificate of Education and the General Certificate of Education Ordinary level examination both attest to attainment at the age of 16 and awards of at least band C in both examinations are therefore generally recognised as equivalent on a subject for subject basis.

Higher grade awards for the Scottish Certificate of Education however reflect attainment one year earlier than do GCE Advanced level awards and may moreover represent less specialised study in a given subject.

The following formulae of equivalence have in the past been adopted:

(a) An SCE Higher grade 'A' or 'B' pass is equivalent to a pass in the Advanced level of the GCE.

(b) Three SCE Higher grade passes are equivalent to two passes in the Advanced level of the GCE.

(c) Four SCE Higher grade passes are equivalent to three passes in the Advanced level of the GCE.

Most courses have specific subject requirements; full details are given in the course information section of the prospectus or in the course information leaflet. Details of entry requirements for courses other than those specified above are also given in the course information section and the course information leaflet.

Application

Application for full-time and sandwich courses should be made as early as possible. There is a standard Polytechnic application form for most

Preston Guild Hall


FROM 10 AM
SNACKS
CELEBRITY RESTAURANT
OPEN FROM 11.30 UNTIL 2 PM
ATTRACTIONS
Guild Hall



courses, copies of which can be obtained from the Educational Liaison Office, the forms, when completed, should be returned to the Academic Registrar. A special procedure applies in the case of certain courses, e.g. degree courses in Art and Design, some Social Work Courses, details of the appropriate procedure are given in the sections dealing with the courses concerned.

It is not necessary to wait until the results of qualifying examinations are known before applying for admission, as provisional places can be offered to suitable applicants pending the publication of examination results. Applicants will normally be invited for personal interview before being considered for acceptance, and wherever possible will be given the opportunity to visit the Polytechnic before accepting the offer of a place.

Where a clearing house system operates the procedure may differ from that normally followed by the Polytechnic. In the case of applications submitted direct to the Polytechnic, however, the following procedures apply.

All applications are acknowledged to the candidates on receipt of the application form by the Polytechnic. The applicants are then advised, usually within a period of four weeks of

(i) unconditional acceptance
(ii) conditional acceptance
(iii) interview-open day
(iv) place on waiting list
(v) rejection

unless further information or references are awaited by the admissions tutors. If a candidate is interviewed he or she sill be informed as soon as possible, and certainly by the 1st August of

(i) unconditional acceptance
(ii) conditional acceptance
(iii) rejection
iv a specific reason for a deferred decision

When the examination results of those applicants with conditional offers are received by the Polytechnic, the Polytechnic will write making a firm offer, or a rejection, by the 1st September or within 14 days of receipt of the results.

Where possible, candidates should write accepting unconditional offers within seven days of receiving the offer. All applicants who confirm their acceptance of a place on a course will be sent a booklet containing detailed information for new students, during the summer. The information will amplify the general information given at the back of this prospectus and cover such matters as course calendar, induction and enrolment arrangements, maps, Polytecnic regulations, fees, grants, examinations, facilities in the Polytechnic and in the town, insurance, safety, etc.

Polytechnics Central Admissions System (PCAS)

The Committee of Directors of Polytechnics (CDP) is currently setting up a centralised system for handling applications for admission to full-time and sandwich first degree and DipHE courses. Degrees in Art and Design will not be included in the new arrangements and will continue to be covered by the Art and Design Admissions Registry.

The Scheme will be known as the Polytechnics Central Admissions System (PCAS) and it is expected that procedures will be implemented for candidates seeking entry in September 1986. The new application procedures will be announced during the 1984/85 academic year.

Postponed Entry

In recent years more students have been taking a year off from their studies between school and higher

education. There are advantages and drawbacks in doing so.

If you are thinking of taking a year off, get in touch in good time with the admissions tutor of the course(s) for which you are applying to discover what his/her attitude is. He/she is more likely to encourage you if you have plans for the constructive use of your time.

Overseas Students

Full details of the application procedure for overseas students, including information on such matters as fees for overseas students, the financial guarantee such students are required to produce, the certificate of competence in English and the requirement to pay fees at or before enrolment are obtainable from the Educational Liaison Office, and are sent out to all overseas students, together with the application form.

Grants

Students following advanced full-time and sandwich courses at polytechnics are eligible for Local Authority awards, provided thay are ordinarily resident in the United Kingdom and satisfy the conditions of the Awards Regulations; normally those taking first degree, BTEC, HND and DipHE courses qualify for mandatory awards whilst grants in most other cases are discretionary. Grants may cover the cost of tuition, registration and examination fees and include allowances for maintenance, books and materials and travelling expenses, the amount of the grant being assessed according to the financial position of the student, taking account of parental income and other circumstances. Continuance of the grant is dependent upon satisfactory progress reports from the Polytechnic.

A number of Social Science Research Council awards are available for students on the Diploma in Management Studies course and prospective applicants should contact the Polytechnic Aacademic Registrar for further details of these awards.

Grants may also be available for students on non-advanced courses, although such grants generally do not include a maintenance allowance.

Application for a grant should be made to the Chief Education Officer of the Local Education Authority of the area in which the student lives. Application should be made in good time to ensure that the student's financial situation is clarified before the beginning of the course and students should note that the duty of an Authority to bestow an award is subject to the condition that an application in writing reaches the Authority before the date on which the course is due to begin. Students applying after the beginning of the course are thus dependent on Authorities exercising discretion in their favour. Useful detailed information on students grants is to be found in the following publications, copies of which can be consulted in the Polytechnic Library:

Grants to Students — A Brief Guide. Issued by the Department of Education and Science and obtainable from Local Authorities. Applies to applicants normally resident in England and Wales.

Guide to Students' Allowances. Issued by and available from the Scottish Education Department, Awards Branch, Haymarket House, Clifton Terrace, Edinburgh EH12 5DT.

Grants Handbook. Published by the National Union of Students, 3 Endsleigh Street, London WC1 0DU. A particularly useful handbook on discretionary award problems.

Educational Charities. Published by the National Union of Students. This lists trust funds that are able to make relatively small grants to students in need.

Enrolment, Registration and Fees

Enrolment

Students accepted on a course are required to enrol. Enrolment normally takes place during the first week of the Autumn term which includes an induction period for most new students. Details of the induction programme, the enrolment procedure and other necessary information for new students will be circulated where possible to successful applicants before the beginning of the session. This information will also be available from the Polytechnic Registry.

Tuition and certain other fees are payable at enrolment. Most full-time students are eligible for Local Authority grants and you will find further details concerning grants on page 20.

Fees

In addition to tuition fees, various fees may be payable in connection with a course, e.g. CNAA, BTEC registration fees. Details are as follows.

Tuition Fees

Tuition fees are normally payable at the beginning of the course each year. Payment in full is due at or before enrolment unless the student is to be grant aided by a Local Education Authority or sponsored by an employer. Those students who are to receive a grant are required to produce written evidence of the offer of a grant covering the payment of tuition fees and those students whose employers undertake to pay the fees on their behalf must produce a letter from the employer at enrolment indicating that the latter accepts responsibility for the payment of fees. The student himself is, however, responsible for the payment of fees if for any reason the Local Education Authority or the employer refuses to accept responsibility for payment. Tuition and other fees are reviewed annually, and it is therefore not possible to state the fees at the time of going to print. Details of fees can be obtained from the Polytechnic Registry and a copy of the fees list will be forwarded with each copy of this prospectus circulated after the fees have been determined. They are also contained in the information booklet sent to all students accepted on courses. A full tuition fee is charged for the industrial training period(s) of sandwich courses.

CNAA Registration Fees

A registration fee is payable at the beginning of the first year of CNAA first degree courses and at the beginning of the DMS course. These fees are currently £75.00 and £57.00 respectively.

A registration fee is payable at the commencement of CNAA MPhil or PhD by research.

Business and Technician Education Council Registration Fees

A registration fee (currently £39.50) is payable by all students enrolling on BTEC Higher National Diploma courses for the first time (except BTEC HND Business Studies courses for which the fee is currently £25.00). This fee will register the student with the Business and Technician Education Council for a period of five years.

Examination Fees

There are no fees for purely internal examinations of the Polytechnic. Students are however required to pay fees for other examinations. Full details are also given on examination entry forms where these are supplied.

For some courses, examination fees are payable together with tuition fees and the procedure for payment is the same as for payment of tuition fees. In other cases examination fees are

payable when the examination entry is submitted. In these cases accounts for examination fees are not sent to grant-aiding authorities or employers, but receipts are issued and may be used by students in appropriate cases to recover the expenditure from their Local Authority or other sponsoring body. An examination fee may be payable for a referred or resit examination.

Residential Courses, Visits etc.

Short residential courses, fieldwork trips and other visits may be associated with some full-time and sandwich courses. Where the course or visit is a mandatory element of a designated main course, students in receipt of a Local Authority maintenance grant will receive financial assistance from the Polytechnic in respect of expenditure incurred in accordance with the scale laid down by the Department of Education and Science for supplementary allowances to cover the needs of students attending non-maintained institutions, the level of reimbursement taking into account any savings resulting from the students' absence from their normal place of residence. Where the residential course or visit is not an essential course requirement the Polytechnic may offer some financial assistance to students in respect of expenditure incurred.

Details of residential courses and other visits and of the financial arrangements will be provided where possible in the information distributed to new students before the beginning of the session, copies of which will be available from the Polytechnic Registry.

Permission Vouchers

All students enrolling for the Foundation course in Art and Design, who are not normally resident in the County of Lancashire will be required to produce permission vouchers from their Local Education Authority. Application for a voucher should be made to the Education Office of the Local Authority in whose area the student lives, before joining the course.

Student Regulations

Attendance and Course Work

Students are required to attend classes punctually and regularly, to carry out satisfactorily such work as is set by their tutors, and to sit the prescribed examinations. There are minimum requirements in all courses in respect of attendance, coursework, laboratory work, project work (where appropriate), and examinations, and the right to continue a course of study depends on the maintenance of satisfactory attendance and academic performance.

In some courses there is a requirement to undertake one or more periods of practical training in industry, commerce or the professions, and progress in the course will depend upon the receipt of a satisfactory report on the standard of work achieved by the student whilst in a practical placement.

Examinations and Assessment

The tendency in most Polytechnic courses is for the student's performance to be assessed on the basis of both formal examinations and course work, the proportion of each varying from course to course. Some courses still rely wholly on formal examinations for the assessment process, whilst at the other extreme, in a few courses, there is an absence of all formal examinations, the assessment of student progress being made on the basis of essays, practical work, classwork, homework etc. This latter approach is what is usually meant by 'continuous assessment'. Whichever method of assessment is used, however, every attempt is made to ensure that the assessment process does not entail undue pressure for the student.

General Regulations and Discipline

In any academic community there have to be rules of conduct to ensure the smooth running of the community and to safeguard the freedom of its members. Students are required not to promote racial prejudice, hatred or discrimination.

Students are accpeted into the Polytechnic courses on the understanding that they abide by regulations mentioned in the prospectus and from time to time in force.

The Director has authority to suspend students from attendance for any cause which he considers adequate. The Council will exclude from the Polytechnic premises any student whose continued attendance is undesirable. Excluded students automatically lose membership of the Students' Union and Polytechnic societies.

Safety in the Polytechnic

The Health and Safety at Work Act 1974 imposes stringent requirements on educational institutions to maintain safe plant, safe systems of work, safe premises, etc. as well as the need to ensure adequate instruction, training and supervision to secure safe and healthy working conditions. All students have a duty under the Act to take reasonable care to avoid injury to themselves or others by their activities and to co-operate with those responsible in meeting statutory requirements.

Examination Regulations

The Polytechnic examination regulations approved by the Academic Board govern the conduct of all Polytechnic examinations except where those regulations conflict with the regulations of an external body under whose auspices the examination is conducted, in which case the external rules have over-riding force. New students will be provided with an extract from the regulations concerning the conduct of candidates. The complete document can be consulted, if required, in Faculty offices.

Student Welfare

The Polytechnic is aware of the kind of experiences students can face in entering a course of study in higher education. To meet these needs a structure of general and specialised Welfare Services has been developed, (see below and page 94).

Personal Tutor System

Each full-time or sandwich course student is allocated a Personal Tutor whom he can approach for advice on any personal or academic matter. Personal Tutors are members of staff associated with the course which a student is attending and they have a special concern and interest in the general welfare and progress of those in their group. Students are advised to see their Personal Tutors if they have problems of any kind.

FACULTY OF ART & DESIGN

Dean of Faculty: AG Livingston BA FSIAD MSTD
Faculty Registrar: Mrs EL Davies BA

BA (Hons) in Fashion
BA (Hons) in Fine Art
BA (Hons) in Graphic Design
BTEC Higher National Diploma in Design Crafts: Wood/Metal/Ceramics
Foundation Course in Art and Design

The Faculty is one of the 49 centres in England and Wales approved by the Council for National Academic Awards to offer courses leading to the degree of BA with Honours in the various Art and Design areas.

The Faculty offers BA Honours courses in Fashion, Fine Art and Graphic Design, a Foundation Course for students who are not less than 17 years of age by 31st December of the year of entry, and a BTEC Higher National Diploma in Design Crafts: Wood/Metal/Ceramics. The Faculty has over a number of years established close and fruitful relations with industry, and courses in design not only enable students to develop personal creative talents but also lead to a thorough understanding of industrial and commercial processes. The course in Fine Art provides opportunity for fundamental studies in the practice, history and philosophy of art, providing a basis for the practice of art, teaching in schools of general education, and for subsequent specialisation in a wide range of activities to which a broad competence in, and understanding of, the visual arts are appropriate. Advanced studies in the history and philosophy of art and design contribute to students' ability to work successfully in increasingly complex fields, as well as to their general intellectual development.

There are good facilities within the Faculty for small-scale production using industrial techniques in a number of fields (e.g. photography, letterpress and lithographic printing, garment production, ceramics and industrial design) and these, together with facilities for the practice of fine art in two and three dimensions, are constantly being extended as new needs and new technical processes emerge.

A new building for the Faculty of Art and Design was completed in Summer 1982 and all courses, with the exception of the Foundation course, are housed in the new building on the main Polytechnic campus. The Foundation course is housed at Avenham Annexe in Preston.

Most courses offered by the Faculty include mandatory visits for which students in receipt of a local authority maintenance grant receive financial assistance. Students not in receipt of such grants will be required to meet the full cost of these visits. Students may obtain information on the probable cost of these visits from the Course Leader.

Qualifications for entry to full-time degree courses in the Faculty of Art and Design.

In the selection of students for degree courses, the selection panels will place emphasis upon evidence of creative ability in Art and Design and, for the purpose of demonstrating this evidence, the completion of a Foundation course in Art and Design represents the preferred entry qualification. Except in the case of the Foundation course a student shall not normally be admitted to the course unless he or she will have attained the age of eighteen years by 31st December in the year of entry.

Foundation course students should have attained the age of seventeen years by 31st December of the year of entry.

The normal minimum qualifications for entry are:

(a) a General Certificate of Education with passes in five subjects, including two subjects at Advanced level, or
(b) a General Certificate of Education with passes in four subjects, including three subjects at Advanced level, or
(c) a Scottish Certificate of Education with passes in five subjects of which three are at the Higher Grade, or
(d) a Scottish Certificate of Education with passes in four subjects, all at the Higher Grade, or
(e) an Ordinary National Certificate or Diploma at a good standard, or
(f) the satisfactory completion of a full-time Foundation course in Art and Design of not less than one academic year in length, together with one of the following:
(i) a General Certificate of Education with passes in five subjects at Ordinary level, or
(ii) a General Certificate of Education with passes in four subjects including one at Advanced level, or
(iii) such qualification as the Council for National Academic Awards considers to be acceptable in lieu of (i) and (ii) above, or
(g) such other qualifications as the Council for National Academic Awards deems to be acceptable in lieu of those specified in (a) to (f) above. However, it should be noted that the possession of the entry qualifications specified above does not in itself entitle an applicant to be admitted to a course.

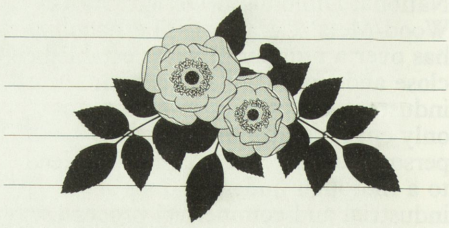
For the purpose of the above Regulations, passes at Grade 1 in the Certificate of Secondary Education are acceptable in place of passes at Ordinary Level in the General Certificate of Education. The term 'pass' refers to the attainment of grades A, B or C in Ordinary Grade examinations of the Scottish Certificate of Education.

Applicants must have a sufficient command of English to benefit from the course.

The Polytechnic may exercise its discretion to admit a student whose qualifications do not conform to the standard minimum entrance requirements but who presents other evidence which, in the opinion of the Polytechnic, indicates that he or she has the capacity and attainment to pursue the course of study proposed.

Admission procedure BA courses and BTEC Higher National Diploma in Design Crafts: Wood/Metal/Ceramics only: Application forms may be obtained from the Art and Design Admissions Registry, Imperial Chambers, 24 Widemarsh Street, Hereford. (*Note:* forms will *not* be supplied directly to individual applicants who are still at School or College; they are usually issued to Heads of Schools or Colleges in February).

Admission Procedure, Foundation Course: Polytechnic application forms should be used — see the note on application on page 16 of this prospectus.



Specialist Design Project for the School of Fashion

School of Fashion and Textile Design

Head of School: J Stevens

BA (Hons) in Fashion

Course Leader: to be appointed

A four-year sandwich course leading to BA with Honours. Students spend a 26 week period in industry in the third year of the course.

The course enables students to develop a personal design sense as well as a thorough knowledge of the techniques of clothing manufacture and other production and marketing factors. The course also provides a background in the history, philosophy and appreciation of the visual arts.

The most immediate practical aim of the course is to prepare students for professional designers' roles in the fashion industry, and students are therefore encouraged to develop original creative abilities which are informed by a knowledge and appreciation of the arts and of the role of fashion in society. Equally, students are encouraged and enabled to regard industrial production processes and commercial organisations as the media in which their creative ideas are to be realised.

The many manufacturers in both the dress and the knitwear industries whom we have consulted agree that a sandwich course of this kind is ideally suited to the education of designers intending to work in industry, and a great many organisations have agreed to continue their support by offering industrial facilities to our students.

From the start of the second year students begin to specialise in design for either knitwear or garments constructed from woven fabrics, though much of the work undertaken is common to both groups. In certain very exceptional circumstances, students' choice between the fashion and the fashion knitwear option at second year stage may have to be restricted but this will only be done in order to avoid students suffering the disadvantages which would arise if there were excessive numbers in any one group.

1st Year

Curriculum: fashion study and design; related design studies; technical studies; historical studies. Students also make a one-week visit to London galleries, fashion houses, etc.

Course duration: September to July (35 weeks)

Examinations: Internal and internal assessments.

2nd Year

Curriculum: fashion study and design; technical and business studies; historical studies. Students also make a one-week visit to London galleries, fashion houses, etc.

Course duration: September to July (35 weeks)

Examinations: Internal assessments.

3rd Year

Curriculum: fashion study and design; technical and business studies; historical studies. Students also make a one-week visit to Paris.

Course duration: September to February (18 weeks) (+26 weeks in industry)

Examinations: Internal and internal assessments.

4th Year

Curriculum: Fashion study and design; technical and business studies; dissertation. Students also make a one-

week visit to London.

Course duration: September to July (35 weeks)

Examinations: Final degree assessment of practical work and dissertation.

Careers in Fashion

During the last decade the United Kingdom has led the way in fashion design, adding a new dimension to the fun of living and enabling all levels of society to enjoy good clothing. It is the talented young British designers who set world trends in fashion. These young people, the great majority trained in schools of art and design, are in touch with contemporary trends not only in clothing but also in the arts generally.

In both the clothing and knitwear industries there are good career opportunities for lively, creative designers with a knowledge and appreciation of modern production and commercial processes. The clothing industry is strongly 'design intensive', which means that there are a great many career opportunities for both young men and young women designers which can lead to specialisation in other aspects of the industry such as buying, range co-ordination, and design management, all of which require imagination and an understanding of the fashion industry as a whole.

Manufacturers specialise in a particular type of range of garments, using either mass-production techniques to meet the ever-increasing demands for well-designed but inexpensive clothes, or small-scale production methods to meet the demand for clothes that are considerably more expensive. Equally, a company may specialise in the manufacture of 'young' fashion dresses, knitwear, children's wear, etc., and a designer may choose to specialise in any one of these fields.

The fact that the industry is divided into a great many independent units further increases the demand for able designers and for senior staff with a thorough understanding of the industry, including its all-important design aspects.

School of Art

Head of School: I Harrow BA

BA (Hons) in Fine Art

Course Leader: AD Powell

A three-year full-time course leading to BA (Honours).

1st Year

In the first two terms students work on a variety of projects with an emphasis on the exploration of ideas, using media areas as appropriate to the individual's expressive intention. The third term is devoted to the formulation of a personal study programme, based on the student's previous work, under the guidance of tutors. This links with the second year. Approximately 20% of students' time is devoted to History and Theory of Art.

