# DOCUMENT RESUME

ED 043 825 AC 008 514

TITLE Into Further Education: Opportunities for 15 and 16

Year Olds in Further Education.

INSTITUTION Association of Teachers in Technical Inst., London

(England).

PUB DATE 68

NOTE 28p.

EDRS PRICE EDRS Price MF-\$0.25 HC-\$1.50

DESCRIPTORS \*Adult Education, College Entrance Examinations,

\*Educational Programs, Fees, Grants, \*Industrial

Training, \*Information Sources, \*Part Time Students,

Teenagers

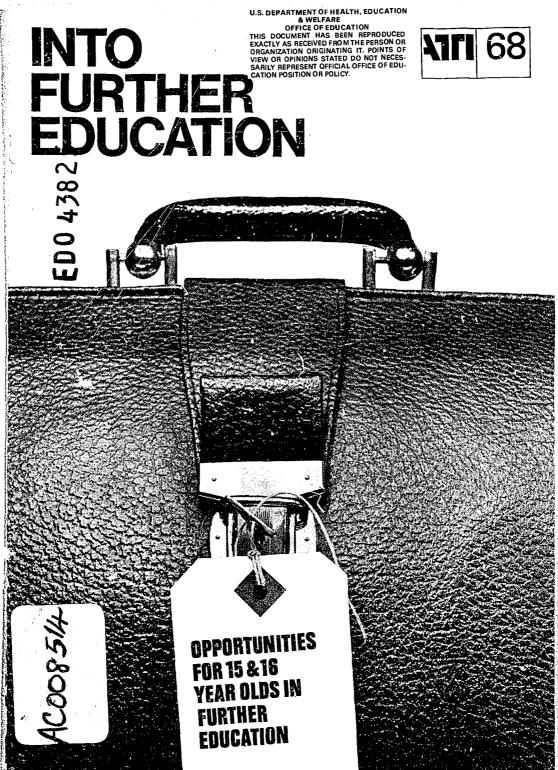
IDENTIFIERS \*Great Britain

### ABSTRACT

The focus of this booklet is on education for people over statutory schooling age. It explains full-time, part-time, sandwich study, and industrial training programs, and discusses the links between colleges and working life, qualifications, variety of opportunity, GCE studies in colleges, and fees and grants. It lists programs offered by the colleges, discusses entrance qualifications, and enumerates information sources. (NL)



U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED
EXACTLY AS RECEIVED FROM THE PERSON OR
ORGANIZATION ORIGINATING IT. POINTS OF
VIEW OR OPINIONS STATED DO NOT NECES.
SARILY REPRESENT OFFICIAL OFFICE OF EDU-



# Contents

Part one. Education after school	2
Part two. What the colleges offer	5
Department of Building	6
Department of Business Studies	8
Department of Catering and Personal Services	10
Department of Engineering	12
Department of Science	16
Department of General Studies	18
Part three. Where to find information	20
Glossarv	23



This booklet is addressed to the teachers of young people who will be leaving school at 15 or 16 and to all others who have the responsibility of advising them including their parents. It is published by the Association of Teachers in Technical Institutions.

ED0 43825



#### Part one. Education after school

Until quite recently, for all but a minority of young people, formal education finished the day they left school. A small number stayed at school beyond statutory leaving age and went on to full-time study at university or teacher training college. The rest went out to work, and that was that, except for the few who studied at evening classes after work to gain a qualification or extend their general education.

This situation has been changing over the last few years. It is well known that the proportion of boys and girls staying on to the sixth form and going on to university has gone up dramatically. Less well known is the great expansion of opportunities for further study of all kinds in the colleges maintained by the local education authorities, particularly for boys and girls who leave school at 15 or 16. There are also many opportunities for advanced study in the technical colleges for young people who complete a sixth-form course at school. *Into Higher Education* (Association of Teachers in Technical Institutions, 1966) outlines these opportunities.

The Association of Teachers in Technical Institutions, which represents the teachers in \*echnical colleges, believes it is important to make these opportunities as widely known as possible. Today's school leavers will spend their working lives in a society that will demand more and more well-educated and skilled workers. Parents, teachers and all who advise young people must do all they can to see that they are prepared for this situation, not just so that they can get a good job, but also so that they can find the satisfaction of using well-educated minds and hands on work that calls out their talents.

#### What is further education?

Further Education is education for people over statutory school leaving age, offered in the colleges maintained by local education authorities. Colleges providing further education have various names - college of technology, polytechnic, technical college, college of further education, college of commerce, college of art, farm institute or college of agriculture. A number of special terms are used in connection with further education; a glossary explaining those used in this booklet and some other common ones is printed on pp 23 to 25. In some cases, the name indicates the level to which subjects are taught - a college of technology is a large college, drawing students from a wide area and offering courses up to degree level; a polytechnic is a college designated by the Department of Education and Science as a centre for advanced studies, while a college of further education serves a smaller area and specialises in work of a less advanced level - often its students go on for higher studies to a college of technology. In other cases, the title of colleges shows that they specialise in certain groups of subjects - commercial studies, art, or agriculture and horticulture. The college of further education is the basic institution in this system, and the one we concentrate on in this publication, since it is mainly the college of further education that caters for young people leaving school at 15 or 16, though in many areas the technical college performs this function.



