

Fields of Education and Training

Manual



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Introduction

Background

The International Standard Classification of Education (ISCED) has been designed as an instrument suitable for assembling, compiling, and presenting statistics of education both within countries and internationally. The system has recently been revised and updated, and the 'new' ISCED was introduced in 1997 (ISCED 97).

The ISCED system is built up by classifying each educational programme by field of education and by level. This manual deals with the classification into fields.

The manual is the outcome of an EUROSTAT project carried out in close co-operation with UNESCO and OECD but not yet adopted by the UNESCO General Conference and thus not forming an integral part of ISCED 97 although it is based on it.

Fields of Education

ISCED 97 contains 25 two-digit fields of education. The classification presented here uses a three-digit code in a hierarchical system for classifying fields of education, where the two-digit level is the ISCED 97 fields of education¹. It is mainly the first two digits that will be used in international data collection. However, the third digit gives a more flexible system, and other aggregations based on the third digit may be used in ad hoc data collections to suit specific purposes. It is also believed that the more detailed fields at the three-digit level will bring a better understanding when allocating programmes into the two-digit fields.

The third digit is also intended for national purposes. Countries which have not developed comprehensive national classification system may adopt it as it stands or modify it to suit national conditions.

CEDEFOP and EUROSTAT² developed the 'Fields of training' system for classifying vocational education and training in 1997-1998. It should be emphasised that the 3-digit level of fields in the classification presented here has been synchronised with the 'Fields of training' classification. That is also the reason for calling this manual *Fields of Education and Training*. There are some small differences compared to the manual on Fields of Training. Such changes are clearly marked in this manual.

Aim of the Manual

The availability of a common classification is only the first step towards the collection of comparable data. The second step is to ensure a consistent application of the classification across countries. Thus, it is the aim of this manual to offer clear guidelines on how to apply the classification for fields of education and training. This

¹ A few small changes compared to ISCED 97 in the names of the fields of education has been made in order to try to clarify the content of these fields.

 $^{^{2}}$ CEDEFOP= European Centre for the Development of Vocational Training. EUROSTAT= Statistical office of the European Communities

is done by both specifying a number of rules to be observed and by providing detailed lists of examples.

It should in principle be possible to classify all education programmes, both initial and continuing education, both general education and vocational training, into one and only one field of education and training. When doing this, some decisions have to be made. With the help of this manual, all countries should hopefully be in a position to make similar decisions.

Structure and Rationale of the Classification

Structure f	or fields	of education	and training
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Broad fields	Narrow fields	Detailed fields	Programmes/Subjects
x	XX	XXX	
		XXX	
	XX	XXX	
		XXX	
	XX	XXX	·····
		XXX	

The Structure of the Classification System

This classification of fields uses a 3-digit code in a hierarchical system for classifying fields of education and training – one for 'broad fields', one for 'narrow fields' and one for 'detailed fields'. There are 9 broad fields, 25 narrow fields and about 80 detailed fields.

The 2-digit level (the narrow fields) will normally be used by the international organisations when collecting data, and the term 'fields of education' usually refers to this level. The 2-digit level or the narrow fields are the same as the ISCED 97 fields of education. The 3-digit level (the detailed fields) are referred to as 'fields of education and training'. To summarise:

Digits	Names of fields		Amount of fields
1-digit	Broad field		9
2-digit	Narrow field	Fields of education (ISCED 97)	25
3-digit	Detailed field	Fields of education and training	≅80

Fields - independent of level

It is worth mentioning that the fields are not defined within levels, but are independent of levels. It is recognised, however, that not all fields appear at all levels.

Rationale of the Classification; Subject content approach

Fields of Education and Training is defined as the subject matter taught in an educational programme. The rationale of the classification for fields of education and training is the subject content approach. The programmes are put together by closeness in subject matter content. The programmes are aggregated to detailed, narrow and broad fields, based on 'knowledge closeness'. It must be emphasised that it is the **main subject content** of the programme which decides into which field it should be classified.

Thus, the distinction between fields does not take into account the personal purposes of the participation in the programmes (pleasure, leisure, to get a job etc.), nor is the intended occupation explicitly taken into account.

In developing the structure of the field classification the following criteria were used in priority order when trying to decide 'closeness in subject matter content':

- * Theoretical content, which is by far the most important criteria.
- * Purpose of learning,
- * Objects of interest,
- * Methods and techniques,
- * Tools and equipment.

More details on the rationale of this classification may be found in Appendix 1.

General, broad programmes at secondary level

General, broad programmes at secondary level which cover a range of subjects such as languages and literature, social science, natural science, mathematics, arts, physical education etc. should be classified into 010 'Basic / broad, general programmes'. This should be the case even if there is some concentration on a certain category of subject matter such as humanities, social science, natural science etc.

Example: A broad, general programme at secondary level, mainly preparing for further studies and covering a wide range of subjects should be classified into field 010 'Basic / broad, general programmes', even if some emphasis is given on e.g. humanities.

Vocational programmes including supporting subjects

In some long vocational programmes, often at upper secondary school, more time may be devoted to several other supporting subjects than the 'intended occupation' subject. Such programmes should all the same be classified into the appropriate vocational field.

Example: A health care programme should be classified into field 723 'Nursing and caring', even if more time altogether is devoted to other subjects than 'nursing and caring' subjects.

Teacher training programmes with a subject-matter speciality

Teacher training programmes consisting primarily of a subject-matter speciality should be classified as teacher training, even if the main content is a subject-matter speciality. When using the 3-digit level, these programmes should be classified into 145 'Training for teachers with subject specialisation' or 146 'Training for teachers of vocational subjects'.

Educational programmes for engineers

Educational programmes for engineers should normally be included in some of the fields under 52 'Engineering³ and engineering trades' or, if civil engineer / constructional engineer, under 58 'Architecture and building'. This should be the case even if these programmes are oriented towards computing, media techniques, environmental protection, textiles, food etc., if the emphasis is on designing and constructing machinery, engines, electrical devices, electronics, computers etc. or buildings, roads and bridges.

Manufacturing programmes

Manufacturing programmes should be classified into the appropriate field under 52 'Engineering and engineering trades' if the emphasis is towards the engineering industry, i.e. on metals, mechanics, machinery, engines, electrical devices etc.

Other manufacturing programmes should be classified under 54 'Manufacturing and processing'. This is the case for programmes with emphasis on manufacturing specific products such as food, textiles, shoes, paper, furniture, glass, plastic etc., However, manufacturing of metal products is excluded from 54 and included in field 521 'Mechanics and metal work'.

³ Note that Engineering is a much broader concept than Engineer, who works as a professional in Engineering, but many other categories also work in this field and there is no level difference intended between field 52 and 54.

Broad fields	Narrow fields	Detailed fields
0 General ⁴ Programmes	01 Basic / broad, general programmes08 Literacy and numeracy09 Personal skills	010 Basic / broad general programmes080 Literacy and numeracy090 Personal skills
1 Education	14 Teacher training and education science	 (141⁵ Teaching and training =143+144+145+146) 142 Education science 143 Training for pre-school teachers 144 Training for teachers at basic levels 145 Training for teachers with subject specialisati 146 Training for teachers of vocational subjects
2 Humanities and Arts	21 Arts	 211 Fine arts 212 Music and performing arts 213 Audio-visual techniques and media production 214 Design 215 Craft skills
	22 Humanities	 221 Religion 222 Foreign languages 223 Mother tongue (224 History, philosophy and related subjects = 225+226) 225 History and archaeology 226 Philosophy and ethics
3 Social sciences, Business and Law	31 Social and behavioural science	311 Psychology312 Sociology and cultural studies313 Political science and civics314 Economics
	32 Journalism and information	321 Journalism and reporting322 Library, information, archive
	34 Business and administration 38 Law	 341 Wholesale and retail sales 342 Marketing and advertising 343 Finance, banking, insurance 344 Accounting and taxation 345 Management and administration 346 Secretarial and office work 347 Working life 380 Law
4 Science, Mathematics and Computing	42 Life science	421 Biology and biochemistry422 Environmental science
	44 Physical science46 Mathematics and statistics	 441 Physics 442 Chemistry 443 Earth science 461 Mathematics 462 Statistics

Fields of Education and Training

⁴ 'General' in this context refers to 'general' as opposed to 'specialised', and has **not** the explicit meaning of 'general' as opposed to 'vocational'

⁵ This field (and the other fields within brackets) is used in the EUROSTAT and CEDEFOP 'Fields of training' classification system for vocational education and training. Its' sub-division used in the present classification is shown within in the brackets.

Broad fields	Narrow fields	Detailed fields
	48 Computing	481 Computer science
		482 Computer use
5 Engineering,	52 Engineering and	521 Mechanics and metal work
Manufacturing and	engineering trades	522 Electricity and energy
Construction		523 Electronics and automation
		524 Chemical and process
		525 Motor vehicles, ships and aircraft
	54 Manufacturing and	541 Food processing
	processing	542 Textiles, clothes, footwear, leather
		543 Materials (wood, paper, plastic, glass)
		544 Mining and extraction
	58 Architecture and building	581 Architecture and town planning
		582 Building and civil engineering
6 Agriculture	62 Agriculture, forestry	621 Crop and livestock production
and Veterinary	and fishery	622 Horticulture
		623 Forestry
		624 Fisheries
	64 Veterinary	641 Veterinary
7 Health and	72 Health	721 Medicine
Welfare		(722 <i>Medical services</i> = 725+726+727)
		723 Nursing and caring
		724 Dental studies
		725 Medical diagnostic and treatment technology
		726 Therapy and rehabilitation
		727 Pharmacy
	76 Social services	761 Child care and youth services
		762 Social work and counselling
8 Services	81 Personal services	811 Hotel, restaurant and catering
		812 Travel, tourism and leisure
		813 Sports
		814 Domestic services
		815 Hair and beauty services
	84 Transport services	840 Transport services
	85 Environmental protection	851 Environmental protection technology
		852 Natural environments and wildlife
		853 Community sanitation services
	86 Security services	861 Protection of persons and property
		862 Occupational health and safety
		863 Military and defence

'0' is used in the third position when there is only one detailed field for the corresponding narrow field or when classifying broad programmes comprising parts from -at least three of the detailed fields, and none of the detailed fields is dominating (see also 'Interdisciplinary and broad programmes on page 12).