Course duration: September to July (35 weeks)

2nd and 3rd Year

Tutors assist the student to develop his/her own creative skills and provide projects which act as a stimulus to greater awareness and understanding of the potential of their ideas.

Course duration: September to July (35 weeks)

Examinations: Internal assessments in the second year. Final degree assessment of practical work and dissertation in the third year.

School of Design

Head of School: RB Casey MSIAD

BA (Hons) in Graphic Design

Course Leader: GF Hollingworth

A four-year sandwich course leading to the award of BA with Honours. Students spend approximately 10 terms in the Polytechnic and 6 months in industry during the four years of the course. The period of industrial training occurs between the third and fourth years of the course, and students are paid wages roughly equal to the weekly value of a major award or grant. The Faculty of Art and Design has obtained the co-operation of a variety of industrial and commercial organisations, and each student's abilities and interests are matched to the particular opportunities that each firm can provide.

Graphic design covers a wide range of activities and the course prepares students for a variety of professional roles in many different kinds of organisation. Students therefore select one or other of two options, each of which enables them to acquire expertise in a particular professional field. A common philosophy, and the fact that much of the work is common to all students, makes it possible for successful students to move freely within the industry as a whole, particularly after some years of practical experience.

Option A (General Graphic Design) is for students who intend to find their first employment with publishers, design groups, in-house graphic design units, advertising agencies etc. The emphasis is on design for print production, but students also design for other media, in particular film and television (including animation) and packaging. There is an emphasis on the design of emotive images of the kind that are particularly important in

advertising and promotional work, but students also undertake projects that require the communication of more factual information and the achievement of stylistic consistency across many items, as in the design of corporate identities. Typography, including book and magazine work as well as more ephemeral items, is seen as a particularly important study for students taking up this option, and it therefore plays a major role in the majority of projects.

Option B (Three-dimensional Graphics) is intended for students who wish to work in three dimensions, and who intend to find their first employment as members of design teams responsible for exhibitions, point of sale displays, packaging and other similar three-dimensional items. They will be equipped to work on advertising and promotional schemes of the kind undertaken by agencies and in-house design groups, and to contribute three-dimensional but essentially graphic material projects under the general control of architects and interior designers. The option enables students to make effective use of structural and other three-dimensional materials. A detailed study in the design of folding box-board cartons provides a vehicle for the study of basic structural principles, as well as introducing students to card as one of the most widely used packaging and display materials.

The aim of the course is to ensure that students acquire the capacity to analyse visual communication problems and propose imaginative solutions which acknowledge technical restraints, whilst making creative use of traditional and newly-discovered technical possibilities. Students acquire a sufficiently thorough grasp of current techniques, and the principles that underlie them, for new developments to be understood and used with confidence. At the same time, students gain an understanding of the nature of the organisational frameworks within which they must work, and appreciate the motives and methods of business organisations. Students also acquire the basic knowledge which will enable them to co-operate with specialists in such fields as motivational research, market research, educational technology and advertising.

1st Year

Curriculum: Introduction to graphic design; typographic design and practical typography; three-dimensional design; photography; preparation of art work; production technology; psychology; history of art; theory of art and design; history of design; history of graphics.

Course duration: September to July (35 weeks)

Examinations: Internal and internal assessments

2nd Year

Curriculum: design, typography; production technology; history of art and design; history of design; history of graphics.

Course duration: September to July (35 weeks)

Examinations: Internal and internal assessments

3rd Year

Curriculum: Design; photography; marketing and professional practice; history of art; theory of art and design; history of design; history of graphics.

Course duration: September to March (24 weeks) (+26 weeks in industry)

Examinations: Internal assessment

4th Year
Curriculum: Design, dissertation.

Course duration: October to July (30 weeks)
Examinations: Final degree assessment of practical work and dissertation.

Careers in Graphic Design
The graphic designer is primarily concerned with the design of such printed items as books, newspapers, magazines, posters, advertising material, packaging and certain kinds of display material, but his work also includes other kinds of visual communication by means of drawn, painted, photographic and three-dimensional images and symbols.

The importance of good graphic design is widely recognised in industry and commerce, not only for advertising purposes but also in publishing, the promotion and training departments of private and nationalised industries, film and television studios, government departments and many other related fields.

There is a well established need for designers who have a good educational background, and whose training equips them to take charge of the design and production of printed matter from the time when it is first commissioned to its eventual production, often in many thousands of copies. The designer may be required not only to take charge of the visual aspects of the work but also to make a detailed analysis of his client's practical needs, to commission specialists in such fields as illustration and photography, and to control production of the finished product.

BTEC Higher National Diploma in Design Crafts: Wood/Metal/ Ceramics

Course Leader: D Harper

This is a two-year full-time course for students interested in a professional career in wood, metal, ceramics. The course includes the study of both studio and industrial design and production and leads to a Higher National Diploma in Design Crafts awarded by the Business and Technician Education Council (BTEC). Students are also encouraged to apply for Diploma Membership of the Society of Industrial Artists and Designers and Licentiateship of the Society of Designer-Craftsmen.

The course is seen as having three major phases: the development of skills and sensibilities in handling of materials and the production of models, prototypes and finished three dimensional work to professional standard; the development of problem solving abilities through design and workshop activity; and the development of individual qualities of design and craftwork through a creative response to practical problems and personal ideas.

Qualifications for entry: Applicants must be 18 years of age by 31st December in the year of entry and hold
(a) a DATEC Diploma in Three-dimensional Design, Design Crafts, Industrial Design, or General Vocational Design;
or
(b) a DATEC Certificate in the above subjects, with additional experience;
or
(c) attainments comparable with a DATEC Diploma, with relevant knowledge and skills i.e. a Foundation Course in Art and Design or relevant employment experience.

Applicants will be required to attend an interview and to present a portfolio of their work.

1st Year
Curriculum: Drawing; Craft practice;

Industrial practice; Decorative techniques; Design methodolgy; Design and craft projects; History of design; Business studies; Professional practice; Materials and production technology.

Course duration: September to July (35 weeks)

Examinations: Internal

2nd Year

Curriculum: As above.

Course duration: September to July (35 weeks)

Examinations: Internal examination and assessment with external moderation by BTEC. External assessment for Diploma Membership of the SIAD and Licentiateship of the SDC.

Careers in Design Crafts

In the field of art and design, craft activity is playing an increasingly important role. Many more students are interested in pursuing artist-craft and designer-craft studies as a means of combining a personal desire for individual creative expression and potentially good vocational opportunities.

Today greater emphasis is placed on the possibilities of designing, making and selling ones own creative work, or working with others as a craftsman in a small studio workshop, craft centre or similar environment. These situations to many people provide the ideal opportunity to practise as an individual artist or designer and have a direct commercial outlet for their creative work. Equally relevant is the fact that areas of product manufacturing industry are employing designers who have the same or similar highly developed craft skills as those required in studio workshops and craft centres. These practical skills are valued because they can always be put to good use solving the diverse problems of studios tackling a wide range of product development work.

Personal choice of career or life style in general depends on individual interests, aptitudes and ambitions, but certain craft skills and sensibilities are universally valued and these can open up a wide range of vocational possibilities. It is with the development of specific craft skills and design sensibilities in individuals that this course is concerned. Encouraging the application of intelligence and imagination is also provided, as is the fostering of appropriate personal and professional attitudes but the primary concern is with achieving a balance of particular practical skills, technical knowledge, aesthetic appreciation and design ability.

Foundation Course in Art and Design

Course Leader: G Fletcher

A one year full-time course which provides a basic education in the practice, history and philosophy of art and design for (a) students wishing to proceed to advanced specialist courses in one or other of the various branches of design for industry, or (b) those wishing to pursue courses leading to honours degrees in Art and Design.

Qualifications for entry: Applicants should be not less than 17 years of age by 31st December of the year of entry.

Applicants will normally be required to have the general education attainment specified by the Council for National Academic Awards for entry to first degree courses in Art and Design, i.e.

(a) a General Certificate of Education with passes (grades A, B or C) in five subjects at Ordinary level.
(b) a General Certificate of

Education with passes in four subjects, including one subject at Advanced level.
Note: passes at Grade 1 in the Certificate of Secondary Education are acceptable in place of passes at Ordinary level in the General Certificate of Education.
(c) such qualifications as the Council deems to be acceptable in lieu of (a) or (b) above.

Applicants who expect to meet these requirements when applying for admission to the course but fail to do so may be admitted to the course on the understanding that they will re-take the subjects in which they have failed.

Exceptionally, students who do not meet the normal general education requirements for entry may be admitted if they show special ability in, and a deep commitment to, Art and Design with a view to apply ultimately to a higher DATEC course. Applications should be made as early as possible in the year of entry.

Course objectives and activities: The Foundation course has two principal objectives: one, to introduce students to the wide range of activities that are collected under the general title of Art and Design, so that candidates for admission to degree or other advanced courses can make an informed choice as to which course or courses to apply for; the other, to enable students to acquire the basic knowledge and skills that will be required on entry to an advanced course in Art and Design. The course also enables students to produce a folio of original creative work which is of the standard expected by polytechnics and colleges offering Honours Degree courses in Art and Design.

Curriculum: Drawing, painting, 3-dimensional construction, visual perception and the use of colour. Opportunities are provided for work with specialist staff from the BA Honours Degree courses, and with visiting staff who have their own professional design practices. All students take a course in History and Theory of Art and Design and are expected to take part in a three-day residential visit and one-day visits away from college.

Course duration: September to July (35 weeks)

Students are expected to attend a one-day introductory course in June prior to the commencement of the course in September.

Entry to Advanced Courses from the Foundation Course

Students prepare a folio of work for submission to the Selection Boards of BA and other advanced courses and staff provide information and advice on the courses most likely to meet each student's individual needs.

FACULTY OF BUSINESS & MANAGEMENT

Dean of Faculty: TJ Squires BCom MSc MA FBIM
Faculty Registrar: NP Maynard DMS MBIM

BA (Hons) in Accounting
Foundation Course in Accountancy
Graduate Conversion Course in Accountancy
BA (Hons) in Business Studies
BTEC Higher National Diploma
BA and BA (Hons) in Law
Diploma in Management Studies

The Faculty offers a wide range of full-time, sandwich, block release, part-time and short courses, leading to qualifications in business studies, management, public administration, the professions and to degrees in Accounting, Business Studies and Law, validated by the CNAA. Attractive career opportunities are available to successful students and more career information is detailed in subsequent pages.

Courses now being developed:
BA(Hons) in Business Administration
BSc (Hons) in Business Information Technology

The proposed new BA is a three year full-time degree course designed to provide the graduate with a stimulating education for employment in administrative management. The degree will provide the student with the disciplinary input which is fundamental to an understanding of business activity and its environmental determinants. Unique to this degree are the introduction of Keyboard skills and the opportunity to study note taking, or a foreign language or communications within a corporate context. The degree also aims to produce graduates who are able to understand the need which organisations now have for efficient information systems.

Subject to CNAA approval the course will be offered from September 1985.

The proposed new BSc is a four-year sandwich degree course. The development of this proposal is at an earlier stage than the BA, but is designed to equip graduates for a career in either management or information system design.

The course will produce graduates who have the knowledge and expertise to make decisions about critical aspects of the use of information technology in business. Graduates will be able to analyse, evaluate and specify IT systems and be able to appreciate and forecast the changes in management structures and production methods necessary to maximise the commercial benefits of IT. Students will make substantial use of the computerised information system of a simulated company, and will acquire many of their business skills using this medium.

Subject to CNAA approval the course will be offered from September 1985.

The courses are the responsibility of the six Schools within the Faculty:
School of Accounting and Finance
School of Administrative Studies
School of Economics
School of Law
School of Management Sciences
School of Organisation Studies

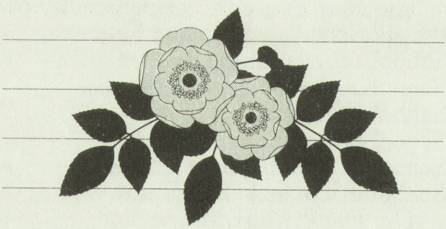
The Faculty of Business and Management has grown rapidly in the last few years and has become a large and well rounded business and management centre reflecting the high priority which the Polytechnic attaches to these areas of study. The Faculty seeks to provide courses of study at all levels of higher education which maximise students' capabilities; entry requirements range from one 'A' level

or good BTEC National Diploma or Certificate to degree or equivalent for postgraduate studies, although mature candidates without these qualifications are always encouraged to apply. Such applications will be individually considered.

Close links have been developed with Industry, Commerce and the Public Authorities in Lancashire, Cumbria and other regions and visiting lecturers from these sectors are involved with the Faculty's courses.

The Dean has general oversight of courses within the Faculty and the Faculty Office handles the administrative arrangements for admissions to full-time and sandwich courses. Initial enquiries should be made to the Faculty Registrar, telephone Preston 22141.

The Faculty offices, together with the School of Law and School of Management Sciences are located in Adelphi Building, the School of Accounting and Finance and the School of Economics in Marshall House and the School of Administrative Studies and the School of Organisation Studies in Robin House. For general enquiries telephone Preston 262495; for admission enquiries, telephone Preston 262412.



The Harris Library, Art Gallery and Museum


HARRIS ST

School of Accounting and Finance

Head of School: RW Wallis BCom IPFA

BA (Hons) in Accounting

Course Leader: MHC Lunt

A three-year full-time course validated by the CNAA leading to the award of BA with Honours in Accounting. The degree provides a broadly based education for students interested in accounting, who may be contemplating a career in accountancy and finance.

The course has been designed to enable students to understand the social, legal, economic and organisational environment of the accounting process, to explore the theoretical foundations of accounting and to examine current practice, problems and developments.

The course will provide for student participation in 'workshops' in accounting practice and the practical use of computers in problem-solving and data processing. It provides a distinctive treatment of the human aspects of accounting and financial control. Options in the final year allow students to select subjects relevant to their possible career needs.

Qualifications for Entry: The normal minimum entry qualifications are one of the following:

(i) a General Certificate of Education in five subjects including English Language and mathematics, of which at least two should be at Advanced level.

(ii) a General Certificate of Education in four subjects, including English Language and Mathematics, of which at least three should be at Advanced level.

(iii) a good standard of pass in the BTEC National Diploma or Certificate.

Qualifications deemed by the Polytechnic to be of equivalent standard to those stated above may be accepted as satisfying the entry requirements. Applicants without an Ordinary Level pass in English Language will have to satisfy the Polytechnic of their competence in written and spoken English.

Candidates who have successfully completed a Foundation Course in Accountancy, a BTEC HND Board 2 (Financial Studies) or other similar qualification may be permitted to enter the second year of the course.

Curriculum: Year 1 — Accounting 1, Computer Studies, Economics 1, Law 1, Organisation Studies 1, Quantitative Analysis 1, Business Seminars.

Year 2 — Financial Accounting I, Management Accounting and Control Systems I, Economics 2, Law 2, Organisation Studies 2, Quantitative Analysis 2.

Year 3 — Financial Accounting II, Management Accounting and Control Systems II, Behavioural and Social Aspects of Accounting, Business Finance and Financial Management plus *two* from Auditing, International Accounting, Public Sector Accounting, Theory and Practice of Taxation, Law of Corporate Finance, Operational Research, Project.

Examinations: Examinations are taken in each subject at the end of each year. In all three years performance is also evaluated by the completion of course work assessments. The final Honours Degree classification (First, Upper Second, Lower Second, Third) will be based upon performance in the second and third years.

Exemptions: The degree gives significant exemptions from the examinations of all the major

professional accountancy bodies, and a reduction in the training period.

Careers: For career opportunities see the end of the Accounting and Finance section.

Examinations: Internal, externally assessed.

Careers: For career opportunities see the end of the Accounting and Finance section.

Foundation Course in Accountancy

Course Leader: GK Woodhall

This is a one year full-time course aiming to provide a sound and appropriate educational base for subsequent professional accountancy studies and practical training.

The course introduces the student to the fundamental principles and concepts of accounting within the context of the economic, legal, and organisational environment in which accountancy is practised. At the end of the course the student can be expected to have developed those skills needed to embark upon a career in accountancy and finance.

In addition to the traditional teaching methods of lecture, seminar and tutorial for each subject, 'workshops' are held in which groups of students carry out practical book-keeping, accounting and computer programming exercises under the supervision of a tutor.

Students who complete the course successfully are exempted from the Foundation examinations of the four professional accountancy bodies mentioned below. Alternatively, the successful student may be permitted to join the second academic year of a degree course in accounting or business studies, provided certain minimum conditions are met.

Qualifications for entry: Applicants should normally be not less than eighteen years of age on the 1st September of the year of entry, and hold the GCE in at least five subjects, including both English Language and Mathematics. Two of the five subjects must be at advanced level. Alternative qualifications will be considered. Full details of the requirements for membership and admission to foundation courses may be obtained from:
The Institute of Chartered Accountants in England and Wales, PO Box 433, Chartered Accountants' Hall, Moorgate Place, London EC2 2BJ
The Chartered Institute of Public Finance and Accountancy, 1 Buckingham Place, London SW1E 6HS
The Association of Certified Accountants, 29 Lincoln's Inn Fields, London WC2A 3EE.
The Institute of Cost and Management Accountants, 63 Portland Place, London W1N 4AB.

Curriculum: Accounting 1 (Financial Accounting), Accounting 2 (Management Accounting and Organisational Control), Economics, Law, Quantitative Analysis, and Computer Studies.

Course duration: September to June (31 weeks)

Examinations: Internal, externally assessed.

Careers: For career opportunities see the end of the Accounting and Finance section.

Graduate Conversion Course in Accountancy

Course Leader: M Edwards

A one term, full-time course providing exemption for non-relevant or partially relevant graduates from the Foundation examinations of the professional

accountancy bodies. The course is approved by the following accountancy bodies:

(a) The Institute of Chartered Accountants in England and Wales
(b) The Chartered Institute of Public Finance and Accountancy
(c) The Association of Certified Accountants

Qualifications for entry:
(i) a degree of any University of the United Kingdom or Republic of Ireland.
(ii) a degree awarded by the Council for National Academic Awards.

Curriculum: Accounting, Economics, Quantitative Methods, Law.

Course duration: September to December (12 weeks)

Examinations: Internal, externally assessed.

Careers in Accountancy and Finance

There are many careers which involve a knowledge of accounting and finance. These may be classified as follows:

Practice: Practitioners offer a variety of services to both individual members of the public and businesses of all types. Amongst the services provided are: the preparation of financial accounts and statements, auditing company accounts, advising on taxation matters, and acting as financial and management consultants.

Industry and Commerce: Accountants provide financial services aimed at promoting organisational efficiency. The work calls for creative and imaginative thinking in devising management information systems. Many accountants are directors of major British and international companies.

Public services: There are careers in local government, the district audit service, the health service, public corporations, nationalised industries, educational institutions and many other non-profit seeking bodies.

Education: Accounting and finance is taught in universities, polytechnics and colleges of further education. Freelance lecturing and financial journalism are also possibilities.

Overseas: The EEC and Commonwealth countries, as well as other developed and developing countries provide expanding opportunities for financial and accounting specialists.

Many careers do not depend upon a person obtaining a professional accountancy qualification, though for some this is a necessary requirement. Generally, a knowledge of accounting and finance is desirable for anyone wishing to pursue a career in industry, commerce, business or public service since all forms of organisation require finance and some form of accounting system.

School of Economics

Head of School: Professor F Livesey BA(Econ)

BA (Hons) in Business Studies

Course Leader: NW Protheroe

A four-year sandwich course validated by the CNAA leading to the award of BA with Honours in Business Studies. The course is divided into two parts — Part I over six terms and Part II over three terms — the two parts are separated by an Industrial Training period of one year.

Part I provides a broad education in major disciplines relevant to an understanding of and a career in commercial and industrial enterprises. In Part II students may specialise in one of four areas: Marketing Studies, Manpower Studies, Finance Studies, or Decision Studies *or* may continue their education on a broader front considering some aspects of all four of these.

Work-based students will be those already employed or those recruited for secondment to the course. In such cases the employer will provide the period of practical training. Polytechnic-based students will be those joining the course on their own initiative. Help will be given to them in finding suitable practical training, and this may be undertaken with more than one organisation to widen the students' experience.

Qualification for entry: The normal minimum entry qualifications are one of the following:

(i) a General Certificate of Education in five subjects, including English Language and Mathematics, of which at least two should be at Advanced Level.

(ii) a General Certificate of Education in four subjects, including English Language and Mathematics, of which at least three should be at Advanced Level.

(iii) a good standard of pass in the BTEC National Diploma or Certificate.

Qualifications deemed by the Polytechnic to be of equivalent standard to those stated above may be accepted as satisfying the entry requirements. Applicants without an Ordinary Level pass in English Language will have to satisfy the Polytechnic of their competence in written and spoken English.

Candidates who have successfully completed a Foundation Course in Accountancy or other similar qualification may be permitted to enter the second year of the course.

Curriculum: Part I — Economics[I], Accounting[I], Law[I], Organisation Studies[I], Quantitative Analysis[I], Computer Studies. In addition students attend a programme of Business Seminars.