How studies are arranged

It is a feature of colleges in the further education system that some of their students are full-time and others part-time.

Full-time

Many students taking full-time courses come direct from school; others are sent by their employers to take a full-time course to improve their qualifications for their jobs.

Part-time

Those who study part-time are usually in jobs and are sent to college on full pay by their employers either for one day a week (day release) or for periods of a few weeks at a time (block release). Some part-time students, who do not receive release from their work, study at evening-only courses.

Sandwich study

The other main form of study in technical colleges is by sandwich course - students alternate periods of study in college with periods of work in industry or commerce. They can be 'college-based', having entered the course direct from school, without being committed to a particular employer; or they can be 'industry based', that is, sponsored at college by their employer.

Opportunities for study

There are now so many changes for young people at work to continue their education and improve their qualifications that it is very important to check whether any job which a boy or girl is thinking about offers opportunities for further education.

Industrial training

Another factor has recently been introduced by the work of the Industrial Training Boards for various industries, set up under the Industrial Training Act. One of the aims of the Act is to increase the amount and quality of training given to young people in industry. For this purpose grants are paid to employers for approved forms of training. Most Industrial Training Boards insist that, where jobs involve a substantial amount of training, before an employer can receive a grant for training he must give young workers release on full pay to a college for appropriate further education. While an increasing number of firms are meeting these standards, by no means all do so. Therefore, when young people are seeking first jobs, it is important to check whether the firm offers systematic training, and whether it gives day release for associated further education. In the interests of their future careers, and of ensuring that they have a good introduction to working life, it is important, if at all possible, to place young people with a firm that will give them day release.

Links with working life

A feature of the colleges is their close link with the working life of their area. Firms send their young people to them for education related to their jobs; there is close contact between employers and teachers; and the teachers in the colleges are people who have themselves earned a living in the occupations for which their students are preparing - such experience is a necessary qualification for teaching in further education. The fact that their studies are linked with their chosen jobs means that students usually take a responsible attitude towards their college work, and their teachers try to give them the opportunity of exercising initiative in their studies. The contact between full and part-time students also makes for development of a mature attitude towards work. Students' unions, which exist in most colleges, give students the chance of organising social and cultural activities.



#### Qualifications

The colleges prepare students for a very wide range of examinations, recognised as important qualifications by many professional institutions and employers. The main categories are:

- 1 City and Guilds of London Institute, and Regional Examining Unions. Certificates for preliminary and more advanced courses over a very wide range of subjects, recognised as qualifications in a great many occupations.
- 2 National Certificates and Diplomas. Examinations in various fields of science, technology and commerce (for definition, see glossary).
- 3 Examinations of professional institutions. Most industrial associations and professional institutions have their own system of examinations, recognised as qualifications at various levels.
- 4 University examinations. GCE examinations at Ordinary and Advanced level which lead to many other courses, including degrees of London University and the Council for National Academic Awards which are available in some colleges of technology.

### Variety of opportunity

Nothing is hard and fast in the further education system. An opportunity missed at one point can be retrieved at another, and it is hardly ever too late. The colleges give those who discover they left school too soon an opportunity to take up their academic studies again; they offer a way from part-time to full-time study for those who have gone to work at 16 and then decide they want to gain higher qualifications; they run courses at a number of levels in any given field so that students can come in at the bottom without any school-leaving qualifications and work their way up, or can enter at some intermediate point with O levels or Certificate of Secondary Education.

### GCE studies in the colleges

While most of the work done in the colleges is unique to them, they have for many years provided GCE O and A level courses for the benefit of young people who either did not have the opportunity of taking GCE at school or who decided after leaving that they would like to improve their qualifications. The colleges are likely to go on providing opportunities for GCE studies in subjects for which they have special facilities, and for those young people who wish to come back into full-time education after a period at work.

## Fees and grants

Full-time and part-time students do not normally have to pay fees up to and during the session in which they reach the age of 18. After that, they may be liable for fees, but grants may be given by local education authorities to both full and part-time students, and to sandwich course students, both industry and college-based. Details should be obtained from the local college.



#### Part two. What the colleges offer

The best way of conveying an idea of what the colleges can offer is to take an average college of further education, department by department, and give typical courses offered by each, with an indication of entry qualifications and of what completing the course means in terms of jobs and access to more advanced study; and this is what we do in the following pages\*. We would like to remind readers, however, that there is really no such thing as an average college of further education; there is a great variety in what is offered and in how departments are organised from place to place. The tables that follow cover the departments and courses likely to be found in most colleges but it should be remembered that some colleges also offer courses outside this range, in such fields as art or agricultural subjects. This can only be a general introduction; for detailed information readers should consult their own local colleges, whose staff are always ready to advise.