'9', '99' or '999' should be used in data collection if the field is not known or unspecified.

Relation to other classifications and ISCED 97 dimensions

Programme orientation and fields

Programme orientation (general, vocational and pre-vocational education) and fields are two **different** dimensions in ISCED 97 and must not be confused.

Many programmes which are classified as General education under Programme orientation should be classified by their main subject in fields. Example: An educational programme in mathematics may be general education for programme orientation, but the field should be 461 'Mathematics'.

Differences compared to fields of training

When creating fields of training a third digit was added to divide most of the two-digit ISCED-fields, especially fields in areas with a lot of VET (Vocational Education and Training). 'Academic' fields, that is fields where it was believed there was not much VET, were kept undivided. In the classification presented here 'academic' fields have also been sub-divided and thus giving a more 'balanced' field classification.

Field of training	Field of education and training
141 Teaching and training	143+144+145+146
224 History, philosophy and related subjects	225+226
310 Social and behavioural science	311+312+313+314
420 Life science	421+422
440 Physical science	441+442+443
460 Mathematics and statistics	461+462
722 Medical services	725+726+727
850 Environmental protection	851+852+853

A few minor changes in the names of the fields of training have also been made in order to make them clearer.

The only 'major' change of content is **Environmental science**, which in fields of training is classified together with Environmental protection under field 850, while in this classification Environmental science/Ecology is classified under Life science in field 422. The reason being that this is considered a more correct classification according to the criteria used. There are also a few other small changes, but the changes are not believed to make any difference in the statistics on vocational education and training.

Compared to Fields of training it has been made clearer in this manual that broad general programmes at upper secondary level with some emphasis on e.g. humanities, social sciences, natural science without neglecting other fields of knowledge should be classified under field 010 'Basic broad/general programmes'.

Relation to ISCO-88

The International Standard Classification of Occupations (ISCO-88) provides a system for classifying and aggregating occupational information obtained by means of population censuses and other statistical surveys, as well from administrative records.

The framework necessary for designing and constructing ISCO-88 has been made on two main concepts: the concept of the kind of work performed (job) and the concept of skill.

Job – defined as a set of tasks and duties executed by one person – is the statistical unit classified by ISCO-88. A set of jobs whose main tasks and duties are characterised by a

high degree of similarity constitutes an occupation. Persons are classified by occupation through their relationship to a past, present or future job.

Skill - defined as the ability to carry out the tasks and duties of a given job - has for the purpose of ISCO-88 the following dimensions:

- 1. Skill level which is a function of the complexity and range of the tasks and duties involved.
- 2. Skill specialisation defined by the field of knowledge required, the tools and machinery used, the materials worked on or with, as well as the kinds of goods and services produced.

Four broad skill levels were defined and made operational by using ISCED 76.

Obviously, there are connections between ISCO-88 and ISCED-fields, but it should be remembered that they classify different statistical units using different criteria. Fields try to classify educational programmes by subject content and ISCO-88 classifies jobs (occupational information) using the concepts mentioned above. A cross tabulation of e.g. census data by ISCED-fields and ISCO-88 should reveal interesting and valuable statistical information for education planners and decision makers.

Inter-disciplinary and broad programmes

Inter-disciplinary programmes

'Inter-disciplinary programmes' has here the meaning of programmes combining (generally **two**) fields of education and training. For these programmes (see *example 1* to 3), the 'majority rule' should be used, that is the subject that dominates decides into which field the programme should be classified. The criteria for dominating is normally the time used on the subject.

<u>Example 1</u>: A programme consisting of both political science (313) and economics (314) should be classified according to which of the subjects dominates, that is on which subject most of the time is spent.

In *Example 2* subjects also fall into the same field of education but in two different fields of education and training. Also in this example, use the majority rule. The programme is not broad enough to be considered as a 'broad programme' according to the definition given below.

<u>Example 2:</u> A programme combining study of retail sales with study of office work should be classified according to which of the fields dominates; 341 'Wholesale and retail sales' or 346 'Secretarial and office work'.

In *Example 3* below subjects fall into two different narrow fields (2-digit level). Use the majority rule; you are more or less obliged to do that as there is no other solution (except 999).

<u>Example 3</u>: A programme that mainly includes subjects within the area of computer science should be allocated to field 481 ('Computer science') even if a certain amount of computer engineering (field 523 'Electronics and automation') is included.

Broad programmes

'Broad programmes' here means that an education or training programme comprises parts from several - **at least three** - fields of education and training, mainly within the same field of education, and none of the fields of education and training is clearly dominating. These broad programmes should be classified by using '0' as the third digit⁶.

Note that the '0' in the third position will be used for information about broad programmes, and it should not be used as a rest code. Note that a '0' in the second position is in principal not allowed.

<u>Examples 4:</u> A programme in business and administration, consisting of management, financing, sales and marketing etc. should be classified as 340 'Broad programmes in business and administration'.

Programmes aiming at one specific vocational field consisting also of supporting subjects from other fields are *not* considered as broad programmes in this context.

<u>Example 5:</u> In a programme in electrical installation, more time may be devoted to other supporting subjects (language, mathematics, natural science etc.) than the

⁶ This is applicable only for the fields of education (two-digit fields) that are divided into three or more fields of education and training, and is expected to be used especially under 34 'Business and administration' and 52 'Engineering and engineering trades'

intended vocational subject. However, this programme should be classified as 522 'Electricity and energy' and not as a broad programme.

Not specified or not able to classify

As a last resort, the '9' may be used in the third position if available information about a programme is not available or if a specific programmes is not possible to classify into any of the detailed fields. A '9' in the second position is in principal not allowed⁷, except that in data collections on the 2-digit level, '99' can be used if the 2-digit field is not known.

<u>Example 6</u>: A programme in engineering where more information is not available should be classified as 529.

How to Use the Manual

- 1. When classifying an educational programme or a group of programmes, look at the overview of the classification on pages 8–9. Start by deciding into which broad field it should be classified into. Go on and look at the narrow fields. In many cases, it is more or less obvious which of the fields the programme belongs to.
- 2. When you have found an appropriate narrow field, check the description given for each detailed field to confirm that it is the right narrow field and if wanted also the right detailed field that has been chosen.
- 3. If it is not obvious into which field a programme should be classified, or if you need more help, look up the name of the programme in the alphabetical code list (appendix 4). Then, check the description given for the detailed fields to see if it is the right code.
- 4. You may also use the rationale of this classification (see appendix 1) in order to allocate the programme. In cases where particular problems are encountered in the application of the field classification, it would be appreciated if they could be brought to the attention of the organisations responsible for co-ordinating the data collection, so as to allow for the improvement of the field manual in the future.

⁷ In the Fields of Training manual both '9' and '0' are allowed in the second position. This means that exceptionally a '0' or a '9' may be allowed in the second position. The decision depends on the needs of each data collection and should be clearly indicated in the relevant implementation instructions. For example, in the UOE data collection a '0' or a '9' in the second position is **not** allowed.

Field Descriptions

This part of the manual describes each field of education and training with regard to the subject content of the field. When classifying programmes, it is very important to look at these descriptions of the content and see which field best corresponds to the programme (programme group) that is to be classified.

If classifying only from the names of the programmes, large mistakes may be made. Especially, this is the case with some popular terms like 'communication', 'management' etc, which are used in many contexts. Also, a programme name might have different meanings in different countries. So, be careful with the names of the programmes and, as far as possible, consider the main subject content of the programmes instead.

Note that the lists of programmes given under each field description below are not complete. At the end of the manual (appendix 3) a more comprehensive list of programmes/subjects is found.

It should be pointed out that the codes 140, 210, 220, 310, 340, 440, 520, 540, 620, 720, 810, 850 and 860 are implementations of the '0' in the third position mentioned in the footnote in the table presenting an overview if the field classification.

0 General Programmes

'General' in this context refers to basic and personal skills ('general' as opposed to 'specialised'), and has not explicit the meaning of 'general' as opposed to 'vocational'.

This category 0 'General programmes' must not be used as a residual category. Programmes with a **subject emphasis** should be classified in fields 1 to 8.

Countries may be asked to report which programmes they have classified as 0 'General programmes', especially at ISCED level 3. Educational programmes at levels 4, 5, and 6 should only by way of exception be classified here.

010 Basic / broad, general programmes

Basic / broad, general programmes are programmes designed to give a basic education in reading, writing and arithmetic along with an elementary understanding of other subjects such as history, geography, natural science, social science, art and music, and in some cases religious instruction is featured. Basic programmes are normally given at primary and lower secondary level. Broad, general programmes at upper secondary level are also classified here – which should be the case even if there is some concentration on a certain category of subject matter such as humanities, social science, natural science etc. Vocational programmes are included only by way of exception. Programmes with the following main content are classified here:

Basic programmes Broad, general programmes General programmes with no special subject emphasis *Broad, general programmes* at upper secondary level (in some countries at lower secondary level) with some *emphasis on e.g. humanities, social science, natural science* without neglecting other fields of knowledge are included in this field. In some countries such programmes are given in a kind of modular system. These programmes should also be classified here.

Exclusions:

Programmes that are considered as general in the program orientation meaning (non-vocational) but have a clear emphasis on a subject or a group of subjects are excluded from this field and are included in one of the fields 1-8, depending on the subject.

080 Literacy and numeracy

Literacy and numeracy are programmes arranged mainly for illiterate **adults**, designed to teach basic reading, writing and sometimes arithmetic. The typical age range can be used to distinguish between field 010 'Basic / broad, general programmes' and this field. Programmes with the following main content are classified here:

Basic remedial programmes for adults Literacy Numeracy

090 Personal skills

Personal skills programmes can be defined by reference to the effects on the individual's capacity (mental, social etc.). This field covers personal skills programmes, not included in 010 'Basic / broad, general programmes' or 080 'Literacy and numeracy', giving key competencies and transferable skills. Programmes with the following main content are classified here:

Argumentation and presentation Assertiveness training Communication skills Co-operation Development of behavioural capacities Development of mental skills Job-seeking programmes Public speaking Self esteem skills Social competence Time management

Inclusions:

Education and training in *leadership* in the context of *personal development* is included in this field.