Part I (Sixth term) — Marketing Studies, Finance Studies, Manpower Studies and Decision Studies

Part II (Final year) — All students take Business and Society and present a project. Each student chooses one of the following five combinations.

(a) Marketing — comprising Marketing Management, Marketing Research, Buyer Behaviour and Communications, Legal and Social Constraints on Marketing.

(b) Finance — comprising Financial Control, Business Finance and Financial Management, Monetary Economics, Law of Corporate Finance.

(c) Manpower — comprising Human Resource Management, Industrial Relations, Human Resources and Labour Markets, Manpower Planning.

(d) Decision — comprising Management Science, Operational Research, Economic and Business Planning, Business Statistics.

(e) General — comprising Marketing

Management, Financial Control, Human Resource Management, Management Science.

It is not necessary for the student to decide which of these he/she will take until the end of Year 3. This decision can then be based upon his/her experience and career intentions.

Throughout, the course consists of a combination of lectures, seminars, tutorials, practical exercises and case studies.

Assessment: Throughout the course, assessment will be based upon a combination of course work and examinations, formal examinations being held at the end of years 1 and 4.

Careers: For career opportunities see page 47.

School of Law

Head of School: Mrs PA Thomas LLB LLM

BA and BA (Hons) in Law

Course Leader: CJ Carr

A three-year full-time degree course validated by the Council for National Academic Awards leading to the award of BA or BA with Honours in Law.

The degree is designed to provide a stimulating and interesting undergraduate study of law which, while providing students with a legal education fully comparable in content and style to that of other degrees, possesses a number of distinctive features of its own.

In the first year the students are introduced to the legal process not only by lectures and seminars but by visits to courts, mooting and lectures by outside specialists on such matters as the administration of the courts, tribunals , the prison and probation services.

Over the final two years of the course a wide range of optional subjects ensure flexibility and the opportunity for students to develop their particular interests. These provide an academic introduction to the study of subjects associated with professional practice as well as the opportunity for studying a wider range of legal subjects.

An opportunity is also provided for the study of the social and interdisciplinary aspects of the law in such matters as the sociology of the legal process and criminal and deviant behaviour, while students with a particular taste for field work and research may opt to do a supervised project in the third year. Additionally, subject to student demand, options are available in the study of the French and German languages.

Qualifications for entry: The normal minimum entry qualifications are one of the following:

(i) a General Certificate of Education with passes in five subjects, including two subjects at Advanced Level and an Ordinary Level pass in English Language.

(ii) a General Certificate of Education with passes in four subjects, including three subjects at Advanced Level and an Ordinary Level pass in English Language.

(iii) a good standard of pass in the BTEC National Diploma or Certificate.

Those students who wish to study for the foreign language options will be required to possess an Advanced Level pass in a relevant language.

Curriculum: First Year — Constitutional Law, Law of Contact, Law of Torts, English Legal System. Legal Methods is studied in the first term while in the second term Foundation Courses in Languages, Sociology of the Legal Process and Politics and the Law are available.

Second Year — Criminal Law, Equity, Land Law and either Consumer Law, Labour Law, Administrative Law, Family Law or Public International Law and either Politics and the Law, Sociology of the Legal Process or Languages I.

Third Year — A choice of five from Consumer Law, Labour Law, Administrative Law, Family Law, Public International Law, Company Law, Conflict of Laws, Law of the EEC, Law of Evidence, Jurisprudence, Public Control of Land, Revenue Law, Criminal and Deviant Behaviour, a Project and Languages II.

Examinations: Examinations are held at the end of each year, and are internally set and externally assessed.

Professional Exemption: The degree qualifies for exemption from Part I of the professional examinations of the Law Society (solicitors) and the Council of Legal Education (barristers) subject to the minimum standards required by those bodies.

NB. The course structure and syllabuses are currently under review. Certain proposed changes will take effect from September 1984, subject to the approval of the CNAA.

School of Management Sciences

Head of School: P Hewitt BSc MTech

Diploma in Management Studies

Course Leader: PC Oastler

The Diploma in Management Studies is a postgraduate/post-experience qualification awarded by the Council for National Academic Awards (CNAA). The Diploma course seeks to provide students with a basic knowledge of the background to industry; to raise their general level of understanding of management processes; and to acquaint them with the tools and techniques of management. It is designed to suit the needs of suitably qualified men and women who already have, or aspire to, management responsibilities, and also those who are changing careers or returning to employment.

The course comprises two stages of full-time study over a period of 8 months, commencing in late September and ending early in the following June. The first stage is broadly based and enables students of differing ages and experience to acquire a uniform background of knowledge before proceeding to the second (final) stage. Entry to the second stage is conditional upon satisfactory performance in stage one — assessment is based on both course work and written examinations.

Curriculum: Stage I (12 weeks): Nature of Management, People and Organisations; Economic and Financial Aspects; Operations Management. Stage II (18 weeks): Nature of Management (including Business Analysis, Management Skills Development), People Organisations (including Industrial Relations, Behaviour in Organisations, Human Resource Management), Financial and Economic Aspects (including Managerial Economics and Management Accountancy), Operations Management (including Operations Research and Production Planning and Control), and Corporate Policy (including Business Policy and Marketing).

Each student will be required to carry out a project in one of the subject areas covered by the course. The project will normally be industry-based, but, in appropriate cases, may be library-based.

The Diploma in Management Studies will be awarded only to those students who achieve a satisfactory level of performance in written examinations (externally assessed); in their project dissertation; and in course work.

Qualification for entry: For entry to Stage I of the DMS a student must hold either:

(i) a degree of a British University or the CNAA; or

(ii) a BTEC Higher National Diploma or Higher National Certificate; or

(iii) an appropriate grade of membership of a professional body approved by the CNAA for this purpose; or

(iv) another acceptable qualification of equivalent standard.

Students should preferably be at least 23 years of age before commencing Stage I. Students of 27 years or over without the above qualifications, but with at least four years' experience of suitable professional or administrative responsibility may be admitted providing they can demonstrate that they are capable of profiting from and contributing to the course. Students who have obtained certain qualifications may be exempted from Stage I.

Successful students may display the letters DMS after their names and with approved managerial experience are also eligible for corporate

membership of the British Institute of Management.

Polytechnic Certificate in Management Studies

Course Leader: PC Oastler

The Stage I of the Diploma in Management Studies is offered in its own right and successful students will be awarded a Polytechnic Certificate. The same entry requirements as the DMS Stage I apply but students aged less than 23 will be considered.

Stage II of the DMS may be completed at a future date.

School of Organisation Studies

Head of School: Martin D Gibson BSc MSc DLM AIPM

BTEC — Higher National Diploma

Course Co-ordinator: VJ Seddon

The Higher National Diploma is validated by the Business and Technician Education Council and is awarded on completion of one or two schemes.

(i) Full-time — A two year full-time course of study.

(ii) Sandwich — A three year course with the first and third years spent in the Polytechnic and the second year in industry.

The content of the two years in the Polytechnic is the same for both schemes.

The Boards of Study in BTEC Courses

BTEC offers several areas of business education and the Polytechnic provides courses in:

Business Studies (general management)
Financial Studies (accounting and company administration)
Public Sector Studies (local government, public corporations, public agencies)

Courses for Distribution Studies are not offered at the Polytechnic.

Since the merger of BEC and TEC these areas of business education are now co-ordinated by the following Boards:

Board 2 Business Finance (previously Boards B1 and B2)
Board 8 Public Administration (previously Board B4).

Students who wish specifically to train for careers in Finance or the Public Sector must register with the appropriate Board at the time of enrolment. This then commits them to

the study of specialist modules (Board cores) during the course. Other students who intend to take up careers involving marketing, personnel management, general management, foreign languages and/or secretarial management will register with Board B2 (Business Studies).

Minimum admission requirement: For admission to full-time or sandwich HND:

(a) a BTEC National level award from a College of Further Education, or
(b) an Ordinary National Certificate or Diploma in Business Studies under pre-BTEC regulations, or
(c) an Ordinary National Certificate in Public Administration, or
(d) four different GCE's with one at 'A' level, the 'O' levels being passed at grades, A, B, C (or the equivalent), or
(e) a qualification accepted by BTEC as equivalent to one of the above.

HND students normally must be at least 18 years of age, have completed compulsory secondary education or its equivalent and be competent in the English language, usually evidenced by 'O' level or other school-leaving certificate.

Applicants over 21 without any of the above qualifications will be considered on an individual basis and may be admitted at the Polytechnic's discretion. Such applications will be considered in relation to alternative qualifications, relevant work experience and an interview.

BTEC — Higher National Diploma

Course Leader: To be appointed

Business Studies

Curriculum: Year 1 — The Business Environment, Organisation Studies, Introduction to Decision Studies, Resources for Business and TWO from: Business Law, Business Computing, Government and the Economy, British Politics and Government, French, German, Spanish, Shorthand and Typewriting. Bi-lingual Administrators take The Business Environment, Organisation Studies, Resources for InformationI, Office Communication I, two languages or one language plus either Business Computing or Government and the Economy.

Year 2 — People and Organisations, Business Planning together with FOUR option modules. For example, students wishing to specialise in Personnel could select Personnel Administration, Industrial Relations, Employment Studies, and one other option. A Marketing specialist could select Marketing Analysis, Marketing Communications, Marketing Research, and Buyer Behaviour. A Language specialist might select from one or two languages, Britain and the European Communities, Personnel Administration, Marketing Analysis. A Secretarial specialist would select Executive Secretarial Studies, Office Administration, Personnel Administration and one other option. Bi-lingual Administrators take People and Organisations, Introduction to Decision Studies, Resources for Information II, Office Communication II, two languages or one language plus either Administrative Management Services or Britain and the European Communities.

It is a minimum requirement of admission to the Bi-lingual Administration stream that one 'A' level be offered in a modern foreign language from French, German and Spanish. The second language may be offered at 'O' level or studied *ab initio.* Single foreign language students choose from a list of optional modules instead of the second language.

Exemptions: Completion of appropriate option modules in B2 (Business Studies) can give substantial exemptions in the

Institute of Marketing. Institute of Personnel Management and other professional bodies.

Financial Studies

Curriculum: Year 1 — The Business Environment, Organisation Studies, Introduction to Decision Studies, Financial Accounting 1, Business Law and Business Computing.

Year 2 — People and Organisations, Cost Accounting, and FOUR from Financial Accounting II, Quantitative Analysis, Auditing, Company and Commercial Law, Management Accounting and Computer Information Systems.

Exemptions: Completion of appropriate option modules in B2 (Financial Studies) can give substantial exemptions in the Institute of Chartered Secretaries and Administrators and Institute of Certified Accountants.

Public Sector Studies

Curriculum: Year 1 — The Business Environment, Organisation Studies, Introduction to Decision Studies, Public and Social Administration, and TWO from Business Law, Business Computing, Government and the Economy, British Politics and Government.

Year 2 — People and Organisations, Public Sector Planning and FOUR from Local Government Administration, Personnel Administration, Industrial Relations, Britain and the European Communities, Administrative Management Services.

Exemptions: Completion of appropriate option modules in B8 can give substantial exemptions in the Institute of Chartered Secretaries and Administrators, Institute of Personnel Administration and other professional bodies.

Progress after BTEC HND

Each year a number of students who have achieved the BTEC HND with Distinction or above average grades go on to postgraduate courses at universities and polytechnics. A number also transfer to the BA(Hons) Business Studies course — normally into Year 2 of that course.

Careers in Business or Public Administration

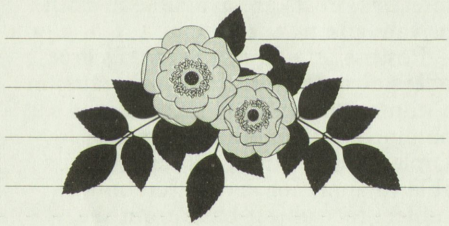
Careers in business include General Business Administration or the specialised fields of Finance, Accountancy, Marketing, Banking, Company Secretaryship, Exporting, Insurance, Local Government, Industrial Relations and similar interests. Posts are available in both private and public sectors.

Possession of an Honours Degree offers a route to professional status in a number of areas. A student who has obtained an Honours Degree or Diploma in Business Studies will be able to apply for exemption on a subject for subject basis from the examination of the major professional associations concerned with Accountancy, Banking, Insurance, Marketing, Transport, Company Secretaryship, Work Management, Personnel Management.

FACULTY OF SCIENCE

Dean of Faculty: PM Young BA, MSc
Faculty Registrar: PA Clark MA BSc

BTEC Higher National Diploma in Applied Biology
Graduate Membership of the Royal Society of Chemistry
BTEC Higher National Diploma in Physical Science (Chemistry)
BTEC Higher National Diploma in Physical Science (Physics)
BSc (Hons) and BSc in Psychology
BTEC Higher National Diploma in Sciences



School of Applied Biology

Head of School: To be appointed

BTEC Higher National Diploma in Applied Biology

Course Leader: Dr CJ Sutherland

A two-year full-time course which includes specialist options, the student choosing two from Biochemistry, Microbiology and Physiology (applied aspects of these options include Pharmacology, Biodeterioration and Biotechnology). The Diploma allows entry to courses leading to qualifications awarded by the Institute of Biology. There is also the possibility of transfer from first year Higher National Diploma to a BSc course for exceptionally able students. The course is unit based and the HND is awarded on the successful completion of 20-24 units.

The Higher National Diploma is a recognised and acceptable qualification for entry to many industries and Government establishments. The diploma is acceptable for entry to some teacher training courses and also to courses leading to professional qualifications in biology and medical laboratory sciences.

Qualifications for entry: For entry to the 1st year of the course the minimum requirement is that the student must either:

(a) have completed the course for two science subjects to the Advanced level of the General Certificate of Education and have passed the examination in at least one of them. These subjects should be a biological subject and chemistry or a physical science.

In addition there must be passes at the Ordinary level of the General Certificate of Education (or a higher level) in:
(i) mathematics and
(ii) physics or a physical science or physics with chemistry or general science I and II and
(iii) a subject testing the ability to use English

or

(b) have a BTEC Certificate or Diploma in Science which includes the following subject areas, or their equivalent, to the levels indicated below:
Level I Safety and Laboratory practice
Level II Mathematics, physics
Level III Biochemistry, biological techniques, and either physiology or biology

or

(c) other equivalent qualifications.

1st Year

Tutor: Dr R Cotton

Curriculum: 60 hour units in each of physics, chemistry, physiology; 30 hour units in each of computing, microbiology, general and communication studies; 90 hour units in each of biochemistry and cell biology, mathematics and statistics; 120 hour units in biomeasurement.

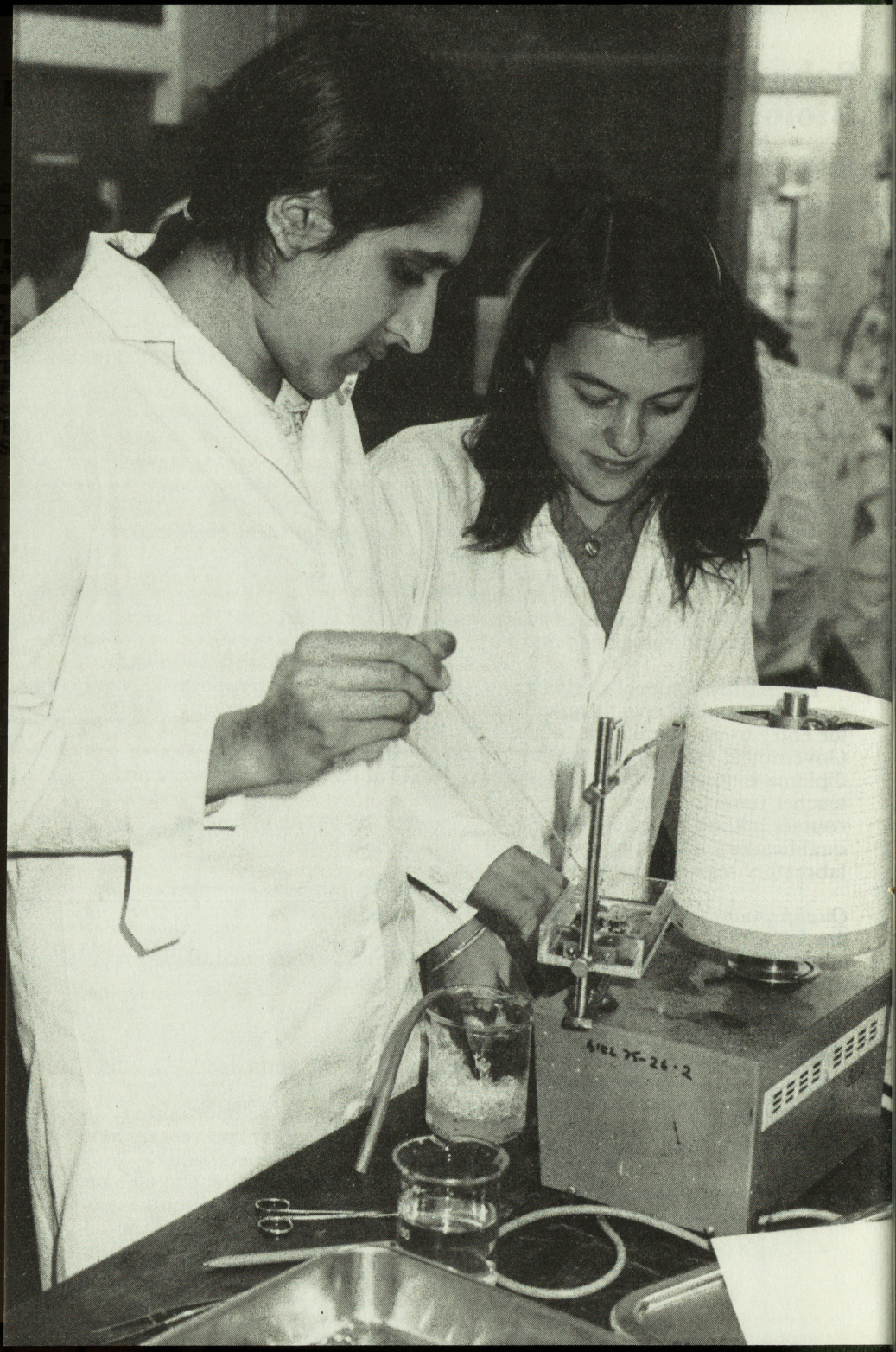
Course duration: September to July (35 weeks)

Examinations: Internal; BTEC moderated.

2nd Year

Tutor: Dr CJ Sutherland

Curriculum: one 60 hour unit in evolution, diversity and ecology; one 60 hour unit in general and communication studies; one 60 hour project unit; one 30 hour unit in plant physiology. In addition the



student chooses two of the following three streams; each stream consists of three units and all units are of 60 hours duration:
Stream A: physiology, pharmacology *and* immunolgy *or* plant environmental physiology.
Stream B: biochemistry, biotechnology *and* nutrition *or* pest control.
Stream C: microbiology, biodeterioration *and* immunology *or* pest control.

Industrial experience: All students must spend a least 300 hours working as laboratory technicians in industry or in college based work which simulates an industrial laboratory. This industrial experience exercise will normally take place in the last 5 weeks of the academic year and/or the holiday periods.

Course duration: September to July (35 weeks)

Examinations: Internal BTEC Moderated

Qualification: BTEC Higher National Diploma in Applied Biology.

Careers in Biology
There is a steady demand for biologists with degree and higher national diploma qualifications in teaching, research, industry, hospital or veterinary laboratories. The employment prospects will depend on the previous course studied, but biochemists, physiologists and microbiologists are required in medical and paramedical laboratories and by food and drug industries. Ecologists and microbiologists are required in agricultural and water industries, and many biologists work for local authorities, the brewing industry, and the fishery industry, both in the Government and the private sector.

Physiology Practical Class

School of Chemistry

Head of School: To be appointed

Note: The BSc/BSc(Hons) Combined Sciences course has merged with the BA Humanities course to form the BSc/Bsc(Hons) Combined Studies course. Information on this course is given on page 86.

Graduate Membership of the Royal Society of Chemistry (Four Year Sandwich Course) and BTEC Higher National Diploma in Physical Science (Chemistry), (Three Year Sandwich Course).

Course Leaders: Dr JW Dodd, Dr D Mason

A polytechnic based sandwich course. Industrial training is introduced in the second half of the first and second years. Students wishing to proceed to GRSC examinations will be required to pass *either* mathematics and physics BTEC units *or* GCE Advanced level mathematics and physics. Continuous assessment and examinations are introduced during each unit and on completion of the unit the student is awarded a pass, a pass with merit or with distinction. A BTEC Higher Certificate (10 units) and/or a BTEC Higher Diploma (20 units) is awarded on passing the specified number and types of units. At the end of the third year, students may sit the Part I examination of the Graduateship of the Royal Society of Chemistry. A supplementary course in advanced analytical chemistry, is offered. Success in the Higher National Diploma and the advanced analytical chemistry course or success in the GRSC Part I examination may qualify a student for admission to the Licentiateship of the Royal Society of Chemistry. The Part II of the RSC examinations, success in which gives the academic qualification for

admission to Corporate Membership of the Royal Society of Chemistry, is taken at the end of the fourth year.