Many technical terms and abbreviations are used in connection with further education and some of these appear in the tables that follow. The glossary on pages 23-25 will help to explain these terms.

#### Entry qualifications

Some courses require a specified standard of examination qualification for entry. If students have not the necessary qualifications, there are usually facilities in colleges for them to gain them. It is important that boys and girls who hope to follow further education courses should be well aware before they leave school of the subjects and examinations that will be most helpful to them.

An interview is often part of college admission procedure, particularly for full-time and sandwich courses. These interviews are directed towards seeing that students are advised as fully as possible of the possibilities open to them.

For convenience in the pages which follow we have grouped entry qualifications into three main types, filling in extra details where necessary in the tables:

- 1 General Education. This is used to mean a secondary education up to school leaving age and does not necessarily mean that the student has taken any school examination such as the CSE.
- 2 Certificate of Secondary Education (CSE). For this standard the student will have followed a five-year secondary course and reached the standard of the CSE in several subjects, usually including arithmetic and English. Grade I passes in CSE examinations are generally accepted as equivalent to GCE passes in the same subjects.
- 3 General Certificate of Education (GCE). Where we use this the student is likely to be expected to have passed in at least four subjects at the Ordinary level. Often the particular subjects are specified and students who have not passed in all of them may need to join the appropriate preliminary course first.
- \*The courses are listed with those at the most elementary level first, so as to show the progression within each department from elementary to advanced.



# Department of Building

Course	Designed for	Entrance Qualifications
Pre-Apprenticeship course 1 year full-time	15 year old school leavers who desire to take up employment in building industry	General education
1 year part-time	As above	As above
Carpentry and Joinery Craft Certificate CGLI 80 3 or 4 years part-time	Apprentices in various trades, ie 15 year old school leavers	General education
Brickwork course Craft Certificate CGLI 82 3 or 4 years part-time	As above	As above
Painting and Decorating course CGLI 85 3 or 4 years part-time	As above	As above
Plumbing course CGLI 86 3 or 4 years part-time	As above	As above
Full Technological Certificate CGLI 291	Holders of a recognised Craft Certificate qualification	
General course in Construction CGLI 313 2 years part-time	16 year old school leavers already in construction industry	General education
Construction Technicians' Certificate CGLI 314 4 years part-time	16 year old school leavers in construction industry	CSE, including Maths and Science or from above course
ONC in Construction 2 years part-time	Students at least 16 of academic ability, working as technicians in construction industry	GCE (Maths, English, a Science and one other subject)
OND in Construction 2 years full-time	Students of at least 16 aiming to enter construction industry at high level	



Subjects of Course	Prospects
Craft theory and practice. Craft, Science, Maths and Geometry. Practical work in 3 building crafts	2nd year of craft courses
As above	As above
Workshop practice/craft theory in appropriate craft, Geometry and calculations, English, General Studies	Recognised craft qualification
As above	As above
As above	As above
As above	As above
Principles of Construction. Building Science, Building Maths, Craft Foremanship	Later years of ONC. First year of HNC after further study in Maths, Science of Construction
Maths, Science, English, Construction Drawing, Construction Processes and Materials	A diagnostic course to guide students into Construction Technicians Course (possibly after 1 year) or to ONC course
Construction, Science and Materials, Calculations, Related Construction Practice	Potential technicians on site and in the office in the construction industry
Science, Technology, Maths, Surveying and Constructional Drawing, History of Building, General Studies, Materials and Structures, Structure of Building Industry	Responsible jobs as Quantity Surveyors, Estimators, Planning Surveyors, Structural detailers, Architectural technicians, etc. Entry to HNC; HND and Degree courses at colleges of technology in building, and professional institution membership



TO THE PERSON OF THE PERSON OF

# **Department of Business Studies**

Course	Designed for	Entrance Qualifications
Retail Trades 2 years part-time	School leavers entering or newly engaged in all kinds of retail shops	
Junior Secretarial 3 years part-time	Young people working in offices who want to improve general education and gain office skills	General education
Secretarial 4 or 5 years part-time 2 or 3 years part-time	Junior secretaries and 18 plus students who aim at posts as private secretaries	GCE standard
Certificate in Office Studies 2 years part-time	Young people at least 16 years old in office work	CSE standard
ONC in Business Studies 2 years part-time	Students aged at least 16 engaged in office work who wish to enter commerce and/or study for a professional qualification	GCE O level in English and 3 other subjects or Certificate in Office Studies
OND in Business Studies 2 years full-time	Students of 16 or over who wish to obtain an advanced business qualification including degree	GCE O level English plus 3 other subjects or equivalent CSE Grade I passes
ocal Government Clerical Examination I year part-time	Entrants to local government	GCE or CSE
Civil Service Clerical Examination	Entrants to Civil Service clerical grades	Good general education, preferably 5 GCE's but non-GCE students may be employed as 'temporary' and then qualify