Education and training related to the *working place* or to the *assignments* is included in this field if it has more to do with personal development than work development.

Programmes for the intellectually disabled on how to *cope with their daily life* are included here

Exclusions:

Study of *leadership* in the context of *management* is excluded from this group and included in field 345 'Management and administration'.

1 Education

140 Teacher training and education science (broad programmes)

Teacher training and education science (broad programmes) is the study of pedagogical theory combined with practice of teaching without specialising in basic teaching, special subject teaching, vocational teaching etc. Broad programmes with the following main content are classified here:

Teacher training, general Practical pedagogical courses, general

142 Education science

Education science is the study of the learning process and the theories, methods and techniques of imparting knowledge to others. Programmes with the following main content are classified here:

Didactics Education science Educational assessment, testing and measurement Educational evaluation and research Pedagogical sciences

Exclusions:

Teacher training programmes which combine education science with the practice of teaching are excluded from this field and included in the some of the fields for teacher training (143-146).

143 Training for pre-school teachers

Training for pre-school teachers is the study of the theories, methods and practice of teaching children between approximately 3-7 years of age within formal school settings at pre-primary level. Programmes with the following main content are classified here:

Early childhood teaching Pre-primary teacher training

144 Training for teachers at basic levels

Training for teachers at basic levels is the study of the theories, methods and practice of giving children between normally 5-15 years of age a sound basic education in reading, writing and mathematics along with an elementary understanding of other subjects such as history, geography, social science etc. Subject specialisation should be stressed less than in field 145 'Training for teachers with subject specialisation'. The study of teaching children with special needs is included in this field, likewise the study of teaching adults basic reading and writing and teaching immigrants the basics in their home language. Programmes with the following main content are classified here:

Class teacher training Home language teacher training Primary teaching Teacher training for children with special need

Inclusions:

The study of *teaching adults basic reading and writing* is included in this field.

145 Training for teachers with subject specialisation

Training for teachers with subject specialisation is the study of the theories, methods and practice of teaching a special subject, mostly at secondary or higher levels. Programmes included in this field often comprise study also of the subject/subjects that are going to be taught. Programmes with the following main content are classified here:

Secondary teaching Teacher training – theoretical subjects, e.g. English, Mathematics, History

Inclusion:

Teacher training programmes with *both a vocational and a theoretical subject* is included in this field.

Exclusions:

Teaching programmes in *vocational, practical and artistic subjects* is excluded from this field and included in field 146 'Training for teachers of vocational subjects'⁸.

146 Training for teachers of vocational subjects

Training for teachers of vocational subjects is the study of the theories, methods and practice of vocational/practical teaching and training. Training for music teachers, art teachers and other teachers in aesthetic subjects are included, likewise training for teachers in physical training. Programmes with the following main content are classified here:

Teacher training – arts and crafts Teacher training – commercial subjects Teacher training – music Teacher training – nursing Teacher training – physical training Teacher training – technical subjects Driving instructor training Training of instructors at companies Training of trainers

Inclusions:

Training of *driving instructors* is included in this field. Training of *trainers for work* is included in this field.

Exclusions:

Training of sport trainers is excluded from this field and included in field 813 'Sports'.

Teacher training programmes with *both a vocational and a theoretical subject* is excluded from this field and included in field 145 'Training for teachers with subject specialisation'.

⁸ In some cases it may be difficult to differentiate between field 145 and 146, but it should be pointed out that it is the **subject** the teacher is trained to teach which decide the field, not the type of school (all subjects in vocational programmes are not vocational subjects).

2 Humanities and Arts

210 Arts (broad programmes)

Arts (broad programmes) is the study of arts without specialising in any of the detailed fields. Broad programmes with the following main content are classified here:

Arts Arts and crafts

211 Fine arts

Fine arts is the study of visual forms of creative expressions, dealing with theory, history, techniques, performance and production in fine arts. Programmes with the following main content are classified here:

Art theory Etching Fine art printmaking History of art Painting Philosophy of art Sculpture

Exclusions:

Training in *ceramics, pottery etc* is excluded from this field and included in field 215 'Craft skills'.

Study of *architecture* is excluded from this field and included in field 581 'Architecture and town planning'.

Teacher training in arts is excluded from this field and included in field 146 'Training for teachers of vocational subjects'.

212 Music and performing arts

Music and performing arts is the study of the principles and techniques associated with performance involving music, speech, movement, mime, characterisation, improvisation and stage craft. Programmes with the following main content are classified here:

Acting and directing Choreography Circus Composition (music) Conducting (music) Dance (art) Drama History of film and theatre History of music Music Theatre

Inclusions:

Study of music and performing arts history and theory is included in this field.

Exclusions:

Teacher training in music and other performing arts is excluded from this field and included in field 146 'Training for teachers of vocational subjects'.

213 Audio-visual techniques and media production

Audio-visual techniques and media production is the study of techniques and skills to produce books, newspapers, radio/TV production, film/video production, recorded music production and graphic reproduction. It includes programmes in methods of colour reproduction, photography and computer graphics. Study of combining pictures, words and decorations in the production of books, magazines, posters, adverts etc. is also included. Programmes with the following main content are classified here:

Bookbinding Camera operating Compositing (printing) Computer type-setting Film production Graphic design Graphic reproduction Illustration Media techniques Multimedia production Photography Printing Publishing design, lay-out Radio and TV production Recorded music production Sound technique Type-setting

Inclusions:

Programmes in desktop publishing and lay-out are included in this field.

Exclusions:

Separate programmes in using *specific software applications* for desktop publishing are excluded from this field and included in field 482 'Computer use'.

Study of *journalism* (wording and content of messages) is excluded from this field and included in field 321 'Journalism and reporting'.

214 Design

Design is the study of creatively combining line, form and fabric in designing and constructing e.g. fashion garments, industrial products and interiors. Programmes with the following main content are classified here:

Costume design Design of industrial products Fashion design Interior architecture Interior design Stage designing Window dressing

Exclusions:

Study of *Building design* is excluded from this field and included in field 581 'Architecture and town planning'.

Study of *Industrial design* is excluded from this field if emphasis is given to technical subjects and not to artistic design, and included in the appropriate field under 52 'Engineering and engineering trades'.

Publishing design and *graphic design* are excluded from this field and included in field 213 'Audio-visual techniques and media production'.

215 Craft skills

Craft skills is the study of techniques and skills in a chosen aspect of **handicraft**, such as jewellery, pottery, weaving, woodcarving etc. Programmes with the following main content are classified here:

Ceramics Crafts, folk arts and artisanry Decorative metal crafts Embroidery Floristry (flower arranging) Glass arts and craft Goldsmithing Handicrafts Jewellery Making of musical instruments (not industrial) Musical instruments (repairing and tuning) Silversmithing Stone carving (craft) Weaving (craft) Woodcarving

Exclusions:

Study of *industrial production* of pottery, woven materials, embroidery etc. is excluded from this field and included in some of the detailed fields under broad field 5 'Engineering, manufacturing and construction'.

220 Humanities (broad programmes)

Humanities (broad programmes) is the study of humanities without specialising in any of the detailed fields. Education and training programmes with the following main content are classified here:

Humanities

221 Religion

Religion is the study of religious beliefs, concepts, symbols, expressions, texts and spirituality. Programmes with the following main content is classified here:

Religious history Study of sacred books Study of different religions

Inclusions:

Included in this field are programmes for children and young people, usually given in religious schools or seminars, in monasteries etc, *aiming to develop an interest in the tenets of their religion* and sufficient familiarity with its philosophy to assist in the propagation of their faith.

Exclusions:

Basic programmes given in religious schools, seminars etc. containing religious instruction but not emphasising it or leading to a religious vocation, are excluded from this field and included in 010 'Basic / broad, general programmes'.

222 Foreign languages

Foreign languages is the study of the structure and composition of foreign languages. It includes the study of related cultures, literature and linguistics. Programmes with the following main content are classified here:

Dead languages Foreign languages Interpretation programmes Second languages Translation programmes

Inclusions:

Foreign languages is the study of a language being *taught as a foreign language* or a second language. A second language means a national language taught to pupils whose main language is another language.

Exclusions:

Programmes teaching the *mother tongue*, even if this language is not the national language (e.g. programmes for immigrants learning their mother tongue) are excluded from this field and included in field 223 'Mother tongue'.

223 Mother tongue

Mother tongue is the study of the native language, including the study of related literature and linguistics. Programmes with the following main content are classified here:

Creative writing Home language Languages, native Mother tongue programmes Sign language

Inclusions:

Mother tongue is study of a language *taught as the mother tongue*, even if the language is not the national language of the country, e.g. programmes for immigrants in their home language.

Exclusions:

National language programmes are excluded from this field if the language is *taught as a foreign or a second language*, and are then included in 222 'Foreign languages'.

Programmes in *literacy and numeracy* are excluded from this field and included in field 080 'Literacy and numeracy'.

225 History and archaeology

History is the study of past events, especially the political, social and economic development of a country, a continent or the world. Study of comparative literature is included in this field, likewise the study of history of science and ideas. *Archaeology* is the study of ancient civilisations by scientific analysis of what is found in the ground. Programmes with the following main content are classified here:

Archaeology Cultural history History History of literature History of science and ideas Museology

Inclusions:

Study of *literature in general* (not combined with study of a special language) is included in this field.

Study of *general linguistics* (not related to a the study of a particular language) is included in this field.

Exclusions:

If study of *literature is combined with study of a special language* it is excluded from this field and included in field 222 'Foreign languages' or 223 'Mother tongue'.

Study of *dead languages* (latin etc.) is excluded from this field and included in field 222 'Foreign languages'.

Study of History of art is excluded from this field and included in field 211 'Fine arts'.

Study of *Music and performing arts history* is excluded from this field and included in field 212 'Music and performing arts'.

Study of *Economic history/history of economics* is excluded from this field and included in field 314 'Economics'.

226 Philosophy and ethics

Philosophy and ethics is the study of philosophy, ethics and related subjects dealing with conception of life. Programmes with the following main content are classified here:

Ethics Logic Morals Philosophy

Exclusions:

Study of *religion* is excluded from this field and included in field 221 'Religion'.