Qualifications for entry: GCE 'O' level passes (Grade C) in English language, mathematics and *either* two science subjects and one arts subject *or* two arts subjects and one science subject, together with *either* a GCE 'A' level pass in chemistry with evidence that mathematics and physics have been studied to a standard beyond the 'O' level syllabus; *or* an Ordinary National Certificate in Science with a pass in elective Chemistry or a BTEC Certificate in Sciences with studies in Chemistry and Laboratory Techniques at Level III and studies in Mathematics and Physics at Level II, or completion of Open College course with passes in appropriate units totalling at least Four Stage A and one Stage B unit. Other combinations of entry qualifications may be acceptable: the Course Leader should be consulted. Success in Polytechnic examinations taken during the course provides the additional qualifications for entry to Part I and Part II of the Graduate Membership examinations.

1st Year

Tutor: Dr BM Smallwood

Curriculum: Inorganic chemistry: chemical bonding, atomic structure, valency, typical elements, radio-chemistry; organic chemistry: electronic theory of organic chemistry and its implications to functional group chemistry, stereochemistry I; physical chemistry: first law of thermodynamics, chemical kinetics, kinetic molecular theory of gases, electrochemistry; general physics; mathematics; general studies.

Course duration: September to March (24 weeks)

Examinations: Each unit has a set of assessments and an end of unit test.

2nd Year

Tutor: Dr C Mortimer

Curriculum: Inorganic chemistry: transition elements, co-ordination compounds, carbonyls, nitrosyls; organic chemistry: further reaction mechanisms, aromatic chemistry, stereochemistry II; physical chemistry: second and third laws of thermodynamics, electrochemistry (galvanic cells), phase equilibria, colloid and surface chemistry; environmental studies; advanced analytical chemistry; general and related studies.

Course duration: September to March (24 weeks)

Examinations: Each unit has a set of assessments and an end of unit test.

Qualification: BTEC Higher National Certificate in Physical Science (Chemistry).

3rd Year

Tutor: Dr RG Brown

Curriculum: Inorganic chemistry: comparative chemistry of the groups, review and extension of theoretical chemistry, solution chemistry; organic chemistry: alicyclic and heterocyclic chemistry, stereochemistry III; physical chemistry: review and extension of thermodynamics, thermodynamics of solutions, structural chemistry, chemical kinetics; environmental studies; advanced analytical chemistry; related studies.

Course duration: September to July (35 weeks)

Examinations: Each BTEC unit has a set of assessments: GRSC Part I examination.

Chemistry Practical Class

Qualification: BTEC Higher National Diploma in Physical Science (Chemistry), GRSC Part I

4th Year

Tutor: Dr G Dyer

Curriculum: review and extension of chemical subjects studied: recent advances in inorganic, organic and physical chemistry; general professional topics.

Course duration: September to July (35 weeks)

Examinations: GRSC Part II

Qualification: Graduate Membership of the Royal Society of Chemistry

Graduate Membership of the Royal Society of Chemistry (Two Year Course)

Course Leader: Dr D Mason

A full-time course leading to the Graduate Membership examinations of the Royal Society of Chemistry.

The chemical subject matter of the course is identical with that of the third and fourth years of the four-year course.

Success in the GRSC Part I examination, which is taken at the end of the first year, qualifies a student for admission to the Licentiateship and for entry to the second year of the course. The GRSC Part II examination is taken at the end of the final year.

Qualifications for entry: BTEC HNC or HND or equivalent and passes in mathematics and physics at GCE advanced level or BTEC level III standard. The course duration, examinations and qualifications are the same as those descibed in the 3rd and 4th years of the four year course.

Corporate Membership of the Society of Chemistry

The Royal Society of Chemistry is the acknowledged professional organisation for chemists, its members being engaged in the advancement, teaching and practice of chemistry and its application in industry and the public service. The standard required of applicants for Membership is not less than that required for a good honours degree of a British university, and success in Part II of the Society's Graduate Membership examination is recognised by most universities as a qualification for entry to their research schools and the subsequent award of a higher degree. There are three grades of membership: Licentiate (LRSC), Membership (MRSC) and Fellowship (FRSC); and all candidates applying for Licentiateship membership must have had one or two years experience in the practice of chemistry. Candidates applying for full membership (MRSC) must have had three years experience in the practice of chemistry which must include the appropriate period of counselled experience. Only candidates qualifying for full membership (MRSC or FRSC) are designated Chartered Chemist (CChem), a qualifiaction which is recognised in both Britain and European countries.

Students taking GRSC courses must register as Student Members of the Society and should write for details to: Registrar, The Royal Society of Chemistry, 30 Russell Square, London WC1. Students receive literature from the Society and may attend meetings of its members.

Careers in Chemistry

The work of a chemist may involve teaching, research, development, production and control,

There is a national shortage of graduate chemistry teachers, particularly those with some industrial experience.

The GRSC is recognised by the Department of Education and Science as academic teaching qualification for science teachers.

Pure or fundamental research is work on projects which may not have any immediate applications but will add to the store of existing knowledge and have a long term influence upon new products and production methods. Applied research makes use of present knowledge and builds upon it with some immediate end in view, eg to produce a new synthetic fibre or a new drug.

Development is a branch of applied research and is concerned with the conversion of a laboratory scale process to a chemical plant process.

Chemists on the production side of industry are often engaged in supervising chemical plant processes and carry responsibility for maintenance of the output and the quality of the product. They must possess technical ability and supervisory skills and must be willing to take decisions. In quality control laboratories raw materials and manufactured products are tested during all stages of production. The qualified chemist has to be constantly aware of new developments in analytical methods and of new instruments available commercially.

In the chemical industry a large proportion of the managers are chemically qualified. The rapid adaptation to accommodate new products and the commercial exploitation of research findings requires such a management policy. For the able and industrious, the highest executive appointments and directorships may be obtained.

The success of the chemical industry is the result of the continued efforts of scientists both in research and development and in the rapid application of new knowledge to production methods. The industry requires a regular recruitment of qualified staff into responsible posts and the biggest demand is for qualified chemists (BSc, MRSC and LRSC). Chemists are also required by universities, colleges of technology, schools, hospitals, government sponsored research institutions and independent organisations.

BTEC HND in Sciences

It is expected that this course will be available from September 1984; it will provide a broad education over a two year course in either:

(i) two areas from chemistry, physics and biology

(ii) the three areas chemistry, physics and biology.

School of Mathematics and Statistics

Head of School: to be appointed

BA and BA (Hons)/BSc and BSc (Hons) in Combined Studies Mathematics

Subject Leader: Dr MJ Grannell

Full details of this course may be found under the entry for the Combined Studies Programme on page 92.

School of Physics and Astronomy

Head of School: To be appointed

BTEC Higher National Diploma in Physical Science (Physics) (A three year sandwich course in Applied Physics with Electronics)

Course Leader: Dr PR Bissell

A three-year Polytechnic based sandwich course in which the applications of physics are emphasised. The second year is an industrial year in which students spend the first term at the Polytechnic and the remaining two terms in a placement gaining Physics related work experience.

The course is unit-based and the Higher National Diploma is awarded on the successful completion of 20-24 units. The successful completion of 10 appropriate units leads to the award of the Higher National Certificate at the end of the second academic year.

Although the Higher National Diploma is a worthwhile qualification in its own right, academically inclined students reaching a high standard on this course will normally have the opportunity to transfer to the second year of the BSc Combined Studies course to study physics and mathematics. Transfer may take place at the end of the first, second or third year.

Qualifications for entry:

(a) Students with GCE qualifications must have reached an appropriate standard of general education and have:
either A pass in GCE 'A' level Physics together with at least one year's study of Mathematics beyond 'O' level,
or A pass in GCE 'A' level Mathematics together with a study of Physics to 'A' level.

(b) Students with BTEC qualifications must have obtained a BTEC Certificate/Diploma which includes:
either Physics III (U78/470) *and* Mathematics II (U76/031 and U76/032).
or Mathematics III *and* Physics II (U76/003) *and* Electronics III (U76/009) *or* Electrical Principles III (U75/010).
or Mathematics III *and* Electronics III (U76/009) *and* Electrical Principles III (U75/010).
(c) A qualification deemed to be equivalent to any of the above.

1st Year

Tutor: Dr MC Holmes

Physics, Mathematics, Electronic, Techniques for Investigation of Materials, Instrumentation, Vacuum Technology, Laboratory Techniques, Manual Skills of Physicists, Use of Computers, Communication Studies, History of Science.

Course duration: September to July (35 weeks)

Examinations: Internal BTEC moderated

2nd Year

Tutor: Dr M Rhodes

The Polytechnic based portion of this year is designed to enhance the students skills and appreciation of the industrial environment prior to taking up the sandwich placement.

Curriculum: Group Project, industrial studies, health and safety at work, numerical methods and computing.

Course duration: September to December (11 weeks)

Examinations: Continuously assessed coursework, BTEC moderated

Qualification: BTEC Higher National Certificate in Physical Science (Physics) after completing a successful industrial training component.

3rd Year

Tutor: Dr PR Bissell

Physics, Mathematics, Electronics, Techniques for Investigation of Materials, Instrumentation, Nuclear Instrumentation and Technology, Applied Acoustics, Project.

Course duration: September to July (35 weeks)

Examinations: Internal, BTEC moderated

Qualifications: BTEC Higher National Diploma in Physical Science (Physics) and Associate Membership of the Institute of Physics.

Careers in Physics

Careers in physics may involve teaching, research, development, production and control. Opportunities exist in universities, polytechnics, school, hospitals, research establishments and industry.

Many physicists are attracted to careers in the electrical and electronics industries and the nuclear industry whilst those interested in the mathematical aspect of the subject may, for example, seek employment in the aircraft industry or computer work. Specialised applications of physics draw some to the oil industry, to instrumentation and control work, to developments in space research and astronomy and other executive scientific areas. About 50 per cent of physicists employed in industry work on research and development; careers in general management, production, personnel or sales are however equally accessible to those with a physics qualification.

For those physicists not attracted to a career in industry there are a host of opportunities in government research establishments, local authorities and in hospitals, where physicists work in teams in connection with the use of radiation and in the development of a variety of apparatus for assisting to maintain life in those suffering from diseased or damaged organs.

In the long term good careers prospects imply full professional recognition of competence by membership of one or more of the major professional bodies such as the Institute of Physics. Courses in the Polytechnic are designed to facilitate such recognition.

School of Psychology

Head of School: D Müller PhD BEd ABPsS

***BSc (Hons) Degree in Psychology**

Course Leader: Dr ML McCullough

A three-year course leading to the award of the Bachelor of Arts Degree with Honours in Psychology. The course has been designed for students considering a career in Psychology and will qualify graduates for entry to the many post-graduate courses available. The first two years concentrate on providing a basic and comprehensive education in Psychology and also include ancillary courses in related areas. The final year gives the student the opportunity to specialise in those areas which he finds interesting and also involves a research project supervised by the appropriate staff specialist. *Graduates of this course are eligible for Graduate Membership of the British Psychological Society.*

Qualifications for entry: (a) A General Certificate of Education with passes in five subjects, of which two must be in academic subjects at Advanced level or (b) a General Certificate of Education with passes in four subjects, of which three must be in academic subjects at Advanced level. Candidates for admission to this course will normally be expected to have obtained a pass at Ordinary level in Mathematics. Qualifications deemed by the Polytechnic to be of equivalent standard to those stated above may be accepted as satisfying the entrance requirement.

1st Year

Curriculum: Learning, perception, human information processing, developmental psychology, individual differences, social psychology, laboratory course, biological bases of behaviour, experimental design,

analysis of data, mathematical methods†, computing, philosophy, language and communication, human evolution, sociology.
†not subject to examination.

Course duration: September to July (33 weeks)

2nd Year

Curriculum: Social psychology, developmental psychology, human information processing, cognitive psychology, animal learning and behaviour, personality, psychobiology, abnormal psychology, history of psychology, laboratory course, experimental design/analysis of data and one subject from biology, sociology, philosophy, language and communication, human evolution.

Course duration: September to July (33 weeks)

3rd Year

Curriculum: Theoretical issues, project and 3 options — the available options are divided into 2 groups and the student must choose one option from each group plus one other option. The first group is developmental psychology, social psychology, abnormal psychology and human motivation; the second group is cognitive psychology, psychobiology, animal behaviour and human performance.

Course duration: September to July (33 weeks)

*Revisions to the course are currently being planned which, all being well, will be submitted to, and approved by, the CNAA in time for a 1984 start. Although it in no way reflects the nature of the proposed changes in course content, the course title will be changed to BSc(Hons) in Psychology, though it is possible that graduates who so wish may be awarded a BA(Hons) degree.

The major change that is envisaged is the introduction of a large number of smaller narrower Year 3 options (eg. Sex and Gender; Personal Relationships; Psychology and the Law; Advanced Cognitive Psychology; Environmental Psychology; Drugs and Behaviour; Schizophrenia . . .) from which the student will select eight.

Careers in Psychology

The traditional fields of employment for the psychology graduate are educational, clinical and occupational psychology. To gain entry to a post-graduate course leading to a professional qualification in one of these areas, an honours degree, in which psychology is a major field of study, is necessary. Although there is still a national shortage of professionally qualified psychologists the competition for places on these courses is becoming progressively more severe and candidates are normally expected to have obtained a good honours degree. Some graduates remain in the academic world by taking higher degrees, usually by research, and then go on to take up teaching or research posts in the higher education sector.

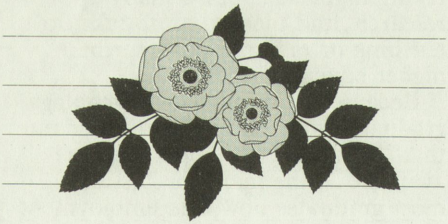
Because the number of psychology graduates is increasing at a faster rate than the number of opportunities available in the major professions, most graduates now find employment elsewhere. In general administration and commerce psychology graduates are well placed to compete with other graduates. In the 'caring' professions psychologists are particularly well-placed; for example, a degree in psychology is normally considered as one of the few appropriate qualifications for admission to one year postgraduate social work courses.

Further information on postgraduate courses and careers in psychology can be obtained by writing to the British Psychological Society, 18-19 Albermarle Street, London, W1X 4DN.

FACULTY OF TECHNOLOGY

Dean of Faculty: DW Walsh BSc, MSc, MBCS
Faculty Registrar: Mrs R Harrison BA

BTEC Higher National Diploma in Computer Studies
Polytechnic Diploma in Building Management and Economics
BTEC Higher National Diploma in Building Studies
BSc Hons and BSc in Electrical and Electronic Engineering
BTEC Higher National Diploma in Electronic Engineering
BEng Hons and BEng in Mechanical Engineering
BTEC Higher National Diploma in Mechanical and Production Engineering
BTEC Higher National Diploma in Engineering Design
BTEC Higher National Diploma in Computer Aided Engineering



School of Computing and Information Systems

Head of School: WM Walmsley BSc MSc PhD CEng MIEE

BA and BA (Hons)/BSc and BSc (Hons) in Combined Studies (Computing)

Subject Leader: WD Nash

Full details of this course may be found under the entry for the Combined Studies Programme.

Higher National Diploma in Computer Studies

Course Leader: WR Madill

A two year full-time course leading to the award of Higher National Diploma in Computer Studies of the Business and Technician Education Council. The course is designed to provide a balanced education for students interested in the application of computers in both industrial and commercial situations. The course contains detailed considerations of mainframe, mini and microcomputers and their use in real-time Industrial Computing as well as their application in management information systems and the electronic office.

Qualification for entry: The normal entry requirement of the course is one of the following:

(a) A National Certificate or Diploma in Computer Studies
(b) A National Certificate or Diploma in Science or Engineering
(c) A National Certificate or Diploma in Business Studies
(d) At least one subject passed at GCE advanced level, plus three other subjects at GCE ordinary level. Mathematics must be one of the four subjects passed at either 'O' or 'A' level.
(e) Completion of Open College course with passes in appropriate units totalling four Stage A units and at least one Stage B unit.
(f) Any qualifications or suitable experience deemed to be equivalent to one of the above.

1st Year
Tutor: G Parker

Curriculum: Programming methodology I, computer systems architecture I, data processing, communication and behavioural studies, organisations, quantitative methods.

Course duration: September to July

Examinations: Internal, BTEC moderated, assessments include examinations and in-course assignments.

2nd Year
Tutor: F Shakespeare

Curriculum: Programming methodolgy II, computer systems architecture II, business computing, industrial computing, software engineering, project.

Course duration: September to July

Examination: Internal, BTEC moderated, assessments include examinations and in-course assignments.

Qualification: Higher National Diploma in Computer Studies of the Business and Technician Education Council. Students not reaching the required standard may be granted a Higher National Certificate.

The Higher National Diploma carries exemption from the British Computer Society Part I examinations.

School of Construction and Surveying

Head of School: TM Ryan BSc(EstMan), FRICS, FCSI

Business/Technician Education Council:Higher National Diploma in Building Studies

Course Leader: DA Evans

A three-year sandwich course or a two-year full-time course which provides education and training for careers with professional status in Building Management, Estimating and Quantity Surveying. An industrial training period of 52 weeks duration (including the summer vacation) may be undertaken between the first and final years of the course in order to provide practical experience of site and/or office work. The final year consists entirely of full-time study at the Polytechnic. Holders of the Diploma will be eligible for membership of the Society of Surveying Technicians and Society of Architectural and Associated Technicians and may apply for exemption from the examinations of the following institutions: Final Part I of the Chartered Institute of Building and the Part One Examination of the Royal Institution of Chartered Surveyors (Quantity Surveying Division). Substantial exemptions from the examinations of the Construction Surveyors Institute will also be afforded.

As an integral part of the course, students will attend a five day residential course in Land Surveying.

Students may enter the course direct from school or may have obtained some industrial experience, or alternatively may be in employment and receive support from their firm or authority. The latter students will be referred to as industry-based.

In addition to suitable academic qualifications, students will be selected on the basis of a confidential report and suitability at an interview by the course leader at the Polytechnic. Prospective students are advised to apply early as an offer of a place on the course will be made, where appropriate, at interview.

Qualifications for entry: Students admitted to the course must normally hold one of the following qualifications:

(a) the Ordinary National Diploma in Building or Civil Engineering;
(b) the Ordinary National Certificate in Construction or in Building;
(c) not less than 4 passes in the General Certificate of Education (Grade A, B or C or CSE grade 1) of which one must be at Advanced Level. The passes at Ordinary Level must include Mathematics, a science and a subject requiring a facility in the use of written English;
(d) BTEC Certificate in Building Studies, including Mathematics at level II;
(e) a BTEC Diploma in Building Studies, Civil Engineering Studies or Construction and Land Use;
(f) completion of Open College course with passes in appropriate units totalling four stage A units and at least one Stage B unit.

Exceptional Entry: Applicants with alternative qualifications to those stated in (a) to (f) above may be considered for entry to the course, eg foreign students possessing overseas qualifications.

Modification of the entry qualifications may be made in the case of mature students taking into account individual experience and personal and professional development.

These applications will be considered by the Higher National Diploma Course Committee appointed

by the Academic Board, the moderator being informed of all decisions.

1st Year

Tutors: P Allouis, BC Heath, S Todd

Curriculum: Subjects according to programme of study from: building technology, measurement of building works, site surveying and levelling, mathematics, computing, science and materials, structural mechanics, organisation and procedures, law and economics.

Course duration: September to June (34 weeks)

Examinations: Internal

Industrial Training Tutor: Dr MA MacKeith

Final Year

Tutor: DA Evans

Curriculum: Subjects according to programme of study from: building technology and legislation, geotechnics, measurement of building work, tenders and estimating, enviromental science, site surveying, site management (production), site management (personnel), building services and equipment, building law, design technology.

Course duration: September to June (34 weeks)

Examinations: Internal, externally moderated

Qualification: Business and Technician Education Council Higher National Diploma in Building Studies.

Polytechnic Diploma in Building Management and Economics

Course Leader: JM Patchett

The course is a one year full-time course for those who wish to qualify for Membership of the Chartered Institute of Building. The Chartered Institute of Building grant to holders of the Diploma exemption from all subjects of their Final Part II Examinations, except for the subject of Building Production and Management which may be taken as an external examination by candidates. Those interested in furthering their Quantity Surveying knowledge by full time study are advised to contact the Course Leader for current regulations relating to membership of the professional bodies in Quantity Surveying.

Candidates qualifying by either full- or part-time study will find that the course is designed to accommodate both backgrounds, and financial assistance is currently offered through grants from Local Education Authorities and the Training Services Agency in addition to Industrial Sponsorship.

Early application is advisable as individual interviews are held throughout the year at the Polytechnic. Places on the course will be offered on the basis of the interview and the confidential reports normally requested from past College and/or employers.

Qualifications for entry: Entrants to the course must hold one of the following qualifications:

(a) Higher National Diploma in Building or HD recognised by CIOB for exemption from final examination Part I

(b) First Degree of Universities in United Kingdom (including Republic of Ireland) or CNAA in Architecture, Estate Management or

Civil Engineering
(c) The Chartered Institute of Building Final Examination Part I (or approved exempting award)

Curriculum: Building technology production and management; advanced planning techniques; statistics and computing; principles of management; contract law and arbitration; economics; measurement of building work and post contract practice; development economics and cost control; personnel management and industrial relations; building marketing finance and control.