See also General Studies, page 18



Subjects of Course	Prospects	
English, Calculations and Accounts, organisation of retail trade and commodity subjects	Advanced Certificate in Retailing	
Shorthand and Typing, Audio-Typing, English	More responsible office work as secretaries, etc	
English, Communication, Shorthand, Typewriting, Secretarial Duties, Commerce, a foreign language	Private Secretary's Diploma. Work as private secretary or personal assistant	
English, Clerical Duties, Business Calculations or Book-keeping	More responsible office posts. Good pass recognised as qualification for entry to ONC in Business Studies (see below)	
Structure of Commerce, Accounting, Economic Geography, Law, Statistics, Economics, English, British Constitution	Intermediate posts in commercial offices, banking, insurance, etc. Entry to HNC course. Possible exemption from intermediate examinations of, for example, Institute of Cost and Works Accountants, Institute of Secretaries, Chartered Institute of Secretaries	
Structure of Commerce, Accounting, Economic Geography, Law, Statistics, Economics, English, British Constitution, plus Language or option secretarial training	Business careers; high level secretarial work. Exemptions from intermediate examinations of many professional bodies. Entrance to degree courses of certain universities and to CNAA degree courses in business studies	
English, Local and Central Government	Intermediate Diploma in Municipal Administration	
English, Arithmetic, General Studies	Higher office grades of Civil Service	



# **Department of Catering and Personal Services**

Course	Designed for	Entrance Qualifications
Basic Cookery for the Catering Industry Certificate Course CGLI 147 2 years part-time	Young people who are employed in the catering industry as trainee cooks or chefs	General education
General Course in Catering 2 year full-time	Students of 16 who wish to enter the catering industry	General education
General Catering Diploma of Hotel and Catering Institute 2 year full-time	Students of at least 16 aiming to enter the industry at a higher level	GCE O level in English and 2 other subjects
Basic Hairdressing Course CGLI 263 3 years part-time	15 or 16 year old school leavers employed as trainees of hairdressing	General education
Nurse cadets 2 years part-time	16 year old school leavers employed by Hospital Management Committees as Cadet Nurses	Full-time education to 16 years CSE or GCE
National Nursery Examining Board Course 2 years part-time 1 or 2 years full-time	16 year old school leavers who wish to work with small children	GCE standard



Subjects of Course	Prospects	
Trade Cookery-theory and practice, General Studies	Recognised craft qualifications; qualification for entry to CGLI Certificate course 151 — cookery for hotel and catering industry	
Theory and practice of Catering, Housekeeping, service of food, English, Science	Recognised craft qualification; posts as cooks or chefs	
Ti early and practice of Cookery and Catering, Waiting and Restaurant Service, Book-keeping and Food Costing, French, General Studies	Qualification to enter membership courses of the Institute; catering and hotel management	
Hairdressing craft, Art, Related Science and Physiology, General Studies	Recognised qualification	
Human Biology, Science, Health, Home Economics, English	Entry to pupil or student nurse training	
English, Human Biology, Health and Development of children, Food, Needlecraft, Colour and Design. Music	Posts as qualified nursery nurses in private homes, nurseries and residential homes	



# Department of Engineering

Course	Designed for	Entrance Qualifications
Preliminary Technical Course 3 years full-time or part-time	15 year old school leavers	General education
First year certificate in Engineering Crafts CGLI 393 1 year full-time	15 and 16 year old engineering apprentices as basic introduction to engineering. All engineering apprentices should try to have this basic practical training	General education
Mechanical Engineering Craft Practice CGLI 193 4 years part-time	Essentially practical course for school leavers of 15 or 16 who intend to become craftsmen in enginer; ing	General education
Motor Vehicle Mechanics Course CGLI 168 3 or 4 years part-time	15 and 16 year old school leavers	General education or completion of a Preliminary Technical Course
Agricultural Mechanics' work CGLI 260 3 years part-time or block release	15 and 16 year old school leavers	General education
Electrical Installation work. Craft practice. CGLI 51 Course A 3 years part-time	Essentially practical course for 15 year old school leavers	Satisfactory school report. General education
Electrica! Installation work. Course B. 3 years part-time	16 year old school leavers	CSE standard
General Course in Engineering CGLI 287 2 years part-time	Diagnostic course for school leavers leading to either Technicians' or ONC courses	CSE standard : should include Maths. and Science