Study of *Philosophy of arts* is excluded from this field and is included in field 211 'Fine arts'

3 Social Sciences, Business and Law

310 Social and behavioural science (broad programmes)

Social and behavioural science (broad programmes) is the study of social and behavioural science without specialising in any of the detailed fields. Training programmes with the following main content are classified here:

Behavioural science Social sciences

311 Psychology

Psychology is the study of the human mind and behaviour as a result of individual differences, experience and environment. Programmes with the following main content are classified here:

Psychology Psychoanalysis Psychotherapy

312 Sociology and cultural studies

Sociology and cultural studies is the study of human beings and the way they behave in groups and in relation to the society. Study of ethnology and social anthropology is included in this field, likewise is the study of human and social geography. Programmes with the following main content are classified here:

Cultural geography Cultural studies Demography/population studies Gender studies Ethnology Social anthropology Social geography Sociology

Exclusions:

Social welfare programmes where emphasis is given to practical social work are excluded from this field and included in field 762 'Social work and counselling'.

313 Political science and civics

Political science and civics is the study of government and political principles or practice. Subjects dealing with rights and duties of the citizens are included. Programmes with the following main content are classified here:

Civics Human rights International relations Peace and conflict studies Political history Political science

Exclusions:

Study of *political economics* is excluded from this field and included in the field 314 'Economics'.

314 Economics

Economics is the study of economic policy, economic theory and economic decision making. Programmes with the following main content are classified here:

Economic history Economics Political economy

Exclusions:

Study of economics where emphasis is given to *business studies* is excluded from this field and classified as 340 'Business and administration (broad programmes)'.

321 Journalism and reporting

Journalism and reporting is the study of the theory and practices of journalism/reporting as part of the field of mass communication. Journalism and reporting is about the wording and content of messages. It comprises news reporting, writing commentaries and feature stories of public interest etc. Programmes with the following main content are classified here:

Broadcast journalism Information (wording and content) Journalism Mass communication (wording and content) News reporting

Exclusions:

Study of *techniques for mass communication* (e.g. printing and radio/TV production) is excluded from this field and included in field 213 'Audio-visual techniques and media production'.

Study of lay-out and publishing design is excluded from this field and included in field 213 'Audio-visual techniques and media production'.

Study of *public relations* is excluded from this field and included in field 342 'Marketing and advertising'.

322 Library, information, archive

Library, information, archive is the study of the methods of selecting, acquiring, organising and storing collections of information, and facilitating the use of information. Library programmes are included in this field. Programmes with the following main content are classified here:

Archival sciences Documentation Information science Library programmes Museum documentation

340 Business and administration (broad programmes)

Business and administration (broad programmes) is the study of the theory and practice of planning, directing, organising and co-ordinating the resources of private and public organisations and institutions. Programmes with the following main content are classified here:

Business and administration Business economics Business studies

Inclusions:

Study of *business and administration* where emphasis is not given towards any of the detailed fields under 34 is included in this field.

Exclusions:

Business programmes where emphasis is given to any of the detailed fields under 34 'Business and administration' (management, administration, marketing etc) should be classified according to the specialisation.

341 Wholesale and retail sales

Wholesale and retail sales is the study of buying and selling goods and services, including stock management, pricing practice, loss prevention, sale systems and procedures. It includes the study of the workings and current trends of the wholesale and retail industries. Selling of buildings and properties is also included. Programmes with the following main content are classified here:

Auctioneering Consumer services Demonstration techniques Purchasing Real-estate business Retailing Stock-keeping Ware-housing Wholesaling

Inclusions:

Study of *buying and selling buildings* and properties is included in this field.

342 Marketing and advertising

Marketing and advertising is the study of exchange processes of goods and services between organisations and/or individuals, and the study of consumer behaviour and requirements. It includes the study of the role of product development, pricing, distribution, promotion and sales in order to maximise business performance. Programmes with the following main content are classified here:

Advertising Market research Marketing Merchandising Public relations

343 Finance, banking, insurance

Finance, banking, insurance is the study of planning, directing, organising and controlling financial activities and services. It includes the control and monitoring of the financial resources of organisations, institutions and individuals, and the provision of financial services at the corporate and individual level. Programmes with the following main content are classified here:

Bank teller programmes Banking and finance Finance theory Insurance Investment analysis Investments and securities Pension insurance Social insurance Stock-broking

<u>Exclusions:</u>

Study of *actuarial science* is excluded from this field and included in field 462 'Statistics'.

344 Accounting and taxation

Accounting and taxation is the study of maintaining, auditing and recording financial transactions. Programmes with the following main content are classified here:

Accounting Auditing Bookkeeping Tax accounting

345 Management and administration

Management and administration is the study of planning, directing and operating the functions and activities of organisations and institutions. Programmes in management also including administration, economics, finance etc. are included in this field if emphasis is given to management and administration. Programmes with the following main content are classified here:

Administration Educational management Employment management Logistic management Management science Office management Organisational theory and behaviour Personnel administration Personnel management Start your own business-courses Training management

Inclusions:

Study of *leadership in the context of management* is included in this field.

Exclusions:

Training of *leadership in the context of personal development* is excluded from this field and included in field 090 'Personal skills'.

Study of *administration in the meaning of office work* is excluded from this field and included in field 346 'Secretarial and office work'.

346 Secretarial and office work

Secretarial and office work is the study of administrative procedures and practises, office technology and clerical, shorthand and keyboard skills. Specialised secretarial programmes (bilingual, medical, law, accounting etc) are included if the programme has secretarial work as its objective, rather than work as specialised assistants. Programmes with the following main content are classified here:

Administrative and secretarial services Clerical programmes Data entry Foreign language secretary programmes Keyboard skills Legal secretary programmes Medical secretary programmes Operation of office machines Receptionist training Secretarial programmes Shorthand Switchboard operating Typing

Inclusions:

Broad secretarial programmes comprising among other thing computer courses are included in this field.

Exclusions:

Separate programmes in *using a specific computer software* are excluded from this field and included in 482 'Computer use'.

Office management is excluded from this group and included in field 345 'Management and administration'.

Hotel receptionist programmes are excluded from this field and included in field 811 'Hotel, restaurant and catering'.

347 Working life

Working life is the study of the structure and function of working life. It comprises programmes, mainly given as staff training, related to the working place and to assignments. Programmes with the following main content are classified here:

Company knowledge Introductory courses Clients' needs Organisation at work Quality assurance Trade union courses (general) Work development

Inclusions:

Staff training related to the *working place or the assignments* is included in this field if not possible to classify into any other fields.

Exclusions:

Training related to the working place or the assignments is excluded from this field if it has *more to do with personal development* than work development and is included in field 090 'Personal skills'.

Staff training which *can be classified* to any other field is excluded from this field and included in the appropriate field. E.g. quality courses should, if technical, be included in the fields under 52 'Engineering and engineering trades'.

Programmes in *work environment* should be included in filed 862 'Occupational health and safety'.

Programmes, mostly at tertiary level, dealing with *working life in general* in terms of the labour market, the social partners, industrial psychology etc. are excluded in this field and included in the fields under 31 'Social and behaviour science'.

380 Law

Law is the study of the principles and procedures for formally maintaining social order, including training for legal professions such as advocate or training for the judicial bench. Programmes with the following main content are classified here:

Commercial law Criminal justice studies History of law Jurisprudence Labour law Legal practice Notary/Notary's practise

4 Science, Mathematics and Computing

421 Biology and biochemistry

Biology and biochemistry is the study of the structure, function, reproduction, growth, evolution and behaviour of all living organisms. It comprises the study of biological and related sciences, and includes the study of the chemistry of living organisms. Programmes with the following main content are classified here:

Biochemistry Biology Botany Genetics Pharmacology Toxicology Zoology

Inclusions:

Study of *chemical processes in living organisms* (biochemistry, toxicology, pharmacology etc.) is included in this field.

Exclusions:

Study of *environmental science*, which is study of the relation between living organisms and the environment, is excluded from this field and included in field 422 'Environmental science'.

422 Environmental science

*Environmental science*⁹ is the study of organisms in relation to one another and to the environment. Programmes with the following main content are classified here:

Ecology Environmental science

Exclusions:

Study of *biology* and *toxicology* is excluded from this field and included in field 421 'Life science'.

440 Physical science (broad programmes)

Physical science (broad programmes) is the study of physical science without specialising in any of the detailed fields. Broad programmes within the physical science are classified here.

441 Physics

Physics is the study of properties and interactions of matter and energy. It includes the study of astronomy and space science. Programmes with the following main content are classified here:

Astronomy Optics Physics Space science

⁹ Environmental science is in Fields of training classified together with Environmental protection under field 850, while in this classification Environmental science/Ecology is classified under Life science under field 422. The reason being that this is considered a more correct classification according to the criteria used.

Exclusions:

Opticians' practice is excluded from this field and included in field 725 'Medical diagnostic and treatment technology'.

442 Chemistry

Chemistry is the study of substances and their elements and how they react when combined. Programmes with the following main content are classified here:

Chemistry Organic chemistry

Exclusions:

Biochemistry is excluded from this field and included in field 421 'Life science'.

443 Earth science

Earth science is the study of the composition and structure of earth including the hydrosphere and the atmosphere. Programmes with the following main content are classified here:

Earth science Geography (nature) Geology Meteorology Oceanography Seismology

Exclusions:

Social geography is excluded from this field and included in field 312 'Sociology and cultural studies'.

461 Mathematics

Mathematics is study of abstract deductive systems. It includes algebra, arithmetic, geometry, real and complex analysis and applied mathematics. Programmes with the following main content are classified here:

Algebra Geometry Mathematics Numerical analysis

462 Statistics

Statistics is the study of collecting, describing, arranging and analysing numerical data. Study of probability theory and actuarial science is included. Programmes with the following main content are classified here:

Actuarial science Mathematical (theoretical) statistics Probability theory Statistics, applied Survey design Survey sampling

<u>Inclusions:</u> Study of *applied statistics* is included in this field. Study of *mathematical (theoretical) statistics* is included in this field.