Course duration: September to May (31 weeks)

Examinations: Internal, externally moderated by professional bodies for exempted awards.

Qualifications: Polytechnic Diploma in Building Management and Economics leading to Membership of the Chartered Institute of Building (after successful completion of Part III requirements).

Careers in Construction

The industry, which is one of the largest in the country, continually requires young people of character and determination who are willing to accept responsibility and to train for technical and executive positions.

There are many and varied occupations followed by members of the construction team and demand exists for project managers, quantity surveyors, estimators, planners, site engineers and within administrative areas.

Construction work is interesting, always rewarding and varied to a greater degree than found in other technical industries.

There are ample opportunities for young men and women possessing the right qualities and ability to reach executive positions.

There is a wide range of construction work — industrial and commercial, ecclesiastical and civic, residential industrialised and pre-fabricated buildings, maintenance and restoration work. Within industry there are many sizes of firms each specialising in one or more of the areas listed above.

School of Electrical and Electronic Engineering

Head of School: Professor NG Burrow BSc(Eng) PhD AKC CEng MIEE

BSc(Hons) and BSc in Electrical and Electronic Engineering of the Council for National Academic Awards

Course Leader: TG Izatt

The BSc Honours and BSc Degree course in Electrical and Electronic Engineering has been recently revised and approved by the Council for National Academic Awards.

A four-year 'thick' sandwich course leading to the award of a Bachelor of Science Degree with Honours or Bachelor of Science Degree in Electrical and Electronic Engineering. Students wishing to be considered for an honours degree award will normally be expected to achieve a higher level of performance than those students aiming for a degree award. In the fourth year, honours degree students will undertake a more demanding programme of studies than degree students.

Qualifications for entry: Students must normally be at least 18 years of age at the commencement of the course and possess one of the following sets of qualifications:

(a) A General Certificate of Education with passes in five subjects of which two must be at 'A' level in one of the following subject combinations:
(i) Mathematics and Physics.
(ii) Mathematics and Chemistry (having studied Physics up to 'A' level).
(iii) Mathematics (pure) and Mathematics (applied) — having studied Physics up to 'A' level.

(b) A General Certificate of Education in four subjects of which three must be at 'A' level, including the subjects of Mathematics and Physics.

(c) A good standard of pass in the Ordinary National Diploma in Technology (Engineering) or Ordinary National Certificate.

(d) A Business Technician Education Council Certificate or Diploma at Merit standard with three Level III units including Mathematics and Electrical Principles.

(e) Open College qualifications: four Stage A units and two Stage B units. The Stage B units to comprise modules 1 and 2 of the Mathematics unit and module 1 Basic Physics unit with either module 2, Physics II or module 3, Engineering Science, of the Physical Sciences unit.

Students holding other qualifications deemed by the Polytechnic to be equivalent may be admitted to the course.

1st Year (BSc Hons and BSc)

Tutor: RG Preston

This stage of the course includes approximately 22 weeks of academic study integrated with 11 weeks of Engineering Practice. This latter incorporates training in the electrical engineering workshops and is equivalent to the Engineering Industry Training Board EPI training module. The academic curriculum includes: mathematics, electrical science, software engineering, electronic principles, engineering physics, related studies, engineering practice (EA1).

Course duration: September to June (33 weeks)

Examinations: Internal, externally assessed.

2nd Year (BSc Hons and BSc)

Tutor: G Stevenson

Curriculum: Mathematics and computing, electromagnetism and circuit theory, digital systems, signal analysis, control, electronic engineering, industrial studies.

Duration: July to September (10-15 months)

Examinations: Internal, externally assessed.

Industrial Year (BSc Hons and BSc)

Tutor: NT Slater

Industrial experience. Industrial training tutors will assist students in finding suitable training places in industry.

Duration: July to September (10-15 months)

Final Year (BSc Hons and BSc)

Tutor: JA Askew

Curriculum: (Honours): mathematics and electromagnetism, digital signal processing, microprocessor systems, control, project; together with *two* subjects from electronic engineering, communication engineering or power electronics.

Curriculum: (Degree): digital signal processing, microprocessor systems, control, project; together with *one* subject from electronic engineering, communication engineering or power electronics.

Course duration: September to June (33 weeks)

Examinations: Internal, external.

Qualifications: Successful completion of the course results in the award of either a Bachelor of Science degree with Honours in Electrical and Electronic Engineering or a Bachelor of Science Degree in Electrical and Electronic Engineering.

BTEC Higher National Diploma in Electronic Engineering

Course Leader: RO Hall

A two-year full-time course based on a unit structure and incorporating a programme of study in electronic engineering leading to the award of the BTEC Higher National Diploma in Electronic Engineering. Engineering Applications, providing practical experience, is fully integrated with the academic studies in each year of the course.

The studies undertaken are relevant to modern industrial developments in microelectronics, and in the final year, the student has the opportunity of studying a range of subjects including electronics, power electronics, digital systems and telecommunications. Microprocessor systems and computing feature strongly in the curriculum.

Qualifications for entry in the first year of the course are: Completion of the advanced level courses for the General Certificate of Education in Mathematics and Physics or Engineering Science with a pass in at least one of these three subjects, together with a pass in each of three additional subjects at Ordinary level *or* a BTEC National Certificate/Diploma in Electrical and Electronic Engineering or in Electronics, containing mathematics, electrical and electronic principles and one other electrical subject normally all passed at level III, *or* an Ordinary National Diploma in Technology (Engineering) *or* completion of an Open College course with passes in appropriate units totalling at least four Stage A units and one Stage B unit, *or* any other equivalent qualification.

1st Year

Tutor: Dr JD Heys

Curriculum: Mathematics, Electronics, Digital Electronics, Circuit Theory Microelectronics, Electrical Machines, Engineering Physics, Engineeering Applications.

Course duration: September to July (35 weeks)

Examinations: Internal, with external moderation, together with in-course assessments associated with each unit studied.

2nd Year
Tutor: I Thomas

Curriculum: Electronics, Power Electronics, Communication Systems, Microprocessor Based Systems, Control Engineering, Mathematics, Project, Engineering Applications.

Course duration: September to July (35 weeks)

Examinations: Internal, with external moderation, together with in-course assessments associated with each unit studied.

Qualification: BTEC Higher National Diploma in Electronic Engineering.

BTEC Higher National Diploma in Computing Technology (Microprocessor Applications)

Course Co-ordinator: G Hall

A two year full-time course based on a unit structure and incorporating a programme of study in the industrial applications of microprocessors.

The course is operated jointly by the Polytechnic and Blackburn College of Technology and Design. Assessment will be undertaken throughout each unit of study and on successful completion of the unit a student will be awarded a pass with distinction or a pass with merit or a pass. On satisfactory completion of twenty-five units, including five units of practical experience, a student will be eligible for the award of a BTEC Higher National Diploma in Computer Technology (Microprocessor Applications). Further information on BTEC Courses is given on page 72.

Qualifications of entry: A BTEC Certificate or Diploma in engineering or science including mathematics at level II, or any equivalent qualification.

1st Year (at Blackburn College of Technology and Design)

Curriculum: Mathematics, electrical principles, computer programming, microprocessor systems, electronic engineering, electrical power engineering, instrumentation and control, practical arrangements.

2nd Year (attendance at both Blackburn College of Technology and Design and Lancashire Polytechnic)

Curriculum: Mathematics, electrical principles, electronic engineering, control systems, software programming, microprocessor based systems, project.

Course duration: September to July (35 weeks)

Examinations: Internal with external moderation, together with in-course assessments associated with each unit studied.

Qualifications: BTEC Higher National Diploma in Computer Tehcnology (Microprocessor Applications)

Careers in Electrical and Electronic Engineering

The electrical and electronic engineering industry encompasses modern developments in micro-electronics, microprocessors, computers,

communications and automation.

Graduates and Diplomates in electrical and electronic engineering are sought after by a wide range of employers, extending over the relatively new areas of microprocessor/electronic research, design, development and applications, to the more traditional areas of electrical and electronic engineering design and manufacture. There is currently a national shortage of both professional and technician electrical and electronic engineers, particularly in the manufacturing sectors of industry.

There are consequently opportunities for challenging and rewarding careeers both in this country and abroad for graduates and diplomates in Electronic and Electronic Engineering.

School of Mechanical and Production Engineering

Head of School: To be appointed

BEng Honours and BEng in Mechanical Engineering of the Council for National Academic Awards

Course Leader: P Tucker

The BEng Honours and BEng in Mechanical Engineering course is of four years duration, including a total of 36 weeks industrial experience. The Course is arranged in four academic parts, and one period of industrial training. The Honours Degree Course is separate from the Degree only in the final three terms, the preceding stages being used to determine the students suitability for either route. Generally, the Honours Degree student is expected to achieve a higher level of performance, and to work at a greater tempo than the Degree student.

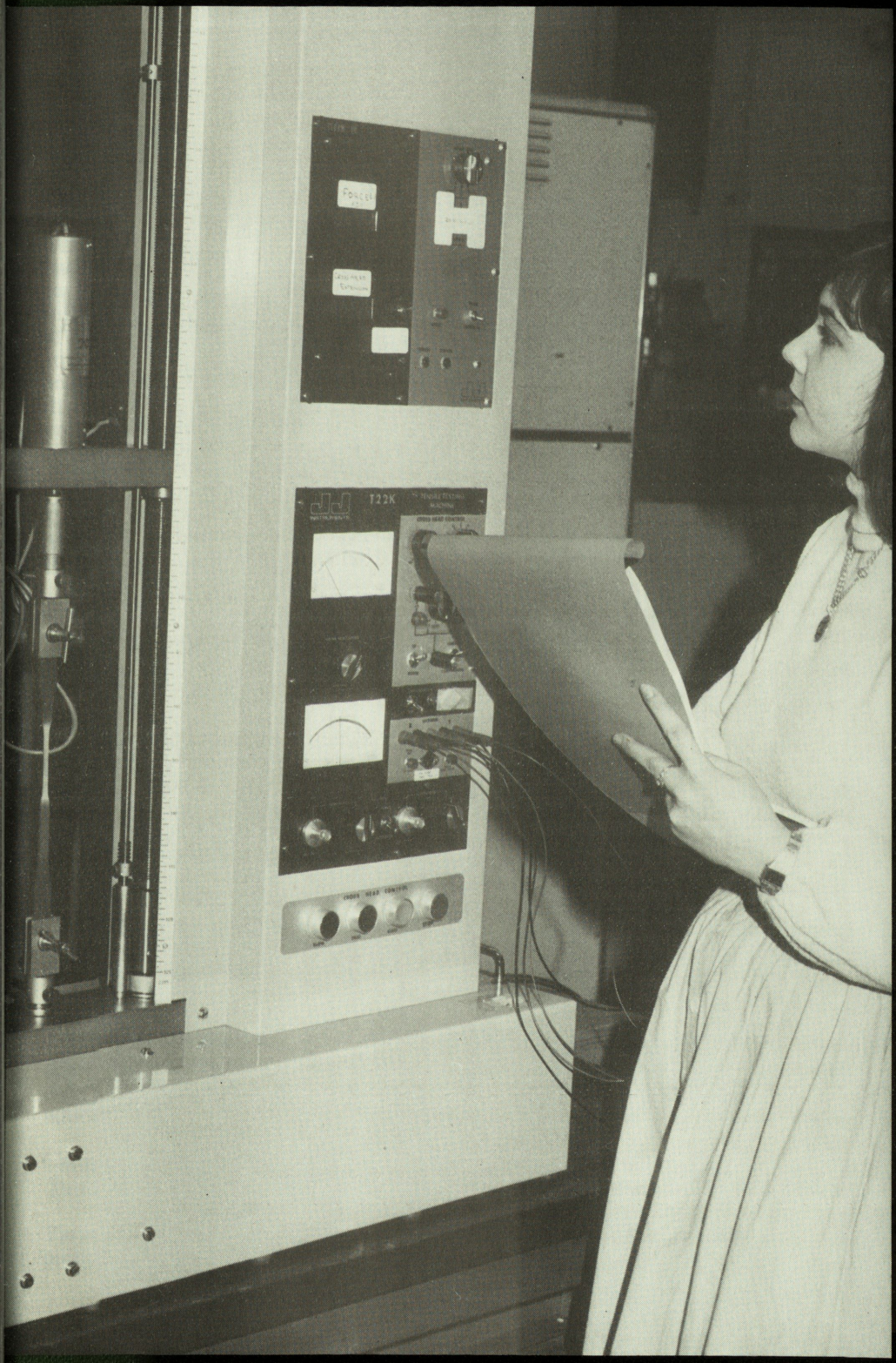
The course is supported by programmes of laboratory work, seminars, and projects, to complement lecture material.

Qualifications for entry: Normally students must hold either:

(a) a General Certificate of Education with passes in five subjects, of which two must be at Advanced level. The subjects must include mathematics, physics and preferably English language. The Advanced level subjects must normally be mathematics (pure, or pure and applied) and either physics or engineering science, or

(b) a General Certificate of Education with passes in four subjects, of which three must be at Advanced level. The subjects passed must include mathematics, physics and English language. The Advanced level subjects

Undergraduate Engineer experiments with drawing of plastic on a Tensile Testing machine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must be three of the following: mathematics (pure, or pure and applied), further mathematics, physics, engineering science, or
(c) an Ordinary National Diploma in Engineering or Technology (Engineering); an Ordinary National Certificate in Engineering. In such a case passes of sufficient merit in appropriate subjects are required, one of which must be mathematics, or
(d) an appropriate BTEC National Certificate or Diploma which includes passes with merit at level III in 3 units one of which must be mathematics and one of which must be mechanical science.
(e) completion of Open College course with passes in appropriate units totalling at least four Stage A units and two Stage B units.

In exceptional cases, qualifications equivalent to the above may be accepted, at the discretion of the Director.

1st Year
Tutor: JA Burton

Curriculum: Mathematics, applied information technology, mechanical science, electrical science, materials science, drawing and related studies. Engineering Applications I is also included, normally conducted in the Polytechnic's workshops and laboratories, and this enhances the industrial content of the course.

Course duration: September to June (33 weeks)

Examination: Internal, externally assessed

2nd Year
Tutor: RH Bryan

Curriculum: Mathematics, accountancy and marketing, industrial organisation, design, thermomechanics of fluids, stress and structures, materials, mechanics, production processes, and electrical engineering.

Course duration: September to March (22 weeks)

Industrial Experience
Duration: April to December (36 weeks)

Industrial training tutors will assist students in finding suitable placement in industry.

3rd Year
Tutor: MJ Manning
Curriculum: Employment and law, mathematics, design, thermomechanics of fluids, stress and structures, materials, control engineering, dynamics, production and production management.

Course duration: January to June (22 weeks)

4th Year
Tutor: Dr MG Hodskinson

Curriculum: (Separate courses are provided for honours and degree students): technology in society, design, project, energy and thermomechanics of fluids, and production systems; half-subjects in stress and structures, dynamics, control engineering, tribology, and numerical methods.

Course duration: September to June (34 weeks)

Qualifications: On successful completion of the course, students are awarded the degree of Bachelor of Engineering with Honours, or Bachelor of Engineering, in Mechanical Engineering.

BTEC Higher National Diploma Awards
(Two Years Full-time or Three-year Sandwich)

Course Co-ordinator: G Podmore

On entry to the course the educational background and previous experience of each student is discussed with the year tutor and an appropriate programme of balancing studies devised. All students attain a broad base of engineering knowledge by the end of the first year, from which they may proceed to the final year of a Higher National Diploma in:

Computer Aided Engineering
Engineering Design
Mechanical and Production Engineering

The final year may be studied directly following the first year to form a two year full-time course, or after a year of industrial experience to provide a three year sandwich course.

Qualifications for entry: The normal entry requirements will be as follows:

(i) 5 GCE passes, including at least one at 'A' level; Mathematics must have been passed at 'O' level and studied to 'A' level, and an additional Science or Technology subject must also have been studied to 'A' level.
or
(ii) an appropriate BTEC Certificate or Diploma.
or
(iii) qualifications deemed to be equivalent to the above.

Mature students are welcome to apply, including those who do not have conventional qualifications for admission to Higher Education.

Course of Study — 1st Year
Tutor: JN Greenhow

Term 1: All students undertake a programme of balancing studies including mathematics, mechanical science, materials, drawing and design, manufacturing technology, computing and microprocessors.

Terms 2 and 3: A programme of studies will include: mathematics, mechanical science, manufacturing technology, engineering drawing and design, computer aided engineering, control of manufacture, introduction to numerical control, computing assignments, thermomechanics of fluids, materials and practical project work.

Course duration: September to July (35 weeks)

Final Year: At this stage the student will undertake the appropriate units which will make him/her eligible for an award of their choice, which can be either:

Computer Aided Engineering

Tutor: Dr EH Smith

Common Core: Management and communication studies, economic and financial studies, mechanical science, related assignments, related project.

Additional units include: Microcomputer principles, software engineering, NC technology, engineering design, production planning and control, quality assurance, mathematics, computer aided design, computer aided manufacture, computer aided manufacturing systems, robotics, fluid power control engineering.

Engineering Design

Tutor: G Podmore

Common core: Management and communication studies, economic and financial studies, mechanical science, related assignments, related project.

Additional units include: Engineering design, design for manufacture, mathematics, materials, thermo-mechanics of fluids, exploration of form, jig and tool design, computer aided design, design project, stress and structures, dynamics and industrial design.

Mechanical and Production Engineering

Tutor: F McIntyre

Common core: Management and communication studies, economic and financial studies, mechanical science, related assignments, related project.

Additional units include: Instrumentation and control, materials, production planning and control, engineering design, microcomputer principles, mathematics, quality assurance, thermomechanics of fluids, NC technology, stress and structures, dynamics, computer aided manufacture, fluid power control engineering, robotics, and computer aided manufacturing systems.

Course duration: September-July (35 weeks)

Assessment: Internal assessment is a combination of continuous assessment methods and formal examinations to suit each unit.

Engineering Applications: The School fully endorses the philosophy of engineering applications, the aim of which is that the student develops an appreciation of the totality of engineering through real life problems involving manufacture and the use of materials and the analysis and synthesis of practical situations. This philosophy is not achieved through individual units but permeates throughout the programme as a whole.

Business and Technician Education Council and its Awards

Business and Technician Education Council (BTEC),
Central House, Upper Woburn Place,
London, WC1H 0HH. Tel: 01 388 3288.

The Business Education Council (BEC) and the Technician Education Council (TEC) merged on 1st October 1983 to form BTEC (Business and Technician Education Council). One of the first major changes resulting from the merger will be the reintroduction of the word 'National' into the titles of technician awards made after 1st January 1984.

The main BTEC awards are:
BTEC General Certificate/Diploma in Business Studies
BTEC National Certificate/Diploma
BTEC Higher National Certificate/Diploma
BTEC Post Experience Certificate/Diploma

The Polytechnic offers Higher National Certificate and Higher National Diploma courses leading to BTEC awards.

Entry Requirements for Higher BTEC Courses: Minimum entry requirements for Higher National Certificate/Diploma courses are:
(i) the relevant Certificate or Diploma, with supplementary studies if necessary, or
(ii) studies to GCE Advanced level and passes in at least one relevant subject at that level, or
(iii) an attainment equivalent to the above

General Structure of Courses and Assessment
Polytechnic Higher National

Certificate and Diploma courses are structured on a Unit basis.

Higher National Certificate and Diploma programmes may contain Level II, III, IV and V Course Units. The concept of the Level of a unit is based on prerequisites and depends on recognition of progression in a programme. An appropriate Level III course unit would normally need to be completed before a Level IV unit is undertaken.

Each course unit will be independent and contain its own course assessment and examinations. On the successful completion of each unit, students will be given a grading which will be Pass with Distinction, Pass with Merit, or Pass. Students who achieve the appropriate number of passes will be awarded either a Higher National Certificate or a Higher National Diploma.

Options within Courses

Since each course contains a number of units which offer opportunities for optional studies a Higher National Certificate or Higher National Diploma course might be better described as a course complex embracing a number of programmes of study. Among the programmes of study within Higher National Certificate course complexes will be programmes appropriate for students with academic facility and interests and who would have opted for HNC courses prior to TEC (BTEC) rationalisation. There will also be programmes appropriate for the student with practical facility and interests who would have opted for CGLI courses. The unit structure enables programmes to be devised which could be tailor-made to specific industrial needs. It is, therefore, in the student's interest to consult his employer before seeking enrolment.

Higher National Certificates

The Higher National Certificate Programme normally comprises a minimum of ten units and consists of approximately 600 hours of part-time study in the Polytechnic for the average student.

The combination of 60 hour units reflects the numbers and levels indicated below.