Subjects of Course	Prospects	
Varies with college, eg Maths, Engineering Science, Technical Drawing, Workshop Theory and Practice, English	Many of the courses listed below, also it is often suitable preparation for HM Forces apprenticeship examinations	
Workshop Theory. Science Drawing, Calculations, Workshop Administration and General Studies	Any of the listed engineering courses and to specialist trade courses, eg welding, sheet-metal work, electrical and instrument crafts	
Craft Practice, Craft Theory, Craft Technique, Related Studies, General Studies	Craftsmen's Certificate and to supplement advanced craft courses in eg Toolmaking, Inspection, Diesel engine fitting	
Motor Vehicle Theory and Practice, and Related Studies	A recognised qualification as a garage fitter and also to more advanced courses	
Calculations and Science, Workshop Processes and Practice, Welding Theory and Practice, Drawing and Materials, Agricultural Machinery, General Studies	Nationally recognised qualification for work with agricultural engineers and on large farms	
Calculations, Craft practice, Craft theory, General Studies	To CGLI course 51-B. Employment as a practical electrician. Course A certificate in Electrical Installation work	
Calculations, Electrical Science, Installation work, Regulations and Sketching	Course Certificate in Electrical Installation work and to CGLI Electrician's Certificate	
Maths, Engineering Science, Engineering Drawing, Workshop Processes and Materials, General Studies	ONC in Engineering if a credit pass is obtained in Maths and Science and a pass in one other subject, otherwise entry to 2nd year of an appropriate technicians' course. At the end of 1st year of course some students may be advised to transfer to Technicians' Course	



Department of Engineering	(Continued)	
Course	Designed for	Entrance Qualifications
General Course in Engineering – Special CGLI 287 1 year part-time	16 year old school leavers	CSE. Nust have completed a full 5 year secondary course with good results
Mechanical Engineering Technicians' Course. CGLI 293 § years part-time	16 year old school leavers and students from the General Course (see above)	CGLI 193, General Course or GCE in Maths, Science and Technical Drawing or Metalwork
Motor Vehicle Technicians' Course. CGLI 170 4 years part-time	16 year old school leavers and students from General Course	As above
Electrical Technicians' Course. CGLI 57 4 years part-time	16 year old school leavers	CSE standard
Telecommunication Technicians' Course. CGLI 49 4 years part-time day or block release	16 year old school leavers	CSE or GCE standard
ONC in Engineering 2 years part-time	16 year old school leavers and students from the above General Course	GCE O level in 4 subjects including Maths. and 1 of the following: Physics, Physics with Chemistry, Mechanics, Mechanical Science or Engineering Science, or CGLI 287
OND in Engineering 2 years full-time or sandwich	16 year old school leavers	4 GCE O levels including Physics and Maths. Successful completion of a General Course in Engineering



Subjects of Course	Prospects
Maths, Engineering Science, Engineering Drawing, Workshop Processes and Materials, General Studies	OND in Engineering if a credit pass is obtained in Maths and Science and a pass in one other subject, otherwise entry to 2nd year of an appropriate technicians' course. At the end of 1st year of course some students may be advised to transfer to Technicians Course
Maths, Engineering Science, Workshop Processes and Practice, Engineering Drawing, General Studies	Final Technicians' Certificate, further study can lead to Full Technological Certificate and to work in supervisory duties, drawing offices, plant maintenance, etc
Maths and Science, Motor Vehicle Technology, Technical Drawing, General Studies	Technicians' Certificate, job as service manager in garage, maintenance engineer to firms' transport sections
Electrical Engineering Principles, Engineering Materials and Drawing, Practical Maths, Electrical Power, Industrial Electronics	Employment as a technician in electrical plant and machinery manufacturing, power generation and supply or industrial electronics
Engineering Science, Engineering Drawing, Maths, Telecommunication Practice and Principles	Telecommunication Technicians' Certificate, employment in PO, Armed Forces, industry, further supplementary studies in specialist subjects
Maths (1 and 2), Mechanical Engineering Science (1), Engineering Drawing (1), Electrical Engineering Science (1 and 2), Physics (1), Workshop Technology (2), Applied Mechanics (2), Applied Heat (2). (Figures in brackets indicate subject is studied in 1st and/or 2nd years)	Depending on results, to university entrance for engineering degree, and college Diplomas. HND, HNC, or as a qualification in its own right for junior posts in engineering — see also 'situations vacant' advertisements
Maths, Physics, Mechanics, Electricity, Engineering Drawing, Workshop Practice	Junior posts as draughtsmen, or in other engineering work. Depending on results, the diploma is an entry qualification to an engineering degree or college Diploma course, an HND or an HNC course



Course	Designed for	Entrance Qualifications
General Course in Science CGLI 246 2 years part-time day (1 year in special cases)	15 plus and 16 plus school leavers	General education, CSE or equivalent
Pre-Diploma in Sciences 1 year full-time	16 plus school leavers	General education
Laboratory Technicians CGLI 119 4 years part-time or block release	16 plus employed in science industry	General education. O levels or CGLI 246 may exempt from 1st year
Chemical Plant Operation CGLI 24 4 years part-time or block release	As above	As above
ONC in Sciences. 2 years part-time or block release	16 plus employed in science industry	GCE O level Maths, English, 2 Science Subjects of CGLI 246
OND in Sciences. 2 years full-time	16 plus school leavers	As for ONC (Sciences)
ONC (Medical Laboratory) 2 years part-time or block release	16 plus employed in medical laboratories	As for ONC (Sciences)