Exclusions:

Study of *demography/population studies* is excluded from this field and included in field 312 'Sociology and cultural studies'

481 Computer science

Computer science is the study of the design and development of computer systems and computing environments. It includes the study of the design, maintenance and integration of software applications. Programmes with the following main content are classified here:

Computer programming Computer science Computer system analysis Computer system design Informatics Network administration Operating systems Programming languages (Visual Basic, C++ etc.)

Exclusions:

Computer engineering (hardware) is excluded from this field and included in field 523 'Electronics and automation'.

Programmes in *using computer applications* are excluded from this field and included in field 482 'Computer use'.

482 Computer use

Computer use is the study of using computers and computer software and applications for different purposes. These programmes are generally of short duration. Programmes with the following main content are classified here:

Computer use Software for calculating (spreadsheets) Software for data processing Software for desk top publishing Software for word processing Use of Internet

5 Engineering, Manufacturing and Construction

520 Engineering and engineering trades (broad programmes)

Engineering and engineering trades (broad programmes) is the study of engineering and engineering trades without specialising in any of the detailed fields. Training programmes with the following main content are classified here:

Engineering Engineering industry programmes Maintenance engineering

521 Mechanics and metal work

Mechanics and metal work (Engineering and engineering trades) is the study of planning, designing, developing, producing, maintaining and monitoring machines, mechanical plants and systems and metal products. It includes designing and maintaining machines which produce goods and services. The focus of programmes in this field is machines, mechanical systems and metal products. Programmes with the following main content are classified here:

Gunsmith Hydraulics Locksmith and safe repairer Mechanical engineering Mechanical trades programmes Metal casting and patternmaking Metal fitting, turning and machining Metallurgical engineering Precision mechanics Sheetmetal working Steel production Tool and die making Welding

Exclusions:

Study of *motor vehicle mechanics and engineering* is excluded from this field and included in field 525 'Motor vehicles, ships and aircraft'.

522 Electricity and energy

Electricity (Engineering and engineering trades) is the study of installing, maintaining, repairing and diagnosing faults in electrical wiring and related equipment in domestic, commercial and industrial establishments. Installation and maintenance of overhead and underground electrical power distribution networks is included. Energy is the study of energy generation. Programmes with the following main content are classified here:

Air-conditioning trades programmes Climate engineering Electrical appliances repairing Electrical engineering Electrical fitting Electrical fitting Electrical trades programmes Energy programmes Gas distribution Heating trades programmes Nuclear, hydraulic and thermal energy Power production Powerline installation and maintenance Refrigeration programmes

Inclusions:

The study of *installing*, *diagnosing faults in and repairing heating*, *air-conditioning* and *refrigeration equipment* is included in this field.

Exclusions:

Study of *vehicle electricity* is excluded from this field and included in field 525 'Motor vehicles, ships and aircraft'.

523 Electronics and automation

Electronics and automation (Engineering and engineering trades) is the study of planning, designing, developing maintaining and monitoring electronic equipment, machinery and systems. It includes designing computers and equipment for communication. Programmes with the following main content are classified here:

Broadcasting electronics Communication systems Communications equipment installation Communications equipment maintenance Computer engineering Control engineering Data processing technology Digital technology Electronic engineering Electronic equipment servicing Network technology Robotics Telecommunication technology Television and radio repairing

Exclusions:

Computer science (design of computer systems and software applications) is excluded from this field and included in 481 'Computer science'.

524 Chemical and process

Chemical and process (Engineering and engineering trades) is the study of planning, designing, and developing products and processes where chemical and physical changes occur. It includes designing chemical plants and control systems. Programmes with the following main content are classified here:

Biochemical technologies Biotechnology engineering Chemical engineering Chemical process engineering Laboratory technology Oil/gas/petrochemicals processing Plant and machine operation (processing) Process technology

Inclusions:

Programmes in *laboratory technology* are included in this field if *emphasis is not given* to a specific application.

Exclusions:

Laboratory technology programmes are excluded from this field if emphasis is *given to a specific application* (biological, medical, etc.) and are included under appropriate field (420, 725 etc).

Programmes with emphasis on *production of a specific material* are excluded from this field; e.g. programmes with emphasis on *paper processing* should be included in field 543 'Materials (wood, paper, plastic, glass)'.

525 Motor vehicles, ships and aircraft

Motor vehicles, ships and aircraft (Engineering and engineering trades) is the study of designing, developing, producing, maintaining, diagnosing faults in, repairing and servicing motor vehicles, including earth moving equipment and agriculture machines. Typical is the combining of studies in both metal structures and motors. Programmes with the following main content are classified here:

Air craft engineering Air craft maintenance Automotive electricity Automotive engineering Coachwork Motorcycle engineering Panel beating Shipbuilding Varnishers/sprayers Vehicle building and repairing

Inclusions:

Study of vehicle electricity is included in this field.

Exclusions:

Study of *producing and repairing non-motor vehicles* is excluded from this field and included in 521 'Mechanics and metal work' (e.g. bicycles) or 543 'Materials; wood, paper, plastic, glass' (e.g. boats, non-motor).

540 Manufacturing and processing (broad programmes)

Manufacturing and processing (broad programmes) is the study of manufacturing and processing without specialising in any of the detailed fields. Broad programmes within manufacturing and processing is classified here.

541 Food processing

Food processing (Manufacturing and processing) is the study of processing and packaging of food and beverages, and the equipment and procedures used in the production and distribution of foods. Programmes with the following main content are classified here:

Baking Beer brewing Butchering Confectionery Dairy foods Food and drink processing Food preservation Food science and technology Meat processing Pastry cooking Tobacco processing Wine production

Inclusions:

Study of food handling and food hygiene is included in this field.

Study of tobacco processing is included in this field.

Exclusions:

Restaurant and catering programmes are excluded from this group and included in field 811 'Hotel, restaurant and catering'.

Nutritional science is excluded from this field and included in field 726 'Therapy and rehabilitation'.

542 Textiles, clothes, footwear, leather

Textiles, clothes, footwear, leather (Manufacturing and processing) is the study of the manufacture of textiles, textile and leather products, clothing and related items, shoes and other forms of footwear. Programmes with the following main content are classified here:

Clothing trades programmes Dressmaking Footwear making Fur making Garment production Leather processing Saddlery Shoemaking Skins and leather production Spinning Tailoring Textile trades programmes Upholstery Weaving (industrial) Wool science

Exclusions:

Handicraft programmes (weaving, embroidery etc.) are excluded from this field and included in field 215 'Craft skills'.

543 Materials (wood, paper, plastic, glass)

Materials (Manufacturing and processing) is the study of the manufacturing of products in wood, paper, plastic, glass or other materials like stone, clay, artificial materials etc. Programmes included in this field have more to do with a specific material than general technical knowledge. Programmes with the following main content are classified here:

Boat building (non-motor) Cabinet making Carpentry (not building) Ceramics (industrial) Furniture making Glass working (industrial) Industrial diamond production Paper manufacturing and processing Plastic manufacturing Rubber manufacturing Timber technology Wood machining and turning Woodwork trades programmes

Exclusions:

Study of *metal work* is excluded from this field and included in field 521 'Mechanics and metal work'.

Study of *building carpentry and joinery* is excluded from this field and included in field 582 'Building and civil engineering'.

Study of *chemical processing in general* is excluded from this field and included in field 524 'Chemical and process'.

Study of *printing and bookbinding* is excluded from this field and included in field 213 'Audio-visual techniques and media production'.

Handicraft programmes (glass arts and crafts, woodcarving etc) are excluded from this field and included in field 215 'Craft skills'.

544 Mining and extraction

Mining and extraction (Manufacturing and processing) is the study of planning, developing, assessing and directing the extraction of minerals, oil and gas from the earth. Programmes with the following main content are classified here:

Coal mining Mineral technology Oil and gas extraction Raw material extraction

Exclusions:

Study of *metallurgical engineering* is excluded from this field and included in 521 'Mechanics and metal work'

Study of geology is excluded from this field and included in field 443 'Earth science'.

581 Architecture and town planning

Architecture is the study of the art, science and techniques of building design. It encompasses both utilitarian ends - such as the soundness of the structure and the functional and economic efficiency of the building - and aesthetic considerations. *Town planning* is the study of the regulated growth and improvement of towns in both functional and aesthetical points of view. Programmes with the following main content are classified here:

Architectural urban design and planning Architecture Building design Cartography/Land surveying City planning Community development Landscape architecture Structural architecture Surveying Town and country planning Urban planning

Inclusions:

Study of cartography and surveying is included in this field

Exclusions:

Study of *interior design* is excluded from this field and included in field 214 'Design'.

The *laying out and construction of* parks and gardens is excluded from this field and included in field 622 'Horticulture'.

582 Building and civil engineering

Building is the study of the science, technology and techniques of assembling, erecting and maintaining public, commercial, industrial and residential structures and their fittings. *Civil engineering* is the study of planning, designing, testing and directing the construction of large scale buildings and structures, including systems for transport, water supply, sewage etc. Programmes with the following main content are classified here:

Bricklaying Bridge construction Building construction Building engineering Building technology Carpentry and joinery (building) Civil engineering Constructional metalwork (building) Dock and harbour engineering Floor and wall tiling Floor covering Mason and tile setting Painting and wall covering Plastering Plumbing and pipefitting Road building Water engineering and technology Water supply and sewerage engineering Ventilation

Exclusions:

Installation of electricity is excluded from this field and included in field 522 'Electricity and energy'. Similarly, *installing and repairing of heating, air-conditioning and refrigeration equipment* is excluded from this field and included in field 522 'Electricity and energy'.

620 Agriculture, forestry and fichery (broad programmes)

Agriculture, forestry and fishery (broad programmes) is the study of agriculture, forestry and fishery without specialising in any of the detailed fields. Broad programmes within agriculture, forestry and fishery are classified here.

621 Crop and livestock production

Crop and livestock production (agriculture) is the study of growing, maintaining and harvesting crops and pastures, and grazing and managing animals. It includes the study of managing and maintaining farms and producing unprocessed plant and animal products. Programmes with the following main content are classified here:

Agricultural sciences Agronomy and crop science Animal husbandry Crop husbandry Dog breeding Farm and ranch management Farming Fruit growing Grain growing Horse breeding Pig farming Poultry husbandry Rye and wheat growing Sheep farming Soil science Vegetable plantation Wine growing

Inclusions:

Study of soil science, soil fertility and irrigation techniques is included in this field.