Minimum number of units in programme	10
Minimum number of units at levels IV and V	6
Number of Level V units normally expected	2
Maximum number of free standing units and units at levels II and III	4

Higher National Diplomas

Higher National Diploma Programmes vary according to the aims of the course. Programmes providing a suitable education for senior technicians normally comprise 1200-1500 hours of study. Programmes designed for students aiming to transfer to degree or professional courses may involve more than 1500 hours of study in the Polytechnic. The mode of study may be full-time/sandwich or part-time. The latter mode of study offers an opportunity for the student with a Higher National Certificate to continue part-time studies for a Higher National Diploma.

The composition of a Higher National Diploma programme comprising 25 units each of 60 hours (1500 hours total) would be:

Minimum number of units in a programme	25
Minimum number of units at levels IV and V	15
Number of level V units normally expected	5
Maximum number of free standing units and units at levels II and II	10

General and Communication Studies

All programmes leading to higher awards contain material related to supervisory or communication studies or studies complementary to the main theme of the programme.

Development

The latest information about particular BTEC courses in the Polytechnic may be obtained from the appropriate Head of School or Course Leader.

FACULTY OF SOCIAL STUDIES & HUMANITIES

Dean of Faculty: HE Probyn BA, MPhil
Faculty Registrar: Miss P Cooke

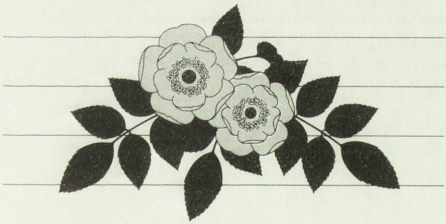
BA Hons in Applied Social Studies
Polytechnic Diploma in Applied Social Studies (Post-graduate) (CQSW)
Polytechnic Diploma in Social Work (CQSW)
Health Visitor's Certificate
National Certificate in District Nursing SRN/RGN
Polytechnic Diploma for Bilingual Secretaries (Post-graduate)
Polytechnic Diploma for Bilingual Secretaries (Post GCE 'A' level)
Certificate of the National Council for the Training of Journalists
Polytechnic Diploma in Journalism for Radio and Television

This Faculty is composed of two schools:
The School of Language and Humanities
The School of Social Studies

The Schools provide courses leading to degrees, as well as to professional qualifications in social work, community health studies, journalism and languages with secretarial studies.

The School of Social Studies is situated in Livesey House, and the School of Language and Humanities is located in Livesey House and the Harris Building. Each School is under the direction of a Head of School.

The Faculty is under the supervision of a Dean, whose office is located in Livesey House.



School of Social Studies

Head of School: Professor S Henig MA

The school offers degree, diploma and certificate courses in Social Administration, Applied Social Studies, Social Work, Health Visiting and District Nursing. At the present time the bulk of the work is carried out in Livesey House, a four storey block adjacent to the main campus, in which are to be found general and specially equipped lecture and tutorial rooms, study rooms, a common-room, with coffee bar, and academic and secretarial staffrooms.

Many of the courses offered lead to professional status, and consequently students spend an appreciable amount of time in practical work placements in Social Work Agencies, Schools, Social Service Departments, etc. Strong links have been forged with education and social service authorities and training officers in industry and commerce, who together seek places on our courses for their staff and provide career opportunities for many of our students. Staff carry out research projects which are closely linked with the teaching undertaken by them which is of benefit both to students on our courses and local industrial, commercial and social enterprises.

BA (Hons) Degree in Applied Social Studies

Course Leader: KM Phillips

Social Work Branch Leader: J Washington
Social Policy and Administration Branch Leader: R Quinn

The course has two branches both leading to the award of the Degree of Bachelor of Arts with Honours in Applied Social Studies. During the first year a choice is made between the Social Work Branch, on which places are limited and the Social Policy and Administration Branch both of which begin in the second year. Students are selected for the Social Work Branch through interviews in the third term of the 1st year following a compulsory observational placement in the Easter vacation. Counselling and teaching is provided to help students make a choice between the two branches. Successful completion of the Social Work Branch leads to the award of the **Certificate of Qualification in Social Work (CQSW)** of the Central Council for Education and Training in Social Work in addition to the award of the BA(Hons) Degree. Students choosing the Social Work Branch will complete their studies in three years.

Qualifications for entry: (a) A General Certificate of Education with passes in five subjects, of which two must be at Advanced level or (b) a General Certificate of Education with passes in four subjects, of which three must be at Advanced level. Qualifications deemed by the Polytechnic to be of equivalent standard to those stated in the preceding paragraphs may be accepted as satisfying the entrance requirement.

Applications from mature students (over 21) without normal qualifications for entry or their equivalents are welcomed.

All applicants will normally be asked to attend an interview. A course brochure is available on request.

Degree Structure

1st Year (Common to both Branches)

Curriculum: Economics, government and politics I, methods of social research, psychology, social history, sociology I, introduction to the two branches.

2nd Year (Common to both Branches)

Curriculum: Social policy and administration (double weighted course), social economics, government and politics II, psychology II, social philosophy, sociology II.

3rd Year (Social Policy and Administration Branch)

Curriculum: Compulsory: social theory and social policy; comparative social policy; and a dissertation. Optional: choice of two options, subject to availability from the following: education policy; health services; history and welfare; housing; ideology, politics and social policy; policy analysis; political economy of welfare; social work studies; sociology of welfare and development; women, social policy and the state; issues in poverty and income support.

3rd and 4th Years (Social Work Branch)

Curriculum: Polytechnic based teaching in social work, legal studies, psychology, and social policy and administration. This teaching is grouped in three modules: methodology of social work practice; the individual, society and social work; contexts of social work practice. In addition, students choose two from a range of client group options.

Placements: Practical placements are organised for both years: that in Year Three is for 26 weeks mostly concurrent with teaching in the Polytechnic; that in Year Four is a block of 14 weeks at the end of the course.

Assessment: In Year 1 students will be assessed on the basis of a mixture of course work and examinations. Part One of the Final Examination takes place at the end of the second year and is a mixture of course work and examinations. Part Two of the Social Policy and Administration Branch takes place at the end of the Third Year and is based on examinations plus a dissertation. Part Two of the Social Work Branch takes place during the fourth year and is based on a mixture of course work and examinations. Award of the CQSW is dependent upon the award of the degree and the satisfactory completion of placements.

Course duration: October to June (33 weeks) in each year, apart from Year 3 of the Social Work Branch (35 weeks).

Careers in Social Administration

Although primarily an academic qualification, a degree in Social Administration also provides a basis for vocational opportunities in both the public and private sectors of the economy.

Graduates in Social Administration have opportunities of entering the central government civil service. In local government there are administrative and research posts in housing departments, education departments and social service departments.

The degree is also suitable for entry into teaching, social work and administrative posts in the health service and voluntary social service agencies.

In the private sector of the economy there are opportunities of entering industry as management trainees, personnel managers and research workers.

The degree also provides a foundation for research and post-graduate courses.

Careers in Social Work

Please see entries under this heading for appropriate careers information.

Polytechnic Diploma in Applied Social Studies (Post-graduate) (CQSW)

Course Leader: BL Gray

A one year full-time course leading to the Diploma in Applied Social Studies awarded by the Polytechnic and to the Certificate of Qualification in Social Work awarded by the Central Council for Education and Training in Social Work.

Qualifications for entry: Applicants must be at least 21 years of age and normally possess a relevant degree with fieldwork experience preferably gained in post.

Application procedure: The course begins in October each year. Selection will be by interview and references will be required from academic tutors and a field work supervisor. Information and application forms are obtainable from The Clearing House for CQSW Courses, Myson House, Rugby CV21 3HT.

Curriculum: Theory and practice of social work covering a range of methods and client groups; social and developmental psychology; sociology; social administration; law.

The fieldwork component of the course is arranged on a concurrent basis with the theoretical teaching, students spending two days in the Polytechnic and three days a week in placement until the final part of the course which is a block placement. The first placement runs for the first and second terms, and the second is a block placement ending in August. Arrangements may be made for some students to remain in one agency for the whole of the fieldwork placement. Discussions regarding placements are held with students, and their preference and experience are fully considered before coming to a final decision. The range of fieldwork placements is fairly wide and opportunities for experience in group and community work are available.

Course duration: October to September

Assessment: Assessment will be made by periodic evaluation of written and field work.

Polytechnic Diploma in Social Work (CQSW)

Course Leader: RD Everett

A two-year full-time course leading to the Diploma in Social Work awarded by the Polytechnic and the Certificate of Qualification in Social Work awarded by the Central Council for Education and Training in Social Work. The aim of the course is to train candidates to become Social Workers capable of working in a number of social work agencies. The course is generic based and will introduce students to social work with a variety of intervention strategies and client groupings.

Qualifications for entry: Applicants must be age 20 or over at the start of the course. They must have the personal qualities necessary for social work and the academic ability to benefit from the course. Candidates under 25 will normally also be required to hold 5 GCE 'O' level passes or preferably 2 'A' level passes; candidates over 25 need not necessarily have formal educational qualifications. They will be expected to show evidence of ability to cope with the academic demands of the course. The Polytechnic may require all candidates to attend for interview, to submit written work or to attend the Polytechnic for academic assessment.

Application procedure: Information and

application forms are obtainable from the Clearing House for Social Work Courses, 4th floor, Myson House, Railway Terrace, Rugby, Warwicks CV12 3HT.

Curriculum: Subjects studied in the Polytechnic include Social Work Method and Practice, Government, Psychology, Sociology, Social Policy and Administration, Law for Social Workers and Medical and Social Aspects of Care of Disease and Disability. Students will be required to undertake social work education and training in fieldwork placements. These placements involve about 50% of the students' attendance time on the course. Options in Year II, depending upon staff availability and demand include: Work with offenders; Residential/day care; Education social work; Health care; Area Team; Community and Youth organisation.

1st Year

Course duration: October to August. Block study in the Polytechnic during term 1; Polytechnic study and fieldwork placement in term 2; and Polytechnic study during term 3, followed by a 10 week block placement during the period June-August.

2nd Year

Course duration: October to July. This includes Polytechnic study in term 1; concurrent Polytechnic study and practice placement in term 2 and block placement during term 3.

Assessment: This is by set essays relating to government, social policy and administration, psychology, law and sociology; and assignments relating to social work teaching and placements in Year 1; and by set essays relating to social issues, assignments relating to social work practice and theory; and an unseen case paper relating to social work practice, in Year 2. All placements are assessed. There is no compensation between written and practice assessment.

Careers in Social Work

Local Authorities are required by the Social Services Act 1970 to establish Social Service Departments to carry out such functions as child care, welfare services under the National Assistance Act 1948, mental health social work, home help, adult training centres, day nurseries, and social work previously undertaken by some housing departments. Social Service Departments provide a wide reaching single service offering help to deprived children and the aged, the physically and mentally handicapped, the childless family, the one parent family and the single adult. In fact, to all age groups with a great variety of social needs.

The Social Worker is trained to work for and within the community and adopts the following methods in applying his or her skill and training to prevent or alleviate human distress:

(a) casework centred on individuals and families in difficulties, assisting them to meet and resolve their problems and make use of the services available to them,

(b) group work: aimed to help people with common problems by fostering mutual support and encouragement among them,

(c) community work: based on the assumption that the social worker can act as an initiator within a neighbourhood in order to mobilise available human resources to tackle local problems,

(d) residential work: as a short- or long-term alternative work setting for people of all kinds and ages who cannot cope in the community or with whom society cannot cope.

Social Workers are employed by local authorities, in hospitals, with

voluntary social work organisations, or in industry or commerce in personnel management. They may be employed as Social Workers in the field or in social work administration, although most will find themselves involved in both aspects of the profession.

Health Visitor's Certificate

Course Leader: Miss EM Jackson

Course Tutors:
Mrs K Fowler, Mrs P Halligan.

A one year full-time course of combined theoretical and practical training leading to the award of a Certificate of Health Visiting by the Council for Education and Training of Health Visitors.

Qualification for entry: Candidates must be State Registered Nurses with approved midwifery or obstetric experience and possess in addition (a) five GCE subjects at 'O' level, or (b) other approved educational qualifications, and/or (c) satisfy the Council as to their educational competence for the course by means of an Entrance Test.* Confidential Professional reports required. Candidates must satisfy both academic and professional staff on their fitness for entry.

Course of study: There are five main areas of theoretical study: the development of the indivual, the individual in the group, the development of social policy, social aspects of health and disease, and principles and practice of health visiting. Students also undertake visits of observation, placements and 9/10 weeks of supervised practice.

Course duration: October to August (51 weeks)

Examinations: Internal, externally assessed, and written Health Visiting and Environmental Studies. Periodic assessment is maintained throughout the course.

Qualification: The Health Visitor's Certificate.

Careers in Health Visiting

The Health Visitor is a nurse with a post-registration qualification, the Health Visitor's Certificate. The Health Visitor is an essential member of the community health team, providing a continuing health advisory service to families and individuals; this work has five main aspects:

(a) the prevention of mental, physical and emotional ill-health or the alleviation of its consequences.
(b) the early detection of ill-health and the surveillance of high risk groups.
(c) the recognition and identification of need and mobilisation of appropriate resources where necessary.
(d) health teaching; individual teaching is undertaken by all Health Visitors and those who have a special aptitude may undertake group teaching.
(e) the provision of care, including support during periods of stress and advice and guidance in cases of illness as well as in the care and management of children.

The Health Visitor not only identifies social and health needs as a result of the visit following the statutory notification of birth, but is concerned more and more with prevention of ill-health/health problems on subsequent contact with the family or as he or she becomes known in the locality. The association of the Health Visitor with the family doctor provides further opportunity of establishing contact with families or individuals living alone who present a potential risk of physical, mental or social breakdown.

N.B. Applicants should note the following points in connection with the course:

1 *The criteria for selection are outlined above.
2 Early application is welcomed as it is easier for practical work placements to be found.
3 Interview Policy — Selection is by a panel of Health Visitor Tutors, Polytechnic Lecturers and Nursing Officers; a deliberate attempt is made to consider candidates from an academic and a professional view point.
4 It is no disadvantage if a candidate has applied for other courses.
5 The demand for Health Visitors varies with District Health Authorities' budgeting and establishments.
6 There is no established transfer system to other courses.
7 Established pattern: For placement with fieldwork teachers who are selected in relation to opportunity.
8 Methods of teaching and assessment: lecture, seminar, and audio-visual sessions with seminar papers and essays and teaching sessions open to continuous assessment. Sessional examinations are also used so that assessment methods are as comprehensive as possible.
9 Student comments are reported to the Course Committee.

National Certificate in District Nursing SRN/RGN

Course Leader: Mrs A Hornby

Course Tutors:
Mrs S Challender, Mrs BJ Charlton

A full-time course of integrated theory and practice leading to the award of a National Certificate in District Nursing.

Structure of the course:

Theoretical Study	*18 weeks (excluding examination week)*
Directed Study	*5 weeks*
Practical Experience	*10 weeks*
Supervised Practice	*12 weeks*

Course duration: September to July

Entrance Qualifications: *Candidates must be State Registered Nurses/ Registered General Nurses normally with two years post-registration experience and possessing five GCE 'O' levels or their equivalent. Consideration will be given to suitable candidates who do not posses these educational qualifications.

Selection procedure:
(a) Entrance test of 1½ hours duration consisting of a written comprehension test and an essay from a choice of topics.
(b) Selection interview.

Course of study: Alternating periods of theoretical study and practical experience are thematically linked to the four stages of the Nursing Process. The subjects studied are:
(1) Principles and Practice of District Nursing which is dealt with in the following three sub-modules: Current Trends in Health Care, The Nursing Process, Management and Teaching.
(2) Sociology
(3) Social Administration.
(4) Psychology

Examinations include the following three parts:
4 Course work assignments
Continuous assessment of practical progress and supervised practice.
Written examination consisting of 2 three hour papers.

Careers in District Nursing

A District Nursing Sister/Charge Nurse is a State Registered Nurse with a post-registration qualification, the National Certificate in District Nursing. District Nursing Sisters/ Charge Nurses lead a nursing team which forms an integral part of the Primary Health Care Team. They are responsible for providing nursing care in the community and accepting responsibility for the professional standard of their own performance.

District nursing includes the application of the following skills and knowledge.

1 Assessment of the nursing needs of patients and families.
2 Provision of skilled nursing care.
3 Planning and implementation of nursing care programmes.
4 Utilisation of appropriate resources in the provision of total nursing care.
5 Applying effective methods of communication.
6 Management of a case-load and a nursing team.
7 Imparting skills and knowledge by appropriate teaching methods.
8 Evaluating the outcome of nursing care.

District Nursing is concerned with caring for patients and also the family unit to which they belong.

N.B. Applicants should note the following points:

1 The criteria for selection outlined above*
2 Early application is welcomed.
3 Candidates are advised to seek secondment for training by consulting the Nursing Officer District Nursing in the Health District of their choice.
4 There is no transfer system to other courses.

School of Language and Humanities

Head of School: D Lamont MA PhD

Diploma for Bilingual Secretaries (Post-Graduate Course)

Course Leader: E Barker
Year Tutor: E Barker

A one year intensive course for graduates in any discipline who have already studied at least one foreign language and wish to train as highly qualified secretaries specialising in languages. The course involves attendance for up to twenty-three hours a week at lectures, seminars and tutorials.

Curriculum: Main Language 1 (French), Main Language 2 (from German, Spanish, Italian), economics, shorthand, typewriting, secretarial practice, (word processing) office systems, computer appreciation, tutorial. Italian is offered at beginner level only.

Course duration: September to July (34 weeks)

Examinations: Appropriate Royal Society of Arts, Paris Chamber of Commerce and Institute of Linguists Examinations. Successful students may be eligible for the award of a Polytechnic Diploma.

Diploma for Bilingual Secretaries (Post GCE 'A' Level Course)

Course Leader: A Godfrey

A two-year full-time course for those aged 18 years or over with 'A' level or equivalent qualifications who have already studied at least one foreign language.



1st Year

Year Tutor: R Davies

Curriculum: Main Language 1 (French), Main Langauge 2 (German, Spanish, Italian), shorthand (including office skills), typewriting (including foreign language), audio typing/ transcription, secretarial practice, office systems, contemporary European institutions, economics, tutorial, residence abroad. Italian is offered at beginner level only.

Course duration: September-July (34 weeks)

Examinations: Internal and external RSA single subjects in shorthand and typewriting. Paris Chamber of Commerce Certificate taken abroad.

2nd Year

Year Tutor: A Godfrey

Curriculm: Main Language 1 (French), Main Language 2 (German, Spanish, Italian), shorthand, typewriting (including foreign language), audio typing/transcription, computer appreciation, secretarial practice, office systems. Italian is offered at beginner level only.

Course duration: September-July (34 weeks)

Examinations: Appropriate Royal Society of Arts, Paris Chamber of Commerce and Institute of Linguists Examinations. Successful students may be eligible for the award of a Polytechnic Diploma.

Career prospects

There is a wide range of interesting and well paid jobs available at home and abroad for students who have successfully completed one of the above secretarial/linguist courses.

BTEC Higher National Awards

Tutor: W Hackl

Modern Foreign language study is offered an an option in the two-year full-time course and three-year sandwich course leading to the BTEC Higher National Diploma in Business Studies. French German and Spanish are offered and students select (one or) two of these for study. Applicants must possess a GCE 'A' level certificate in at least one of the chosen subjects. (For further details see page 45).

Certificate of the National Council for the Training of Journalists: full time Journalism Course

Course Leader: J Allitt

A one year full-time course designed to give students a practical and academic background before entering the profession. It is the only course offered at a Polytechnic that has the recognition of the National Council for the Training of Journalists, which lays down the syllabus. After successful completion of the course students may apply for posts on provincial newspapers. After suitable practical experience they then take the final part of the examination for the Proficiency Certificate in Journalism.

Entry is through selection panels consisting of newspaper executives, senior journalists and Polytechnic tutors. Interviews and aptitude tests are normally held between November and June. Applicants are advised to apply early in the year as only a limited number of students is accepted.

Qualifications for entry: Open to graduates of British universities and to holders of two GCE 'A' levels, or equivalent.

Curriculum: Public administration, newspaper law, newspaper practice, use of language, shorthand and typewriting.

Course duration: October to June (34 weeks)

Qualification: Certificate of the National Council for the Training of Journalists. This gives exemption from the four compulsory examinations qualifying trainees to sit for the NCTJ Proficiency Certificate in Journalism, and also enables trainees to take this examination after a shortened period of experience of a newspaper office.

Careers

There are about 32,000 journalists working in Britain today. The majority are employed on 137 daily and Sunday newspapers, on more than 1,000 weekly newspapers, and on nearly 6,000 magazines and house journals. A considerable number are employed in television, radio and public relations.

A junior journalist has a wide choice of posts after completing his training. He may move to a larger paper, into television or radio, or into public relations. Salary above the basic minimum national scales depends on ability, which can obtain rapid rewards; and promotion to executive level often comes at a younger age than in most professions. There has been equal pay for women for many years.

Polytechnic Diploma in Journalism for Radio and Television

Course Leader: J Allitt

A one year full-time course designed to give students the professional training and academic background to produce in them a basic knowledge of radio and television journalism in its various aspects, making them capable of being immediately productive in a radio or television studio, and enabling them to benefit rapidly from further experience and training.