GCE O levels, GCE A levels, see Department of General Studies

Intending nurses

Pre-Nursing 1 or 2 years full-time



Good general education

Subjects of Course	Prospects	
Maths, Physics, Chemistry, Biology and General Studies	Entrance to ONC, OND or Technician Courses	
As above, possibly with additions	CGLI 246 and/or GCE subjects suitable for entry to ONC and OND courses in Sciences	
Laboratory procedure, Related Maths and Sciences, General Studies	CGLI Technician Certificates. Industrial laboratory technician posts	
Industrial practice and instruments, Related Sciences and Maths, Report writing, Technical Drawing, General Studies	Appropriate CGLI Certificates, Chemical plant operator posts	
Basic Maths, Physics, Chemistry and General Studies plus Mathematics, Physics, Chemistry or Biology in greater depth. General Studies	Entry to HNC and HND courses. Technological posts in industry	_
As for ONC with some additions	Entry to HNC and HND. Entry to university or college of education	
Basic Sciences and Maths, plus Professional subjects, General studies	ONC (Medical Laboratory) (replaces former Intermediate IMLT examination). Entry to HNC (Medical Laboratory) and AIMLT Courses, medical laboratory work	
General Science, Human Biology, Hygiene, General subjects	Appropriate GCE O levels. Nursing, medical laboratory technicians, physiotherapy, etc	



### **Department of General Studies**

Course	Designed for	Entrance Qualification
GCE O level (Science and Engineering) 1 or 2 years full-time	Students wishing to take up engineering or scientific career	General education
GCE O level Arts or Commerce 1 or 2 years full-time	Students wishing to take up commercial or non-scientific work	General education
GCE A level Sciences 2 years full-time	Students hoping for entry to university or the professions	GCE O level in 5 (4) or more subjects including those to be studied
GCE A level Arts 2 years full-time	As above	As above

Art, Music and Drama:
Some colleges provide
full-time courses in these
subjects for students intending
to make their careers in the
arts, as well as part-time
non-vocational courses

The General Studies Department (which may have another title or form part of another Department) usually provides a continuation of the general education of students in other departments. Most courses in colleges now make provision for students to continue their general education together with the more specialised education connected with their vocation. Many departments also provide courses leading to GCE O and A level examinations in a variety of subjects.

Classes may be provided not only in scientific and technical subjects but also, for example, in English language, foreign languages, English literature, history, geography, economics. At each level the courses may be full-time or part-time day or evening and usually last for one or two years. They provide

continuing opportunities for students over a wide age range to study for GCE. Full-time courses may be provided for those who have just left school and for those whose full-time education has been interrupted, for instance, by a period of work.

Some colleges provide courses specially designed for adult students. Part-time courses are provided for students in full-time employment who wish to take GCE, perhaps to qualify them for a more advanced course of study.

Some employers will grant day-release to their employees to enable them to take GCE courses, but for those for whom day-release is not available many colleges provide an extensive programme of evening-only classes



Subjects of Course	Prospects	
Maths, English, Physics, Chemistry, Technical Drawing, etc	GCE A level. Entry to many courses in other departments. College of education	
Maths, English, History, Geography, Social Studies, etc	As above	
Generally 2 or 3 subjects selected from Maths, Physics, Chemistry, Biology, Geography, etc  Generally 2 or 3 subjects selected from History, Geography, English Literature, Sociology, Economics, Music, etc	University entry. Direct entry to HNC or HND, college diplomas, and degree courses. Direct entry to qualifying examinations in architecture, accountancy and many other professions. Teaching	



#### Part three. Where to find information

#### Individual advice

Young people and their parents can obtain general advice on employment, further education and training from the school careers teacher; Youth Employment Officer in their area (address from school, Education Office, or local office of Ministry of Labour); and the Principal of the local college.

For advice on particular courses in colleges, the head of the department offering the course should be consulted.

#### Courses and qualifications

Some reference sources:

- 1 Further Education for School Leavers. DES/COI. 1966.
- 2 Opportunities after 'O' Level. Penguin Books. 8/6d
- 3 Middle School Choice. Careers Research Advisory Centre (CRAC) 25 St Andrews Street, Cambridge. 5/-
- 4 Into Higher Education. ATTI 1966 (gratis from the Association, Hamilton House, Mabledon Place, London WC1).
- 5 On Course. Department of Education and Science quarterly journal of education for industry and commerce.
- 6 Advisory Centre for Education. 16 + a national information service on higher education: first degree and higher national diploma.
- 7 British Qualifications. Barbara Priestley. Andre Deutsch. 1966. 63/-
- 8 British Further Education. A J Peters. Pergamon. 1967. 63/-

Lists of courses at colleges in their areas, issued by the Regional Advisory Councils for Technological Education:

London and Home Counties Regional Advisory Council for Technological Education, Tavistock House South Tavistock Square London WC1

Southern Regional Council for Further Education 9 Bath Road, Reading

Regional Council for Further Education for the South West 12 Lower Castle Street Bristol 1

West Midlands Advisory Council for Further Education Pitman Buildings 161 Corporation Street

Birmingham 4

Regional Advisory Council for Further Education in the East Midlands Robins Wood House Robins Wood Road Aspley Nottingham East Anglian Regional Advisory Council for Further Education County Hall Martineau Lane Norwich