Study of *growing intensively managed crops* such as fruit and vegetables is included in this field.

Exclusions:

Study of *wine production* is excluded from this field and is included in field 541 'Food processing'.

Jockeying is excluded from this field and is included in field 813 'Sports'

622 Horticulture

Horticulture (gardening) is the study of horticultural technology and management, floriculture, greenhouse methods, nursery management, landscape gardening etc. Programmes with the following main content are classified here:

Floriculture Gardening Greenkeeping Horticultural techniques Nursery management Turf cultivation

Inclusions:

The *laying out and construction of urban and domestic* parks and gardens is included in this field.

Gardening programmes combining floriculture and growing vegetables are included in this field.

Exclusions:

Study of *growing crops* (plants such as wheat, rice, fruit, vegetables etc, grown in order to be eaten) is excluded from this field and included in field 621 'Crop and livestock production'.

Study of *soil science, soil fertility and irrigation* techniques is excluded from this field and included in field 621 'Crop and livestock production'.

Study of *National park management* is excluded from this field and included in field 853 'Natural environments and wildlife'.

Study of *Landscape architecture* is excluded from this field and included in field 581 'Architecture and town planning'.

623 Forestry

Forestry is the study of establishing, cultivating, harvesting and managing forests. It includes study of hunting and trapping. Programmes with the following main content are classified here:

Forest keeping Forest product techniques Forestry Hunting and trapping

Exclusions:

Study of *National park management* is excluded from this field and included in field 852 'Natural environments and wildlife'.

Timber technology (sawmill production etc) is excluded from this field and included in field 543 'Materials (wood, paper, plastic, glass)'.

624 Fisheries

Fisheries is the study of breeding, rearing and harvesting fish and other seafood. Programmes with the following main content are classified here:

Fish breeding Fish farms Fishery Fishery science and technology Shellfish breeding

Inclusions:

Programmes for operating fishing boats are included in this field.

Exclusions:

Study of *industrial processing of fish* is excluded from this group and included in field 541 'Food processing'.

640 Veterinary

Veterinary is the study of preventing, diagnosing and treating diseases and injuries in animals, and their general care. The study of caring for sick, injured and infirm animals undergoing treatment in veterinary clinics is included. Programmes with the following main content are classified here:

Animal health care Animal reproduction (science) Veterinary assisting Veterinary medicine Veterinary science

Inclusions:

The science of *animal reproduction* is included in this field.

Exclusions:

Study of *animal breeding* is excluded from this field and included in field 621 ' Crop and livestock production'.

7 Health and Welfare

720 Health (broad programmes)

Health (broad programmes) is the study of health without specialising in any of the detailed fields. Training programmes with the following main content are classified here:

Health Public health programmes

721 Medicine

Medicine is the study of the principles and procedures used in preventing, diagnosing, caring for and treating illness, disease and injury in humans and the maintenance of general health. Principally, this field consists of training of physicians/doctors. Programmes with the following main content are classified here:

General medicine Gynaecology Medical science Medical training Medicine Paediatrics Surgery Training of physicians/doctors

723 Nursing and caring

Nursing and caring is the study of providing health care for the sick, disabled or infirm and assisting physicians and other medical and health professionals diagnose and treat patients. The focus of qualifications in nursing is maintaining and caring for the health during illness and rehabilitation. It includes care of old people and care of the disabled. Programmes with the following main content are classified here:

Assistant nursing Basic nursing Care of old people Care of the disabled Health care programmes Infant hygiene (nursing) Midwifery Nursing aide/Orderly Psychiatric nursing

Inclusions:

Caring programmes comprising both health care and social care e.g. for old people, are included in this field.

Exclusions:

Veterinary nursing is excluded from this field and is included in field 640 'Veterinary'.

Dental nursing is excluded from this field and is included in field 724 'Dental studies'.

Care of children (if not health care) is excluded from this field and included in field 761 'Child care and youth services'.

724 Dental studies

Dental studies is the study of diagnosing, treating and preventing diseases and abnormalities of the teeth and gums. It includes the study of designing, making and repairing dental prostheses and orthodontic appliances. It also includes the study of providing assistance to dentists. Programmes with the following main content are classified here:

Dental assisting Dental hygiene Dental laboratory technology Dental nursing Dental science Dental surgery Odontology Orthodontics

Inclusions:

Study of *dental hygiene and public dental health* is included in this field.

725 Medical diagnostic and treatment technology

Medical diagnostic and treatment technology is the study of a wide range of technologies used for diagnosing and treating diseases and handicaps. Programmes with the following main content are classified here:

Ambulance technology Medical laboratory technology Radiology technology Radiotherapy Hearing aid technology Optical technology Prosthetic technology X-ray technology

Inclusions:

Medical laboratory technology is included in this field.

Exclusions:

Study of *laboratory technology* is excluded from this field if emphasis is *not given to medical laboratory technology*. General laboratory technology is included in field 524 'Chemical and process'. Laboratory technology where emphasis is given to other specific applications (biology, physics, chemistry etc) is included in the appropriate field (421, 441, 442 etc).

Study of *dental technology* is excluded from this field and included in field 724 'Dental studies'.

726 Therapy and rehabilitation

Therapy and rehabilitation is the study of restoring normal physical conditions to those incapacitated by temporary or permanent disability. Programmes with the following main content are classified here:

Dietician programmes Medical massage Nutrition/Dietetics Occupational therapy Physiotherapy Rehabilitation Speech therapy

Inclusions:

Study of vocational rehabilitation and occupational therapy is included in this field.

Exclusions:

Study of *psychotherapy* is excluded from this field and included in field 311 'Psychology'.

Study of *nutrition science* is excluded from this field and included in field 421 'Biology and biochemistry'.

727 Pharmacy

Pharmacy is the study of drugs and their effects on humans. It includes their preparation, dispensing and administration. Programmes with the following main content are classified here:

Dispensing pharmacy Pharmacy

Exclusions:

Study of *pharmacology* is excluded from this field and included in field 421 'Biology and biochemistry'.

761 Child care and youth services

Child care and youth services is the study of the development and care of children and youths. It includes study of recreation and leisure activities as a social service for school children. Programmes with the following main content are classified here:

Child care Children recreation programmes Youth services Youth worker programs

Exclusions:

Study of *early childhood education* is excluded from this field and included in field 143 'Pre-primary teaching'.

Study of *health care of children* is excluded from this field and included in field 723 'Nursing and caring'.

762 Social work and counselling

Social work and counselling is the study of the welfare needs of communities, specific groups and individuals and the appropriate ways of meeting these needs. The focus is on social welfare with emphasis on social policy and practice. Programmes with the following main content are classified here:

Alcohol and drug abuse counselling Alcohol, tobacco, drugs (knowledge about) Crisis support Family and marriage counselling Mobbing and maltreatment (knowledge about) Social policy Social practice Social theory (applied) Social work (welfare) Vocational counselling Vocational guidance

Inclusions:

Study of vocational guidance is included in this field.

Exclusions:

Study of *sociology and social science* is excluded from this field and included in field 312 'Sociology and cultural studies'.

Caring programmes *combining health care and social care*, e.g. for old people, are excluded from this field and included in field 723 'Nursing and caring'.

8 Services

810 Personal services (broad programmes)

Personal services (broad programmes) is the broad study of personal service without specialising in any of the detailed fields. The field consists to a large extent of programmes at secondary level. Training programmes with the following main content are classified here:

Personal services

811 Hotel, restaurant and catering

Hotel, restaurant and catering is the study of providing food, beverages, accommodation and related services at hotels, restaurants etc. Programmes with the following main content are classified here:

Catering Cooking (restaurant and hotel-type) Food serving Hospitality services Hotel- and restaurant programmes Hotel receptionist training Hotel services Waiting and bar service

Exclusions:

Study of *food processing (industrial*) is excluded from this field and included in field 541 'Food processing'.

Receptionist training (general) is excluded from this field and included in field 346 'Secretarial and office work'.

812 Travel, tourism and leisure

Travel and tourism is the study of marketing and advertising tourist destinations and events. It includes the study of ticketing and reservation practices. *Leisure* is the study of recreational and leisure activities for individuals and groups. Programmes with the following main content are classified here:

Ground crew training (airport) Guiding, tour leading Recreation and leisure Tourist trades programmes Travel agency services Travel and tourism Travel services

Exclusions:

Study of *recreation and leisure activities for school children is* excluded from this field and included in field 761 'Child care and youth services'.

813 Sports

Sports is the study of techniques and skills in a chosen sport. Programmes with the following main content are classified here:

Sport trainer programmes Techniques and skills in a chosen sport Programmes for umpires and other sports officials

Inclusions:

Jockeying is included in this field.

Exclusions:

Training of school teachers in physical education (sports teachers) is excluded from this field and included in field 146 'Training for teachers of vocational subjects'.

814 Domestic services

Domestic services is the study of various domestic services, such as housekeeping, cleaning, laundering, sewing etc. Programmes with the following main content are classified here:

Caretaking, housekeeping and homeservice workers Chimney sweeping Cleaning Cooking (home) Domestic science Dry-cleaning Funeral services and mortuary science Home economics Laundry Needlework (home) Sewing (home)

Inclusions:

Cleaning programmes are included in this field even if *directed towards cleaning* schools, hospitals, factories etc.

Exclusions:

Study of *building maintenance* is excluded from this field and included in field 582 'Building and civil engineering'.

815 Hair and beauty services

Hair and beauty services is the study of caring for the hair and the body for beautification. Programmes with the following main content are classified here:

Barbering Beauty therapy Cosmetology (make up) Hairdressing Fitness and weight control

840 Transport services

Transport services is the study of operating, navigating and directing ships, aircraft and other forms of transportation. Programmes with the following main content are classified here:

Air traffic control Aircraft operation Cabin crew training Communication (air, railway, road etc.) programmes Crane and truck driving Driving programmes Flying and navigation Navigation technologies Postal service Railway operations Road motor vehicle operations Ship operation Transport programmes

Inclusions:

Cabin crew training is included in this field.