Entry is through selection panels consisting of executives and senior journalists from the radio and television industry and Polytechnic tutors. Interviews and aptitude tests are normally held between November and June. Applicants are advised to apply early in the year as only a limited number of students is accepted.

Qualifications for entry: Applicants must hold a degree of a British University of Polytechnic, or be sponsored by a broadcasting employer. They must be eligible to work in Britain after completing the course.

Curriculum: The syllabus consists of professional subjects (Journalism and Broadcasting) and the two academic subjects considered essential for journalists: Media Law and Public Administration. Shorthand, Keyboard and voice tuition are also given. During the second term, the students occupy nine weeks acquiring industrial experience by spending three weeks at a time in studios of BBC TV, BBC local radio, and independent TV and local radio.

Course duration: October to June (34 weeks)

Qualification: Polytechnic Diploma in Journalism for Radio and Television.

Careers

The future is one of considerable expansion in television and radio. The number of local radio stations is increasing, especially in the independent sector, and the number of job opportunities is rising accordingly. Ability can obtain rapid rewards and promotion often comes at a younger age than in most professions.

Combined Studies Programme

Dean of Programme: Dr TC Curtis PhD FRHistS
Programme Administrator: Mrs JM McGrenra BA, DipLib

DipHE, BSc/BSc(Hons), BA/BA (Hons) in Combined Studies Pre-Degree Course

Combined Studies is a rapidly growing programme of full and part-time courses in Humanities, Social and Administrative Studies, Science and Technology. The courses can be followed to honours degree level or students may leave after the second year, or its part-time equivalent, with a Diploma in Higher Education. There is also a two term pre-Degree course especially designed for mature students. (Details can be found in the P/T Prospectus.)

The Programme is administered by the Programme office which is responsible for the registration of students, the conduct of courses, and the co-ordination of examinations. The Programme Office is housed in Room B221, Harris Building, telephone extension nos. 2198 and 2488.

DipHE, BSc/BSc(Hons), BA/BA(Hons) Combined Studies

Programme Co-ordinators: Dr JF Brown, Mr K Foster

Senior Tutor: Mr JS Moorman
DipHE Tutor: Ms J Darcy

This is a three year full-time course leading to a two subject degree of the Council for National Academic Awards. Students who succesfully complete the first two years of the Degree can, in certain circumstances, qualify for the award of a Diploma of Higher Education. The distinction between BSc and BA awards is based on the subjects undertaken by the student. The degree is taught in conjunction with its part-time day or evening variant (see Polytechnic's Part-Time Prospectus) and students beginning full-time study may later transfer to a part-time schedule.

Qualification for entry: Applicants must meet the following general requirements:

(a) GCE passes in five subjects including two at Advanced level
or
GCE passes in four subjects including three at Advanced level.
In addition several subjects have additional entry requirements and this information is included in the section on completing the application form.
(b) a good OND/ONC in suitable subjects.
(c) A BTEC Certificate/Diploma including passes with merit at level III in appropriate units.
(d) Equivalent qualifications, eg Open University, Open College, etc. will also be considered.
(e) The Polytechnic will also consider applications from mature students without any of the above formal entrance requirements if they can provide evidence of their ability to sustain study at honours degree level. Students falling into categories (d) and (e) should contact the Admissions Tutor for further information.
Qualifications should normally include 'O' level English Language or equivalent.

Course Structure

In the first year students study THREE subjects of equal weight chosen from the following:

Astronomy	*Geography*
Biology	*History*
Chemistry	*Linguistics*
Computing	Mathematics
Economics	*Organization Studies*
Education Studies	Physics

English *Politics*
French *Psychology*

A summary of each subject is provided at the end.

In the second and third years students will continue with TWO of the subjects studied in Year One and *some* of these subjects can be weighted according to the subject's own choice of 'route' through the Degree. In addition there are three new subjects which can be studied as second and third year subjects, these being:
American Studies
Biochemistry
Physiology

Routes available:

(i) All the subjects can be studied on a joint honours route in which each subject is given equal weight. Students who wish to study *two* subjects printed in italics have also the possibility of two other routes viz.,
(ii) the major-minor route (a major subject with approximately 75 per cent weighting and a minor subject with approximately 25 per cent weighting, or in exceptional circumstances.
(iii) the 'free' route (any approved combination of courses, given that the proportion of courses in any single subject may not exceed that of a major subject).

Students reading French on routes (i) and (ii) are required to spend a year in France, making the duration of their Degree four years. For all subjects, greatest specialisation occurs in the third year when, in addition to taught courses, students prepare a dissertation or project based on personal research in one of their two subjects or in an area which spans both.

In the first and second years *all* students will undertake a Context of Science or Context of Humanities course aimed at broadening their appreciation of their chosen subjects of study. Science students will also receive instruction in computer programming.

Applying for the Course

Standard Polytechnic application forms should be used and it is important that applicants specify on the application form the three subjects they wish to study in the first year. In making a choice of first year subjects applicants are asked to follow the guidelines below as it is not possible to allow an unrestricted choice of first year subjects. It would also greatly assist the Admissions Tutor if applicants could indicate their probable choice of second year subjects; this choice is not binding and if applicants are not certain a second year choice need not be specified.

Choosing Subjects for the Degree Programme

The degree scheme requires applicants to choose *three* subjects to study in the first year and at the end of the year *two* of these will be selected for study in the final two years. In choosing three first year subjects applicants must obey the following rules:
(1) Each subject must lie on a different timetable spot.
(2) Applicants must satisfy any entry requirements a subject may have (see later section) over and above the general entry requirements for the course (see previous section).

1st Year timetable spots

Spot No.	*Subjects*
1	Astronomy, Biology, History, Organization Studies
2	Economics, Education Studies
3	English, Physics, Psychology
4	Chemistry, Linguistics, Politics
5	French, Geography, Computing
6	Mathematics

As an example, applicants would not be able to study Astronomy, Biology and Economics as main subjects because Astronomy and Biology are on

the same timetable spot, however Biology, Economics and Psychology would be allowed.

In making a choice of first year subjects applicants should consider their probable choice of second year subjects as once again they are on a spot system and students may only study two subjects from different spots.

2nd Year timetable spots

Spot No.	*Subjects*
1	Biochemistry, Economics, English, Physics, Psychology
2	Astronomy, Chemistry, Linguistics, History, Physiology, Organization Studies
3	American Studies, Mathematics, Politics
4	Education Studies, French, Geography, Computing

Although this spot system may look rather restrictive all the most useful subject combinations can be studied.

Minimum subject entry requirements: In addition to the general entry requirements for the degree schemes as outlined earlier in order to study a given subject applicants may need to satisfy additional entry requirements which are as follows:

1st year subjects

Astronomy	A study of Physics to 'A' level A pass in 'O' level Mathematics
Biology	A study of Biology to 'A' level A pass in 'O' level Mathematics
Chemistry	A study of Chemistry to 'A' level A pass in 'O' level Mathematics
Computing	A pass in 'O' level Mathematics
Economics	A pass in 'O' level Mathematics
Education Studies	No special requirements
English	No special requirements
French	A pass in 'A' level French
Geography	A pass in 'O' level Mathematics
History	No special requirements
Linguistics	No special requirements
Mathematics	A pass in 'A' level Mathematics
Organization Studies	No special requirements
Physics	A study of Physics to 'A' level A study of Mathematics to 'A' level
Politics	No special requirements
Psychology	A pass in 'O' level Mathematics

Ancillary subjects

Ancillary Maths II	A study of Mathematics to 'A' level

Passes in BTEC level III subjects will be accepted as equivalent to 'A' level passes.

2nd year subjects

In order to study a given subject in the second year it must have been studied in the 1st year. However some subjects only appear in the second year while other subjects make restrictions on the 1st year subject combinations which must be studied. These restrictions are as follows:

American Studies	Study two from English, Geography, History or Politics in the 1st year
Astronomy	Study Mathematics or Ancillary Mathematics II and Physics in the 1st year

Biochemistry	Study Biology and Chemistry in the 1st year
Physics	Study Mathematics or Ancillary Mathematics II in the 1st year
Physiology	Study Biology in the 1st year

Course Profile

Duration: October to July
Examinations: At the end of each year, internally set with external moderators. There is also a large proportion of continuous assessment.

Qualification: Will be those of the Council for National Academic Awards.

Careers

The major advantage of this form of honours degree is that it allows the student to keep a wide range of career options open and specific career opportunities will be determined by the main subjects studied. With such a large choice of subject combinations it is not possible to give information here about career opportunities, however students will receive careers advice from members of staff when it comes to making their choice of subjects to study in the final two years of the course. The Polytechnic also runs a careers advisory service.

Subject Profiles

American Studies (Minor only in 2nd and 3rd years). This is a new departure in the Polytechnic's courses in that it is a multi-disciplinary programme of study taught jointly by a number of teaching staff from at least three different Divisions. The American Studies programme is taken as a Minor, in the second and third years of the course, by students whose major is in English, Geography or History; students must have passed two of these subjects in year 1. The programme crosses the traditional boundaries of academic disciplines, and looks at American culture through, for example, studies of American literature, themes in American history and aspects of the contemporary American landscape. In year three students take specialist interdisciplinary courses on such topics as wilderness; the American Hero and the City in American Culture. All courses are jointly taught by a number of lecturers and discussion and seminar work are given prime emphasis.

Astronomy: Unlike other subjects astronomy will not have been studied formally by many students. In the first year of the course the aim is to provide a broad introduction to the subject for those who will study the subject for one year only and provide a firm basis for students to enter the second and third years of the course. During the first year a complete range of topics is covered including the solar system, structure of the stars, the galaxy and cosmology.

The subsequent years of the course are intended to familiarise the student with theoretical and observational techniques in astronomy. The scope of the work covers radiation processes, observational techniques, and solar system studies. The third year, a logical progression of the material in the second year, provides the opportunity for the student to study the evolution of the stars, galaxies and cosmology, relativity, and to extend the observational techniques. Honours students will be required to undertake a project to gain first hand knowledge of procedures and techniques.

Astronomy is essentially an observational science and students at all stages of the course will be expected to undertake observational work at the observatories.

Biology: (1st year only). This is a first

year course designed to provide a background in biology for students who wish to take either Biochemistry or Physiology in the second year, or to give students who wish to continue with non-biological subjects a basic training in biology. The course is broad and includes biochemistry, cell biology, physiology, diversity of life, genetics, ecology and evolution.

Biochemistry: (2nd and 3rd years only). This course is offered in the second and third years only and follows on from the first year studies of biology and chemistry. Second year students study the major areas of biochemistry including molecular biology, enzymology, metabolism, bioenergetics, microbiology and biochemical genetics.

Third year students continue to study the main areas of biochemistry but there is greater emphasis on recent advances in the subjects. There is also opportunity for specialist studies in nutrition and clinical biochemistry or in biodeterioration and microbial biochemistry.

Chemistry: The first year Chemistry studies are designed to consolidate and extend 'A' level work and therefore provide a basis for later studies in either Chemistry or Biochemistry. In the second and third years of the course, the fundamental basis of the subject is developed through a series of lectures, tutorials and practical classes. In addition, students may further their studies in selected areas of Chemistry by attending a number of advanced topic courses in the third year and by choosing a project relevant to Chemistry.

Computing: The course provides the opportunity to study computing fundamentals, the current technologies supporting modern computer systems architectures, and advanced methodologies for the application of computers and related technologies to the design of information system architectures in the commercial and industrial environment.

The first year comprises three units: introduction to data processing, computer systems and program design, and provides the fundamental knowledge for all students wishing to study computing in part two of the course. These units are also a self-contained course for those students not wishing to continue with Computing, but who wish to acquire sufficient computing knowledge and skills to apply them selectively throughout their course.

Students studying Computing in part two of the course may take either a major or joint programme of study. The second year course comprises a core study of computer systems architecture, information processing, software engineering and information systems environment. Units are also offered in operating software and systems analysis and design. The third year course is concerned with the study of advanced architectures and technologies with particular emphasis on communications networks and methodologies for information systems design including data bases and embedded computer systems for industrial computing. A unit in computer graphics and image processing is also offered. All students select an option course from a list of options reflecting current developments and research interests of staff. An assessed project is also undertaken in the third year, enabling the student to concentrate on a particular interest.

Economics: The course provides the opportunity to analyse economic ideas, relationships and activities.

In the first year all students take a single course, the major part of which deals with the Economic Analysis of the national economy. Building upon this, second year courses examine the allocation of resources within an

economy, different economic systems, key aspects of the development of the British economy in the twentieth century, and the theoretical foundation for the economic analysis of the public sector. In Year Three all students take one common course in Economic Policy and also select from specialist options in the Political Economy of Welfare, Post-Keynesian Economics and the economics of Development and Underdevelopment.

Education Studies: The course is designed to complement other studies in the programme and seeks to promote an interest in the social and cultural dimensions of man's existence. It looks at education in a broad context and examines its relationship with, for example, political institutions and the national economy. The course aims to explore differing interpretations of what constitutes education. Although there is reference to formal education and schooling, there is also a focus on the unprogrammed acquisition of knowledge which arises from everyday experience, not least through communications and the mass media. Consideration is also given to the significance of education in shaping social, moral, and technological futures. The structure and content of the option courses in years two and three of the course allow students to pursue either a discipline based or a topic based study of the educative process.

English: The English course aims to explore the distinctive forms of 'genres' of literature; to consider the relationship between literary works and their social and cultural context; and to examine selected authors and topics in depth.

The first course is an introduction to the novel, poetry and drama, through the study of a range of examples of each genre. Thereafter the student can to a considerable extent construct his or her own programme of study. In the second year there are three broad-based period courses, dealing with the Renaissance (including Shakespeare). Victorian Literature and Modern Literature. English majors take all three courses; joint students the Renaissance and one other; minor students any one course. In the third year a wide variety of specialised options are available.

French: The French component offers courses in three principal areas: French Language, French Literature and Applied Language Studies.

The French Language Courses are compulsory in all years and place much emphasis on developing the major communicative skills. There is a well equipped language laboratory and oral work is conducted by native speakers.

The Literature Courses are designed to cover the main literary movements from the 18th century to the present with specialised options in year three.

The Applied Language Courses draw upon insights and concepts from Linguistics as the basis for the analysis and composition of French texts.

Students may take the literary and applied language courses in varying combinations according to preference.

Note: In addition to normal 'A' level entry there is a special 'O' level intake who follow an intensive course in year one.

Students following a Major or Joint route in French will normally be expected to spend one year studying or in paid employment in France (not applicable to part-time students).

Geography: A wide range of courses is offered within a well-equipped department.

In the first year, lectures introduce the ideas through which we interpret information, while practical sessions and fieldwork develop approaches to the problems of understanding natural

and human landscapes. Second-year courses focus on the complexities of the natural environment, of historic landscapes of the British Isles, and of contemporary social, economic and environmental problems. Investigative skills are further developed in preparation for the third-year courses and for the dissertation. The range of third-year courses reflects the research interests of the staff and provides the opportunity for students to work at an advanced level in a number of specialised fields.

History: The courses cover a broad range of historical periods and area studies, but overall they focus on the skills of the historian, especially those concerned with the selection and interpretation of evidence. These skills are introduced in the first year through a single survey course in Western Civilisation reinforced by several historiographical case studies. In the second year students select courses from a range of more specialised options which include British, European, and American history. These options provide the foundation for the more advanced courses of the final year which usually reflect the research interests of the teaching staff. In the third year students select courses from two groups: one group is made up of special studies concerned with topics like Nazism or the French Revolution, while the other consists of comparative, thematic, courses like the Thirties.

Linguistics: The course aims to discover exactly what language *is* and to examine its many forms and uses.

The first year introduces key notions and techniques for describing the sounds, structure and meanings of language and poses questions about the use of language in specific situations, such as advertising, politics, literature, etc. The second year allows students to broaden their understanding of the 'core' areas of language study while introducing courses which variously develop the theme of language and communication. All third year courses build upon those in Year Two and allow students to examine specific applications of Linguistics, and the relationship of Linguistics with other disciplines such as Sociology, Psychology, and English Literature.

Mathematics: The course is designed to provide a broad understanding of the major areas of Mathematics with a bias towards applicability.

The first year course covers basic algebra, calculus and statistics and seeks to provide a treatment suitable both for those students not taking Mathematics as a main second and third year study as well as for those continuing with the subject. In the second year all Mathematics students undertake four common courses: Mathematical Methods (largely more calculus), Pure Mathematics (algebra and analysis), Statistics and Numerical Analysis. The latter component includes the necessary computer programming material (currently FORTRAN is used). In the third year all Mathematics students undertake a common course in Mathematical Methods and Pure Mathematics and options are available (subject to demand) in Statistics and Numerical Analysis. In addition, final year students may opt to undertake a project in Mathematics.

Organization Studies: The course is concerned with developing an understanding of the operation of organizations in modern industrial societies, using the techniques and concepts developed in the behavioural sciences. The course will consider a wide range of organizations, (for instance, business organizations, hospitals, trade unions).

The first year will provide students with a basic understanding of the

nature of human behaviour in organizations and the relationships between organizations and society in general. Second year courses examine such aspects of organizational life as decision making, power and conflict in organizations and the relationships between people and their work, as well as considering some of the different approaches which have been used to study organizations.

In the third year courses, students are able to develop a deeper understanding of such issues as the impact of technological change on people and organizations, industrial democracy, organizational effectiveness.

Throughout the course there are opportunities for students to relate the course material to their own interests and experience.

Physics: Physics is a fundamental science and the course emphasises this by building on basic concepts.

The course aims to provide the student with a good grounding in the principles and applications of Physics, with the practical skills required to make an early contribution to projects in industry or research and with sufficient knowledge of practical electronics and computer systems to be able to apply the modern techniques used in physical research and technology.

In the first year course basic concepts are developed through lectures and practical classes in electricity and magnetism, atomic and nuclear physics, mechanics, waves, optics and thermal physics.

The second year course extends and consolidates first year work using a more rigorous mathematical approach and a study of the microscopic viewpoint of physics is started through lectures on microscopic properties of matter and wave mechanics.

The third year course sees completion of the fundamental concepts of atomic, nuclear and solid state physics and gives scope for specialisation in a number of areas of applied physics and pure physics. These may include optoelectronics, nuclear instrumentation, applied acoustics, radiation physics, applied magnetism, semiconductor devices, molecular spectroscopy, nuclear structure physics and modern physics. There is considerable scope for student projects in these areas.

Physiology: This course is available as a second and third year subject following on from Biology in the first year.

The second year course is designed to give a broad coverage of physiology, which includes celluar, animal, plant and environmental physiology. Particular emphasis is placed upon the development of a good working knowledge of a wide range of modern instrumentation used in physiology.

In the third year the course develops a deeper understanding of mammalian physiology and neurophysiology. The opportunity for specialisation is available through selection of options such as pharmacology or environmental physiology and through a wide range of research projects.

Politics: The study of Politics is concerned with the way societies resolve the conflict of interests and ideas between individuals and groups. Within the context of the Combined Studies Degree, it also examines the nature and development of political thought.

The first year includes a self-contained course on the nature of the study of politics and includes an examination of major political ideologies and their manifestation in the nineteenth and twentieth centuries. Students are also provided with a detailed analysis of the British political system, ranging over such matters as party politics and voting patterns, parliament, the cabinet and the civil

service and the policy making process.

All second-year Politics students take a course in political theory. In addition Joint Honours students may choose between a course on comparative politics, which includes analysis of political ideas, structures and practices of countries such as France, Germany and the USA, and one on international relations, which examines the interaction between nations and the development of political strategies. Students majoring in Politics must follow all three courses; those taking Politics as a Minor subject choose one.

Options in the third year give students the opportunity to focus more precisely on selected aspects of the broad areas already covered, in many cases reflecting the research interests of members of staff.

Psychology: has been aptly described as the science of mental life. It is wide-ranging and borders on many other subjects making it an ideal discipline within this programme. Combinations can be made with subjects from the Sciences, Social Sciences and the Humanities which are useful both in terms of academic content and career prospects.

The first year of the course is designed to be a broad introduction to the discipline and includes the study of learning, perception, cognition, social psychology, developmental psychology, individual differences and psycho-biology.

In the second and third years students are allowed to specialise in two or more of these areas and there exists a wide-ranging series of options in the third year which will enable students to develop their interests as well as complement their second main subject. Both pure and applied areas of study are emphasised in each student's programme of study.

Student Services

Head: Miss Frances Higgins
MA (Psychol), BA(Soc Admin) DASE (Educ Guid) DipVG GBPsS

The challenges and demands made on students undertaking a Polytechnic course may arise from the adjustment to a larger and more varied environment, unfamiliar living conditions, health or financial needs, making new relationships, coping with personal or family problems, study pressures and career choices and decisions. Many of these are normal needs and experiences, while others may be of a deeper nature and concern. Help may be required for example in finding accommodation, obtaining medical treatment or advice, dealing with transitional needs or more long standing personal feelings or difficulties, or obtaining information on career opportunities. The staff of the Student Welfare Services are available to assist in these matters and many students make use of these services during their time at the Polytechnic.

Accommodation Service

An increasing number of students attending the Polytechnic are living away from their home area and the Accommodation Officers recognise the importance of trying to provide suitable accommodation for students.