Yorkshire Council for Further Education Bowling Green Terrace Jack Lane Leeds 11

Regional Advisory Council for Further Education in the North West Africa House 54 Whitworth Street Manchester 1

Northern Advisory Council for Further Education 5 Grosvenor Villas Grosvenor Road Newcastle-on-Tyne 2

Welsh Joint Education Committee 30 Cathedral Road Cardiff



and by the Regional Examining Bodies:

East Midland Educational Union Robins Wood House Robins Wood Road

Aspley Nottingham

Jack Lane Leeds 11

Union of Educational Institutions Norfolk House Smallbrook Ringway Birmingham 5

Yorkshire Council for Further Education Bowling Green Terrace

Union of Lancashire and Cheshire Institutes Africa House 54 Whitworth Street Manchester 1

Northern Counties Technical

**Examinations Council** 

Newcastle-on-Tyne 2

5 Grosvenor Villas

Grosvenor Road

Colleges

College prospectuses give details of all courses, timetables, fees, etc. They can be obtained from the college registrar or secretary.

The local education office will provide a list of colleges in its area. Colleges maintained by local education authorities are listed in such reference works as the Education Committees Yearbook and the Yearbook of Technical Education and Careers in Industry (both available in libraries).

Careers

Yearbook of Technical Education and Careers in Industry. A and C Black 50/— (obtainable in colleges and public libraries).

Careers Guide, HMSO 8/6d

Careers leaflets published by HMSO

National Union of Teachers:
Annual Guide to Careers for Young People

**Industrial Training** 

Information about the recommendations for training and education for young people employed in various industries, made by the Industrial Training Boards, from the Boards (addresses below) and from local offices of the Ministry of Labour:

Agricultural Horticultural

and Forestry ITB

Bourne House

32 - 34 Beckenham Road

Beckenham Kent

Carpet ITB

Evelyn House 32 Alderley Road Wilmslow

Wilmsiow Cheshire

Ceramics, Glass and Mineral

Products ITB

Bovis House Northolt Road Harrow

Middlesex



Chemical and Allied Products ITB

9 Gloucester Gate London NW1

Civil Air Transport ITB

Staines House 158 - 162 High Street

Staines Middlesex

Construction ITB

Radnor House London Road London SW16

Cotton and Allied Textiles

ITB

10th Floor Sunlight House Quay Street Manchester 3

**Electricity Supply ITB** 

30 Millbank London SW1

**Engineering ITB** 

St Martin's House

140 Tottenham Court Road

London W1

Foundry Industry Training

Committee

50 - 54 Charlotte Street

London W1

Furniture and Timber ITB

11th Floor York House Empire Way Wembley Middlesex

Gas Supply ITB

17 Grosvenor Crescent

London SW1

Hotel and Catering ITB

Ramsey House Central Square Wembley Middlesex

Iron and Steel ITB

4 Little Essex Street

London WC2

Knitting Lace and Net iTB

4 Hamilton Road Sherwood Rise Nottingham

Man-made Fibres Producing

ITB

5th Floor Bowater House Knightsbridge London SW1

Petroleum ITB

3 Chester Gate London NW1

Road Transport ITB

Capitol House Empire Way Wembley Middlesex



**Rubber and Plastics ITB** 

3 – 4 Chester Gate London NW1

Shipbuilding ITB

Raebarn House Northolt Road South Harrow Middlesex

Water Supply ITB

104a Park Street London W1

Wool, Jute and Flax ITB

55 Well Street Bradford 1

Education for Commerce and Industry

Publications of the British Association for Commercial and Industrial Education 16 Park Crescent London W1

(BACIE)

Glossary

Apprenticeship

A form of contract between an employer and a young person, The conditions of the contract vary from trade to trade and according to the age and educational qualifications of the young person. Apprenticeship still does not necessarily involve systematic training.

trai

Block release

A system by which employers send young employees to colleges for periods of several weeks at a time for studies associated with work. Such students usually receive their basic rate of pay.

Certificate in Office Studies

Gained by two-year part-time course; for young people in office work; good pass qualifies for entry to Ordinary National

Certificates in Business Studies.

Chartered Engineer (CEng)

Corporate member of one of the professional engineering institutions that form the Council of Engineering Institutions.

City and Guilds of London

institute (CGLI)

Established 1876 by City Livery Companies, started examinations in technical subjects 1879. Largest examining body for craft, etc

courses.

College Diplomas in

Engineering

Degree-level award meeting professional requirements of Chartered Engineering Institutions, as linked by Council of

Engineering Institutions (CEI).

College of Art

College offering courses in fine art, graphic design etc at various

levels.

College of Commerce

College specialising in business, commercial and related subjects.

College of Further Education

(CFE)

A comprehensive college normally covering liberal and professional studies as well as the technical education needed in

its district; often at all levels.

College of Technology

Large college, drawing students from wide area and offering

advanced courses.

Council for National

Academic Awards (CNAA)

Body set up by Royal Charter in 1964, to award degrees to

students at non-university colleges.