Exclusions:

Programmes in *telephone network services* are excluded from this field and included in field 523 'Electronics and automation'. Programmes in *switchboard operating* are excluded from this field and included in field 346 'Secretarial and office work'.

850 Environmental protection (broad programmes)

Environmental protection (broad programmes) is the study of environmental protection without specialising in any of the detailed fields. Training programmes with the following main content are classified here:

Environmental protection Natural resources use programmes

851 Environmental protection technology

Environmental protection technology is the study of processes in order to minimise discharge and waste and avoid pollution. It includes programmes dealing with control of water, air, soil etc. Programmes with the following main content are classified here:

Air pollution control Ecological technology Noise pollution control Industrial discharge control Recycling Water pollution control

Exclusions:

Programmes dealing with *hygienic standards in food, water etc.* are excluded from this field and included in field 853 'Community sanitation services'.

852 Natural environments and wildlife

Natural environments and wildlife is the study of the relationships between living organisms in natural environments in order to protect nature and wildlife. It includes study of establishing and maintaining national parks in order to preserve their original natural state. Programmes with the following main content are classified here:

National parks and wildlife management Nature conservation Wildlife Study of *forestry and horticulture* is excluded from this field and included in some of the fields under 62 'Agriculture, forestry and fishery'.

Study of *hunting and trapping* is excluded from this field and included in field 623 'Forestry'.

853 Community sanitation services

Community sanitation services is the study of community services dealing with items that affect public health such as hygienic standards in food, water supply, disposal of sewage and garbage and street cleaning. Programmes with the following main content are classified here:

Hygienic standards Hygiene, community Refuse collection Refuse/sewage disposal Street cleaning Water supply (service)

Inclusions:

Programmes in *services to the community dealing with items that affect public health*, such as hygiene standards in food and water supply, disposal of garbage, street cleaning etc. is included in this field.

860 Security services (broad programmes)

Security services (broad programmes) is the study of security services without specialising in any of the detailed fields. Broad programmes within security services are classified here.

861 Protection of persons and property

Protection of persons and property is the study of services to the community concerning protection of property and persons. It comprises training in police work, public security, fire protection and fire fighting. Programmes with the following main content are classified here:

Civil security Customs programmes Fire technology Fire-protection (fire fighting) Life guarding Police work Policing studies Prison work Public security Security and loss prevention services

Exclusions:

Study of law is excluded from this field and included in field 380 'Law'.

Study of criminology is excluded from this field and included in field 312 'Sociology and cultural studies'.

862 Occupational health and safety

Occupational health and safety is study of recognising, evaluating and controlling environmental factors associated with the workplace. Programmes with the following main content are classified here:

Ergonomics (occupational health and safety) Health and safety in the workplace Industrial welfare Labour protection Labour security Labour welfare (safety) Occupational health and industrial hygiene Occupational safety Stress Work environment

Exclusions:

Study of *vocational rehabilitation and occupational therapy* is excluded from this field and included in field 726 'Therapy and rehabilitation'.

Study of labour law is excluded from this field and included in 380 'Law'.

Study of *ergonomics* is excluded from this field if emphasis is given to technical aspects and is included in the appropriate field under 52 'Engineering and engineering trades'.

863 Military and defence

Military and defence is the study of services to the community connected with war and defence, designed to provide training in the principles and practice of military science. Programmes with the following main content are classified here:

Army training Defence studies Military science War theory

Exclusions:

Military personnel participating in non-military programmes should be classified according to the subject content of the training programme.

Appendix 1

Rationale for fields

Much of the wording in this appendix comes from ABSCQ, the Australian Bureau of Statistics Classifications of Qualifications. Also when writing the field descriptions in this manual, the 'Australian Bureau of Statistics Classification of Qualifications' (ABSCQ) has been helpful. Thank you, Australia, for letting us use some of your wordings.

Introduction

The rationale of the classification for fields of education and training is the subject content approach. The programmes are put together by closeness in subject matter content. The programmes are aggregated to detailed, narrow and broad fields, based on 'knowledge closeness'. It must be emphasised that it is the main content of the programme which decides into which field it should be classified.

This is the same rationale as for fields of study in the old ISCED (ISCED76).

A number of existing classifications were considered as a starting point for developing the new classification (see Andersson and Olsson (1996) : Fields of Training. Appendices).

The conclusion was very clear; the subject content approach is the best rationale for fields of education.

But what is meant by closeness in subject matter content or 'knowledge closeness'?

Subject matter

Fields of Education and Training is defined as the subject matter taught in an educational programme. The Field of Education of an educational programme refers to factual and practical learning (subject matter). The subject matter knowledge is applied to a particular type of problem or for a specific purpose. This purpose may be practical (e.g. engineering), abstract (e.g. philosophy) or both (e.g. architecture).

Field of Education is a function of the subject matter content. Therefore, two educational programmes have the same field of education if the main subjects studied are the same. In practise, educational programmes are classified in the same detailed field of education if the main subjects studied are sufficiently similar for the purpose of the classification. This, evidently, leaves room for subjective judgements. When making the classification, we have tried to think that:

- 1. The major requirements of users should be met.
- 2. We should provide a reasonably accurate reflection of reality.
- 3. The classification must be manageable.
- 4. The statistical output, for example the detailed fields should not be too small. Though size of the fields are not seen as an important factor in a worldwide classification, the same fields are small in some countries and large in others.

5. The classification must build on the two-digit ISCED-*Fields of Education* and also the EUROSTAT/CEDEFOP *Fields of Training*.

There is no absolute objective way to create a classification. It should also be clearly understood that **one definitive best** system for classifying educational programmes into fields does not exist. It is always a compromise between different views and considerations. It is impossible to find one classification system that satisfies all demands. However, it is believed that the classification given in this manual is a reasonably good solution.

Fields of education are related to each other through the amount of subject matter they have in common, through the broad purpose for which the study is undertaken and through the theoretical knowledge which underpins the subject matter. For example, biology is related to chemistry and physics because:

- * in order to understand biology it is necessary to know some physics and chemistry
- * studies are undertaken for the same broad purpose of understanding natural phenomena
- * the same theoretical knowledge is applied, e.g. the scientific method and the nature of the universe.

Criteria for Fields of Education

In ISCED 97 fields of education are classified into groups according to the following criteria in **priority** order:

- Theoretical content
- * Purpose of learning
- * Objects of interest
- * Methods and techniques
- * Tools and equipment

Theoretical content refers to the ideas and concepts included in an educational programme.

Purpose of learning refers to the aim of the skills and knowledge gained from an educational programme. Note that this has nothing to do with the students personal purposes, it is what the educational programme is designed for, that is the *purpose of the programme*.

Objects of interest are the phenomena, problems or entities studied. They are the 'things' to which the students learns to apply the knowledge and skills of the course. They may, for example, be mathematical problems, vehicles requiring repair, people with a particular illness.

Methods and techniques are the specific procedures for applying the skills and knowledge gained in an educational programme. They may, for example, be steps for solving mathematical problems, techniques for repairing vehicles or procedures for treating particular ailments.

Tools and equipment are the instruments and implementations which an individual learns to use and operate in an educational programme.

Application of the Criteria

All educational programmes are associated with a blend of theoretical understanding, factual knowledge and practical skill. In trade educational programmes, for example, the emphasis is primarily on practical skill, but a certain amount of theoretical understanding and factual knowledge is also necessary. If it is determined that the factual knowledge and the theoretical understanding associated with such a trade educational programme form part of the same body of knowledge as certain higher level educational programmes, then these programmes should have the same field of education. For example, a tool-making programme includes some of the mathematics, factual knowledge and engineering theory used in mechanical engineering, thus tool-

making and mechanical engineering should have the same field of education (but different levels of attainment). The same applies to electrical trade programmes which are related to higher level programmes in electrical engineering, thus the same field of education. Nursing and caring is classified as 723 and Medicine as 721, why not in the same detailed field? They are obviously close, but there are differences in content. There is also a strong user interest to be able to differentiate between nurses and doctors, and in some countries the educational level is the same so the differentiation must come through fields.

When the criteria points at different directions, then the border line cases appear. The most obvious example is veterinary studies, should this be associated with medicine or animal husbandry? We have chosen the latter. Another example is Environment science and Environment protection. The first is close to biology and is classified as life science. The second is closer to other protection services and even if it contains subjects related to biology etc., we have classified it under services.

Countries should use the criteria mentioned above when allocating into fields new educational programmes not found in the field descriptions.

Example 1. Educational programmes for intellectually handicapped how to cope with their daily life is classified under '090 Personal skills', because the content in such programmes is development of personal capacity.

Example 2. Cabin crew programmes contain elements of safety, aircraft knowledge, medical assistance and hospitality service etc. Applying the criteria above it was found that such programmes should be classified as '840 Transport' and not '811 Hotel, restaurant and catering'.