There are Polytechnic Halls of Residence which provide single study bedroom accommodation with self catering facilities. There are also a number of large houses also run on a self catering basis, offering single and shared bedroom facilities. The Polytechnic residential accommodation includes a good stock of shared flats and houses with single study bedrooms and communal facilities. There is also approved accommodation in the private sector consisting mainly of lodgings and shared houses with a

A study-bedroom in the Halls of Residence



small supply of flats and bedsits. Most of the accommodation is sited between ¼ mile and 3 miles from the Polytechnic. First year students are given priority in much of this accommodation, particularly where they live beyond a certain radius of the Polytechnic and require seven day accommodation.

While the majority of students can be accommodated on the Campus or in surrounding districts, some may have to be housed some distance away. Students who are grant-aided will generally be assisted by their supporting Local Education Authorities if their necessary travelling expenses exceed the amount included in the grant.

Careers Counselling and Appointments Service

Students need to give time and thought to decsions and choices about their future if they are to take advantage of the range of developing opportunities available in the rapidly changing society we live in today. So they are encouraged to use the range of resources offered by the Service before final year.

Interviews with the Careers Counsellors which are of a personal and confidential nature, allow for informal discussion and the opportunity to talk over uncertainties, develop plans for personal career exploration and make informed choices and decisions.

A Careers Information Centre provides a wide range of information on occupations and professions, employers and the opportunities they offer and on undergraduate and postgraduate courses in Polytechnics, Universities and other institutions of higher education.

Vocational Interest Questionnaires are available and many students, after consultation with the Careers Counsellor, have found them a useful aid in exploring possible careers or broad questions about the future.

A series of careers video tapes are available for individual or group viewing, as well as a programme of careers talks and Workshops such as 'Applying for a Job', 'Career Decision Making and Transition', 'Getting the Best out of Industrial Training'.

Employers visit the campus to interview final year students and assistance is also given in arranging selection interviews at an employer's premises. Additionally individual or group exploratory visits to employers are also arranged.

The service is also available to those students who for whatever reason do not complete their course and assistance is given in exploring alternative opportunities.

St Peter's Centre

Preston 22141 Ext, 2063

The Centre, which is at the rear of the Arts Centre, opposite the library, exists to serve all members of the Polytechnic of any faith or none.

The change in life-style involved in becoming a student with all its pressures and challenges, offers an opportunity to challenge or deepen long held beliefs or unbeliefs. To help you during your time in Preston and at the Polytechnic, the Centre and the Chaplains are at your service at anytime for anything. We are not part of the 'establishment', but are officially recognised. We work together and have contacts with other faiths.

We can be seen around the campus as well as at the Centre, and can also be contacted at home. Details of services, discussion groups, talks and other events are published at the Centre and around the campus.

Chaplains:

Revd David Clegg (Anglican) — Full Time	Home Tel: 734478
Revd Terry Rodgers (Roman Catholic)	726370
Rev Arthur Roberts (Free Church)	719449

Counselling Service

The Counselling Service is available to help students with personal, social or emotional needs. *It is a strictly confidential service.* Often the transition from school to student life, coping with a new course of study, making new friendships, can make extra demands on students and to have someone to turn to, with whom they can talk over their feelings or anxieties can be of real help. Sometimes the difficulties one experiences can be deeper and more long standing — feelings about one's worth and value, confidence in one's ability to cope with academic expectations, personal or family stress and problems. In assisting students to cope with needs or difficulties, the aim of the service is not one of imposing values or solutions, but rather providing the opportunity for a person to explore their needs or situation more clearly and facilitate the student's own means of coping, or arriving at a decision. Sometimes a single interview with the Counsellor may be sufficient but where more serious difficulties are experienced it is often helpful for counselling to continue for a longer period.

The main approach of the service is through individual counselling but opportunities are also offered to students wishing to develop relationship skills or improve study habits, through group work.

Health Service

The Polytechnic operates a full time Health Centre during term time, with medical and nursing staff, treating minor accidents and sickness and advising on health problems generally.

Students who will be living away from home are strongly advised to bring their National Health Medical Cards with them and register with a Polytechnic doctor or any other local General Practitioner.

Note: Further information about the services is sent to students before the beginning of the session.

Services offered to Schools and Industry

Advisory Service for Schools and FE Colleges

Educational Liaison Office

Pupils frequently need information and advice about courses available at Lancashire Polytechnic and Polytechnics generally, and the Educational Liaison Office is willing to assist the careers staff in this respect. Another function of the Educational Liaison Office is to establish and maintain personal contacts between the staff of schools and colleges and their colleagues in the Lancashire Polytechnic.

Visits of small or large groups of Fifth and Sixth Form pupils to the Polytechnic are welcomed. Alternatively, staff of the Polytechnic will gladly visit schools to talk about courses and life in the Polytechnics, to lecture on their own specialist subject or to assist at careers events. Careers staff are invited to contact the Educational Liaison Office to discuss suitable arrangements. Every attempt is made to cater for the special interests of a party of school or college visitors.

Service to Employers and Employees

Business and Industrial Centre

The Polytechnic has recently established a Centre to cater for the needs of Business, Industry and the Public Sector.

The Centre offers the following services:

Consultancy — technical advice is provided for local firms and a comprehensive testing service is available.

Short Courses — designed for the individual employer and dealing with his specific problems such as the introduction of new techniques and new technology.

Student Placements — Co-ordination of the Polytechnic's industrial and commercial links with organisations throughout the United Kingdom and overseas who provide this essential element of practical experience for students studying a variety of degree and diploma courses.

Advice to Small Businesses — those hoping to set up a small business can seek advice from consultants specialising in the problems of the small family business.

For further information of the facilities available contact Mrs Jean Minall. Tel: 22141

Students' Union

St Peter's Square,
Fylde Road,
Telephone: Preston 58382

If you become a student at the Polytechnic you will automatically become a member of the Union. The Union is the official representative body of the students and is concerned with four main aspects.

Firstly representation on all internal and external bodies.

Secondly the campaigning side, where the Union's major work is in seeing that all students are given a greater insight into the education system under which they are studying and that students campaign on such issues as directly face them, eg grants and accommodation.

The third area is the welfare function of the Union, whereby certain services are provided by the Union organisation. Some of the major areas covered by Union Welfare are those provided nationally by the NUS and also NUS Insurance (Endsleigh) and NUS marketing. In addition the Union gives welfare advice on such questions as grants, accommodation or any other matters which causes members concern plus transport facilities.

The fourth area is the social side of the Union, social events, discos, folk club, film nights, etc. are promoted for the general enjoyment of the membership. This area also covers clubs and societies for those who have special interests outside the general social field of the Union. These clubs and societies may become affiliated to the Union and thus receive a grant to carry out their activities.

The Union also engages in trading activities. With the joint purchasing power of over 1,000,000 students nationally, their Unions have combined to secure substantial discounts in stationery, arts materials, travel facilities and bar stocks. Those discounts are passed on to the membership so that goods are usually far cheaper than in local shops.

Union membership cards are issued at enrolment. The possession of a Union card enables students to participate in social activities, to join any student club or society and to vote in elections, union meetings and other activities.

Union Premises: In January 1979 a central union building was completed. This building has general office facilities for the running of the Union and recreational facilities ie Bars, Games Rooms, Dance Hall, Meeting Room, TV lounge, etc. to serve the general requirements of students.

National Union of Students

This is the national organisation representing over one million students in educational institutions of all kinds and sizes. It has a permanent staff and offices and negotiates with the Department of Education and Science on behalf of students both collectively and individually. It is an effective source of information on all aspects of student life and will deal with student problems individually through the union officers within their particular institution.

After enrolment students are asked to go to the union office where they may collect their National Union of Students (NUS) membership card. All enquiries should be addressed to the President or the Vice President of the Students' Union.

Physical Education and Recreation

Head of Section: J Montgomery BEd DipPE DipSpEd CertEd

The section is centred on the indoor facilities in the Sports Hall. Using these and hired facilities the following activities are catered for: athletics, badminton, basketball, canoeing, cricket, dance, fencing, fitness training, five-a-side football, golf, gymnastics, hockey, jogging, judo, karate, mountaineering, netball, rugby, sailing, skiing, soccer, squash, swimming, table-tennis, tennis, trampolining, volleyball, weight training and yoga.

Qualified coaches give instruction on all recreational activities. The Students' Union run their own sports clubs through the Sports Council and the opportunity exists to participate in British Polytechnic Sports Association competitions.

Adjacent to the sports hall is a human-performance laboratory which is used for research into exercise and which forms the centre for a cardiac rehabilitation programme run in conjunction with the section providing the local community with a unique service.

The Polytechnic is situated within easy reach of the Lake District National Park and a variety of outdoor activities are available both there and more locally.

For further information and all bookings contact the Physical Education Staff in the section's office (A.9 Ext. 2039).

Polytechnic Arts Centre

Manager: W Hemingway
Administrative Assistant: Mrs P Fletcher

The Polytechnic Arts Centre opened in 1976 in a renovated Church building. 'St Peter's' was an Anglican neo-gothic Church designed by the Liverpool architect Rickman and opened in the Guild year of 1822. The present building has retained the architectural elegance of the original structure including the cast-iron work which was a special feature of Rickman's designs. The building is shared with the inter-denominational Chaplaincy who use the former chancel and vestry.

The main auditorium is used both in the evenings and on certain lunchtimes for a mixed programme of professional and amateur events. These range from classical, folk and jazz concerts to dance and drama productions. The north and south aisles are used for a constant series of exhibitions of varying subject matter including works by regional and national artists, exhibitions of architectural and historical interest, photographic and craft work. The building also offers practice and rehearsal facilities for the Polytechnic's own cultural activities — dance, drama and music workshops. A new feature of the work of the Arts Centre is the organisation of a series of lunchtime lectures. This programme of public lectures provides a platform in the North West for distinguished people to speak either officially or personally on important issues of the day. Anyone requiring further information should contact the Manager (telephone Preston (0772) 262040).

Leisure activities — Rossendale dry ski slope



The Library and Learning Resources Service

Librarian: JR Edgar MA, FLA

It is increasingly a feature of higher education that students are required to develop habits of independent learning; greater emphasis is placed on the student working on his/her own, reading the literature of his/her subject with an alert and critical mind. The Polytechnic has therefore developed an up-to-date Library and Learning Resources Service (LLRS) which aims to provide a dynamic user-oriented service rather than one which merely acts as a collector and organiser of materials.

Nowadays information and ideas of direct relevance and interest to the students and staff of the Polytechnic are published not only in the traditional way (books and journals), but in an increasingly diverse range of media, including audio and video tapes, slides, records, films, electronic sources etc. These and other media are being added to stock in increasing numbers in response to the educational and research needs of the users of the LLRS.

Science, Technology, the Social Sciences, Business, Art and Humanities are well represented in the stock of the Library and the Preston Incorporated Law Society has deposited its collection with the Polytechnic which is housed adjacent to the Polytechnic's own Law Collection.

Membership of the LLRS is open to all staff and current and former students of Lancashire Polytechnic and to members of Preston Incorporated Law Society. Under a reciprocal agreement students and staff of Lancaster University are also eligible for full membership. Staff and students of other colleges, staff of central and local government departments, of industry and commerce and members of the general public are able to use the library for reference purposes. Further details of these facilities are available on request.

All new students are offered an introductory visit to the Library. Seminars and tutorials on the use of library materials are provided for many courses by a team of Subject Librarians. They have been appointed to cover the fields of Art and Humanities, Business Studies and Law, Sciences, Social Sciences and Management, and Technology, developing the stock in their respective subject areas, assisting in the provision of an information service, preparing printed guides to the stock and services available and generally ensuring that the LLRS responds to the needs of users by keeping in close touch with staff and students.

Study and reference facilities, the loan of books and other materials, self-service photocopying, a 'restricted loan collection' of books and articles in heavy demand, a collection specifically for part-time students and searches of information held on computer data bases are among the other services offered.

All new materials added to the stock of the Polytechnic Library and an increasing proportion of the older stock is recorded in the computer-produced microfiche catalogue, copies of which are available for consultation in the library.

A large new LLRS building opened in January 1979 alongside the Polytechnic Arts Centre and the new Students' Union. Nearly 700 reader places, including study tables, drawing tables, carrels, and easy chairs in informal groups are included on its three floors. In addition, a classroom fully equipped for audio-visual use, two seminar and two tutorial rooms and several sound-proofed carrels are provided. Enquiries Desks are manned



by professional librarians on each of the three floors.

The total resources of the LLRS, amounting to about 200,000 volumes, nearly 1800 current periodical titles and 100,000 audio-visual items are supplemented by co-operative arrangements with other local libraries, and by access to the national inter-library loan network via the North West Regional Library System and the British Library Lending Division at Boston Spa, Yorkshire.

The Preston District Central Library (formerly the Harris Library), which is part of the Lancashire Library, is a valuable additional resource available to Polytechnic staff and students. It houses large fiction and non-fiction lending collections, a reference library and a record lending library. Its stock has been enriched by the transfer of the Technical Information Centre and other non-fiction, music and drama material previously located in the Corporation Street headquarters of the Lancashire Library.

Further information about the use of the Polytechnic Library is available from the Enquiries Desk.

Polytechnic Bookshop

The Polytechnic Bookshop, operated by Parrys Ltd, the Liverpool University booksellers, is located next to the Polytechnic main entrance. It is open throughout the day. The bookshop carries a good range of course text books and is able to provide an excellent service for supplying other academic books through its ordering system. Students may also purchase stationery, including special laboratory notebooks through the bookshop.

Computer Centre

Head of Computer Centre: AE Roff BA MA FSS

General purpose computing facilities are centralised within the Polytechnic and are available to all sections of the establishment for teaching purposes, for research and for administration. The Centre is responsible for administering these facilities and seeks to provide an effective and interesting environment in which computing facilities may be used as an integral part of the education process.

Computers have had a profound effect on the workings of modern industry, government, commerce and the professions. Traditional activities in these areas have been radically altered by the introduction of automated techniques and many recently qualified people will become involved in some way with these machines during their working lives. Consequently Computing is taught, where relevant, on all courses and students are encouraged to apply computing methods to investigate situations in their main subjects.

All students are welcome to make use of the facilities of the Computer Centre and of the advisory facilities available there. The Centre has 4 terminal teaching rooms, a user work area, data preparation area, offices and reception.

The designation of Lancashire Polytechnic as a major centre for information technology has led the Polytechnic to accelerate existing plans to make further developments in the area of computing. These plans include additional staffing, a substantial enhancement of the equipment and an extension of the Computer Centre to provide additional terminal rooms and specialist graphics and microcomputer laboratories.

The staffing of the Centre is organised in two sections — operations and developments. Operations is responsible to the Computer Manager for data preparation, terminal supervision, computer reception and room bookings, as well as operating the computer systems and communications. The Developments section is responsible for designing, implementing and maintaining all the systems and applications software. It also advises and assists users on available software and on preparing programs and data to run on the system.

Groups of terminals are available in all Faculties throughout the Polytechnic in addition to those in the Computer Centre. The existing computer systems which provide a powerful computing facility able to support over 200 terminals concurrently are as follows:

(a) PRIME 9950 Computer — 8 megabytes memory, 760 megabytes on line disk storage. 112 terminal lines, Educational use.

(b) PRIME 750 Computer — 6 megabytes memory, 680 megabytes on line disk storage. 80 terminal lines. Educational use.

(c) VAX 11/750 Computer — 4 megabytes memory, 400 megabytes on line disk storage. 24 terminal lines Educational use.

(d) PRIME 750 — 4 megabytes memory, 460 megabytes on line disk storage. 64 terminal lines. Administrative, word processing use.

Each of the computers has magnetic tape back up and a central printer. An AO plotter is available to all educational users.

Some 350 terminals and workstations are connected to these systems mostly via a GANDALF Double PACX IV switch allowing each terminal to access all educational machines.

A wide range of applications and systems software is available on the PRIME Machines and a team of professional Programmer/Analysts are responsible for developing and maintaining the software systems for use within the establishment. All the major programming languages are available including COBOL, FORTRAN, BASIC, PASCAL, and CORAL-66 in an on-line form. Various low level languages and microcomputer cross assemblers are also available to provide an excellent environment for program development. In addition, users can employ a wide range of software packages applicable in diverse areas such as business, the sciences and geograpy. These packages, many of which are widely used in commerce and industry are able to meet the needs of those who wish to use the computer purely as a resource in their subject area as well as those who require a deeper understanding of the computer in their work.

Lancastrian School of Management

Dean of School: to be appointed

Head of Short Course Unit: CW Cunliffe

Administrative Assistant: Mrs SB Myerscough

Centred on the Lancashire Polytechnic, the Lancastrian School of Management is responsible for the co-ordination and development of the comprehensive range of Management education and training services sponsored by the Lancashire and Wigan Education Authorities. Residential and day courses in numerous subject areas cater for the needs of all levels of management. The School offers a full consultancy service and will undertake research assignments in the management field.

Organisations can take advantage of the programme offered or have courses specifically designed to meet their individual requirements.

Borwick Hall Management Centre, the residential centre for the Lancastrian School of Management offers excellent lecturing and seminar accommodation in purpose built accommodation. The Hall is situated at Borwick, near Carnforth, close to the M6 Motorway and offers full residential and catering facilities.

The Management Centre is available to organisations for any of the planned courses or they may use the facilities for their own development programmes.

For further details please contact:
CW Cunliffe,
Head of Short Course Unit,
Lancastrian School of Management,
Lancashire Polytechnic,
8 East Cliff,
Preston PR1 3JN (0772) 22141
or
Lancastrian Management Centre,
New Borwick Hall,
Carnforth,
Lancashire LA6 1JO
Tel: (0524) 734500

Winckley Gardens, Preston



Lancashire Polytechnic

Educational Liaison Information Service

If you would like to apply to join a Polytechnic course, or if you require further details of any of the full-time and sandwich courses listed overleaf, simply complete the details below:

Name ..... Date of Birth .....

Address .....

.....

.....

Post Code .....

(i) Please send me an Application Form ☐
(ii) Please send me further course details. ☐
(also tick appropriate box overleaf)
(iii) Please send me information about the ☐
accommodation service
(iv) I am a mature student and do not have ☐
all the formal course entry
requirements, can you advise me. My
daytime telephone number is .....

I have the following query not covered above:

_____

_____

_____

_____

_____

_____

Signed ..... Date .....

Return to Educational Liaison Office,
Lancashire Polytechnic,
PRESTON PR1 2TQ.

Tel: (0772) 22141

Degree Courses 1985/86

- ☐ * Fashion
- ☐ Fine Art
- ☐ * Graphic Design
- ☐ Accounting
- ☐ * Business Studies
- ☐ Law
- ☐ Combined Studies (see below)
- ☐ * Electrical & Electronic Engineering
- ☐ * Mechanical Engineering
- ☐ Applied Social Studies
- ☐ Psychology

Polytechnic Diplomas/Certificates 1985/86

- ☐ Management Studies
- ☐ Biochemistry
- ☐ Advanced Certificate in Design and Manufacture (postgraduate)
- ☐ Numerical Control Technology and Computing Aided Programming
- ☐ Building Management and Economics
- ☐ Applied Social Studies (postgraduate)
- ☐ Social Work
- ☐ Bilingual Secretaries (postgraduate)
- ☐ Bilingual Secretaries (post 'A' level)
- ☐ Radio and Television Journalism (postgraduate)

Higher National Diploma Courses 1985/86

- ☐ Design Crafts (wood/metal/ceramics)
- ☐ † Business Studies
- ☐ Bilingual Administrators
- ☐ * Physical Science (Chemistry)
- ☐ * Physical Science (Physics)
- ☐ Applied Biology
- ☐ Computer Studies
- ☐ Electronic Engineering
- ☐ Microprocessor Technology and Applications
- ☐ † Mechanical & Production Engineering
- ☐ † Engineering Design
- ☐ † Computer-Aided Engineering
- ☐ † Building Studies

Other Courses 1985/86

- ☐ Foundation Course in Art & Design
- ☐ Foundation Course in Accountancy
- ☐ Graduate Conversion Course in Accountancy
- ☐ Diploma in Management Studies
- ☐ Graduate Membership of the Royal Society of Chemistry
- ☐ Health Visitors Certificate
- ☐ Certificate of the National Council for the Training of Journalists
- ☐ Certificate in District Nursing SRN/RGN

* indicates a sandwich course
† indicates full-time or sandwich

The following subjects are available as options in the Combined Studies degree course.

- ☐ American Studies
- ☐ Astronomy
- ☐ Biochemistry
- ☐ Biology
- ☐ Chemistry
- ☐ Computing
- ☐ Economics
- ☐ Education Studies
- ☐ English
- ☐ French
- ☐ Geography
- ☐ History
- ☐ Linguistics
- ☐ Mathematics
- ☐ Organisation Studies
- ☐ Physics
- ☐ Physiology
- ☐ Politics
- ☐ Psychology

I am also interested in:

- ☐ Part-time courses in .....
- ☐ Associate Student Scheme
- ☐ Mature Student Booklet
- ☐ Postgraduate work in .....

Notes

LANCASHIRE POLYTECHNIC

PROSPECTUS

FULL TIME

1985-6