Courses, usually part-time, for 15 to 16 year old school leavers Craft courses

who intend to become craftsmen in eg engineering, building

trades, hairdressing.

Craftsman Skilled worker in manufacturing industry, carrying out skilled

practical tasks.

Certificate of Secondary

Education (CSE)

Examination instituted 1963, administered by fourteen regional boards, designed for pupils of average ability who have taken a

five-year secondary school course.

Day Release System by which employers give young employees paid time off

on one or more days a week for studies at technical college.

DES Department of Education and Science - formerly Ministry of

Education.

Dip.Tech Degree-level qualification awarded to students at colleges of advanced technology (now technological universities) and at some

large colleges of technology by the National Council for Technological Awards. Replaced since 1964 by CNAA BSc degrees, administered by Council for National Academic Awards.

Farm Institute or College of Agriculture

College offering courses in agriculture, horticulture, dairying, etc.

Full Technological Certificate Highest-level City and Guilds of London Institute (CGLI)

Certificate

General Certificate of Education (GCE)

External examination instituted 1951, administered by eight examining boards. Originally designed for pupils in grammar-type secondary schools (O level GCE for 16 plus and A level for 18 plus pupils), can now be taken in all comprehensive and many secondary modern schools. GCE courses at O and A level are also offered by technical colleges and colleges of further education.

General Course (G course)

Course for school leavers in eg building or engineering, leading to technician or Ordinary National Certificate course.

**Higher National Certificate** (HNC)

Nationally recognised qualification gained by part-time study in various fields, including building, engineering, science and business studies. Recognised high-level technician qualification.

**Higher National Diploma** (HND)

Qualification of approximately pass-degree level gained by sandwich or full-time study.

Industrial Training Act

Act passed in 1964 in order to improve quantity and quality of training and education for industrial and commercial jobs. All employers covered by Industrial Training Boards have to pay a levy for training, and can receive grants towards what they spend on training employees.

Industrial Training Boards (ITB's)

Boards for various industries, set up under the Industrial Training Act, composed of representatives of employers, employees and educational interests, to establish training standards, encourage improved training and administer levy/grant system.

Integrated courses

Full-time courses covering first year of employment in industry in which young employees spend their whole time in technical college taking basic course of combined education and training.



**National Certificates** 

See Ordinary National Certificate, Higher National Certificate.

National Diplomas

See Ordinary National Diplomas and Higher National Diplomas.

Operative

Worker who carries out specific operations, using machinery or plant, that do not need traditional 'craft' skills.

Ordinary National Certificate (ONC)

Nationally recognised qualification in various fields, instituted in 1921; administered by Joint Committees consisting of representatives of professional institutions, Department of Education and Science, and colleges. Gained by part-time study. Subjects include building, engineering, science and business studies. Recognised, depending on level of pass, as entrance qualification for some universities and for CNAA degrees, for college diplomas, and for HND's.

Ordinary National Diploma (OND)

As above, but gained by full-time or sandwich study.

**Polytechnic** 

Large institution designated by Department of Education and Science as centre for advanced studies, following on White Paper – *Plan for Polytechnics*, published 1966.

Pre-apprenticeship course

Course at technical college for 15 year old school leavers who want to take up apprenticeships in eg, engineering or building.

Regional Advisory Councils

Advisory Councils for Further Education in nine regions of England, plus the Welsh Joint Education Committee. Composed of representatives of local education authorities, universities, colleges, teachers, industry and HM Inspectorate.

Regional Examining Bodies

Six regional organisations providing examinations, mainly nonadvanced, in technical, commercial and general subjects, etc. Passes in their examinations exempt from corresponding CGLI examinations.

Royal Society of Arts (RSA)

Began examining in 1856; offered examinations in technical subjects until 1879 when CGLI took over; then concentrated on commercial, secretarial and general educational subjects where it occupies position similar to that of CGLI for technical subjects.

Sandwich course

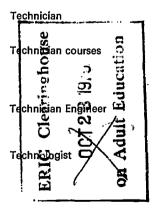
THE RESERVE OF THE

1

ď

ijf.

Course of study in which students spend alternating periods of varying lengths studying in college and working in industry or commerce. Students can be college-based, or sponsored by their employing firms.



Person employed in industry or commerce who is expert in applying specific techniques associated with science or technology.

Part-time courses intended to qualify students for technicians' posts in various fields of industry. Some are designed to be taken after a craft course, others are intended for young people who have completed a five-year secondary school course.

Non-chartered engineer, holding responsible position in engineering, expert in application of specific engineering techniques.

Person with qualifications required for membership of professional institutions, and knowledge and experience of applying fundamental principles of his subject.



ERIC Clearinghouse 0CT23 19/0

Published by the Association of Teachers in Technical Institutions Hamilton House Mabledon Place London WC1 April 1968. Reprinted May 1968

Design by Graham Stevens Cover photography by Tony Lee Printed by Clare Son and Company Limited Wells Somerset