Appendix 2

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Appendix 3

Numerical Code List

010 Basic / broad, general programmes **Basic** programmes Broad, general programmes General programmes with no special subject emphasis **080** Literacy and numeracy Basic remedial programmes for adults Functional literacy Literacy Numeracy Simple literacy **090** Personal skills Argumentation technique Assertiveness Co-operation Communication skills Development of behavioural capacities Development of mental skills Development of personal organisational capacities Enhancing personal skills Family life development training Job-seeking programmes Life orientation programmes Personal career planning Personal development Positive thinking Presentation technique Public speaking Self esteem skills Self-confidence Social competence Teamwork Time management 140 Teacher training and education science (broad programmes) Education technology Practical pedagogical courses Teacher education Teacher training 142 Education science Curriculum development (theory) Didactics Distance education methodology Education science Educational assessment, testing and measurement

Educational evaluation and research Pedagogical sciences (education) 143 Training for pre-school teachers Early childhood teaching Pre-primary teacher training 144 Training for teachers at basic levels Class teacher training Elementary teacher education Home language teacher training Primary teaching Special education teaching 145 Training for teachers with specialisation in general subjects Secondary teaching Special subject teaching Teacher training, theoretical subjects 146 Training for teachers of vocational subjects Driver and safety teacher education Driving instructor training Flight instructor training Nursing teacher training Physical education teacher training Post-school teacher training Teacher training in arts and crafts Teacher training in commercial subjects Teacher training in music Teacher training in nursing Teacher training in technical subjects Teacher training, physical training Teacher training, vocational subjects Technical teaching Training of instructors in companies etc. Training of trainers Vocational teacher training 210 Arts (broad programmes) Arts (broad programmes) Arts and craft (broad programmes) **211 Fine arts** Aesthetics Art history Art studies Art theory Calligraphy Drawing (artistic) Etching (artistic) Fine art printmaking History of art

212 Music and performing arts

Acting and directing Choreography Circus Composition (music) Conducting (music) Dance Directing (theatre) Drama Elocution Fashion modelling History of music History of film and theatre Music Music and the stage Performing arts Theatre

213 Audio-visual techniques and media production

Animation Binding and finishing (printing) Bookbinding Camera operating Cinematography Compositing (printing) Composition equipment operating Computer graphics Computer type-setting Desktop publishing Discjockey training Film and TV editing Film production Graphic design Graphic reproduction Illustration Lay-out Media techniques Multimedia production Photo developing Photography Printing Printing machining Publishing design Radio and TV production Recorded music production Screen printing Silk screen printing Sound and vision Sound technique Type-setting 214 Design Costume design Design

Design of industrial products (artistic) Fashion design Industrial design (artistic) Interior architecture Interior decorating Interior design Stage designing Three dimensional design Window dressing 215 Craft skills Ceramics (craft) Conservation of cultural material Craft programmes Crafts, folk arts and artisanry Decorative metal crafts Embroidery (craft) Fibre, textile and weaving arts Floristry (flower arranging) Glass arts and craft Goldsmithing Handicrafts Jewellery design Jewellery making (craft) Lapidary and jewellery Making of musical instruments (not industrial) Musical instruments (repairing and tuning) Needle craft Picture framing Silversmithing Stone carving (craft) Weaving (craft) Woodcarving 220 Humanities (broad programmes) Humanities 221 Religion Religion **Religious history Religious studies** Sacred books, study of 222 Foreign languages Interpretation programmes Languages, dead Languages, foreign Linguistics, foreign languages Second languages Semantics, foreign languages Translation programmes 223 Mother tongue Creative writing Home language Language maintenance Languages, native Linguistics, native language Mother tongue programmes Philology (native language) Semantics, native language Sign language

Speech and rhetorical studies (native language) 225 History and archaeology Archaeology Comparative literature Cultural history History History and philosophy of science and technology History of science and ideas Literature history Medieval and renaissance studies Museology 226 Philosophy and ethics Ethics Logic Morals Philosophy 310 Social and behavioural science (broad programmes) Behavioural sciences Social sciences **311** Psychology Conversational therapy Development and child psychology Psychoanalysis Psychology Psychotherapy 312 Sociology and cultural studies Criminology Cultural geography Cultural studies Demography/population studies Ethnology Futurology Gender studies Geography (social) Human geography **Regional cultures** Social anthropology Social conflict theory Social geography Sociology Women studies 313 Political science and civics Civics Human rights International relations Peace and conflict studies Political history Political science **Politics 314 Economics** Econometrics Economic history **Economics** International economics Macro economics

National accounts Political economy 321 Journalism and reporting Broadcast journalism Communication, mass- (wording and content) Information (wording and content) Journalism Mass communication (wording and content) News reporting Publishing (dissemination of messages) 322 Library, information, archive Archival sciences Documentation Information science Information searching Librarianship training Library programmes Museum documentation 340 Business and administration (broad programmes) Business and administration Business programmes, broad Business studies (broad programmes) Economics, business 341 Wholesale and retail sales Auctioneering Buying and selling Consumer services Dairy retailing Demonstration techniques Property sales Purchasing Purchasing, procurement and contracts Real-estate business Retailing Sales representatives Stock-keeping Telephone selling Ware-housing Wholesaling 342 Marketing and advertising Advertising Market research Marketing Merchandising Public relations Sales and marketing 343 Finance, banking, insurance Bank teller programmes Banking and finance **Business finance** Finance theory Finance, banking, insurance Financial management Insurance Investment analysis Investments and securities

Pension insurance Social insurance Stock-broking 344 Accounting and taxation Accounting Auditing Bookkeeping Tax accounting 345 Management and administration Administration **Business** administration Educational management Employment management Enterprise training Human resources management Local public administration Logistic management Management of education Management science Management skills Office management Organisational theory and behaviour Performance appraisal Personnel administration Personnel management Public administration Public and institution management Quality management Recruitment Start your own business-courses Training management **346** Secretarial and office work Administrative and secretarial services **Business** correspondence Clerical programmes Court reporting Data entry Foreign language secretary programmes Information processing/data entry Keyboard skills Legal secretary programmes Management support services Medical secretary programmes Office automation Operation of office machines **Receptionist training** Secretarial programmes Shorthand Stenography Switchboard operating Typing 347 Working life Clients' needs Company knowledge Industrial relations Introductory courses at work Organisation at work

Quality assurance Trade union courses (general) Work development Working life 380 Law Commercial law Criminal justice studies History of law Jurisprudence Labour law Law Legal practice Legal studies Notary/Notary's practise Para-legal studies 421 Biology and biochemistry **Biochemistry Biology Biometrics Biophysics** Botany Entomology Genetics Life sciences Limnology Microbiology Molecular biology Ornithology Parasitology Pharmacology Toxicology Virology Zoology 422 Environmental science Ecology Environmental science 440 Physical science (broad programmes) Physical programmes (broad programmes) 441 Physics Acoustics Astronomy Astrophysics Nuclear physics Optics **Physics** Planetary sciences Space science 442 Chemistry Analytical chemistry Chemistry Organic chemistry Petrology Polymer chemistry 443 Earth science Atmospheric sciences Earth science Geodesy

Geography (nature) Geography (physical) Geology Geophysics Geoscience Hydrogeology Hydrology Marine science Meteorology Mineralogy Ocean life sciences Oceanography Palaeontology Seismology Vulcanology **461** Mathematics Algebra Applied mathematics Data analysis (mathematics) Geometry **Mathematics** Numerical analysis **Operations** research **462** Statistics Actuarial science Mathematical (theoretical) statistics Probability theory Statistics, applied Survey design Survey sampling 481 Computer science Computer programming Computer science Computer system analysis Computer system design Informatics (computer science) Network administration **Operating systems** Programming (computer) Programming languages (Visual Basic, C++ etc.) Software localisation Software testing 482 Computer use Computer software use Computer use Internet use programmes Software for calculating (spreadsheets) Software for data processing Software for desktop publishing Software for word processing 520 Engineering and engineering trades (broad programmes) Engineering Engineering industry programmes Maintenance engineering Materials technology

Quality control (technical) 521 Mechanics and metal work Bicycle production Bicycle repair Boilermaking and welding Gunsmith Hydraulics Locksmith and safe repairer Mechanical engineering Mechanical trades programmes Metal casting and patternmaking Metal fitting, turning and machining Metal trades programmes Metallurgical engineering Metallurgical technology **Micromechanics** Precision mechanics Sheetmetal working Steel production Tool and die making Watchmaking Welding 522 Electricity and energy Air-conditioning programmes Climate engineering Electrical appliances repairing Electrical engineering Electrical fitting Electrical power generation Electrical trades programmes Energy programmes Energy studies Gas distribution Heating trades programmes Nuclear, hydraulic and thermal energy Power production Powerline installation and maintenance **Refrigeration programmes** Solar energy 523 Electronics and automation Automation **Broadcasting electronics** Communication systems Communications equipment installation Communications equipment maintenance Computer repairing Computer engineering Control engineering Data processing technology Digital technology Electronic data processing Electronic engineering Electronic equipment servicing Network technology **Robotics** Telecommunication technology Television and radio repairing

524 Chemical and process **Biochemical technologies** Biotechnology engineering Chemical engineering Chemical process engineering Laboratory assistant programmes Laboratory technician programmes Laboratory technology Oil refining Oil/gas/petrochemicals processing Plant and machine operation (processing) Process technology 525 Motor vehicles, ships and aircraft Aeronautical engineering Aerospace engineering Agriculture machinery mechanics Air-craft engineering Air-craft maintenance Automotive electricity Automotive engineering Coachwork Helicopter construction Marine construction Maritime engineering Motorbike mechanics Motorcycle engineering Naval engineering Panel beating Shipbuilding Varnishers/sprayers Vehicle and motor engineering Vehicle building Vehicle diagnostics Vehicle electricity Vehicle mechanics Vehicle painting Vehicle repairing Vehicle trimming 540 Manufacturing and processing (broad programmes Manufacturing and processing (broad programmes) 541 Food processing Baking Beer brewing Brewing Butchering Cheese production Confectionery Dairy foods (industrial) Dairy science Distilling Food and drink processing Food handling/hygiene Food preparation Food preservation Food processing industry

Food programmes Food science Food science and technology Food technique Industrial bakery/flour production Meat processing Pastry cooking Tobacco processing Wine production Wine science Wine storing/maturing 542 Textiles, clothes, footwear, leather Clothing industry Clothing trades programmes Clothing, apparel and textile working Custom tailoring Cutting and tailoring Dressmaking Embroidery and needlework (industrial) Footwear making Fur making Furrier Garment production Knitting (industrial) Leather goods maker Leather goods production Leather processing Leather trades programmes Pelt worker Saddlery Sewing (industrial) Shoe production Shoe, boot and leather repairing Shoemaking Skins and leather production Soft furnishings Spinning Tailoring Textile technique Textile trades programmes Textiles, clothing and footwear Upholstery Weaving (industrial) Wool science 543 Materials (wood, paper, plastic, glass) Boat building (non-motor) Cabinet making Cane willow and bamboo work Carpentry (not building) Ceramics (industrial) Furniture crafts Furniture making Glass production Glass working (industrial) Industrial diamond production Paper manufacturing and processing Plastic manufacturing Rubber processing

Stone cutting Synthetic fibre manufacturing Timber technology Wood machining and turning Wood technology Woodwork trades programmes Woodworking and carpentry 544 Mining and extraction Coal mining Mineral technology Mining engineering Mining technology Oil and gas extraction Quarry supervision Raw material extraction 581 Architecture and town planning Architectural urban design and planning Architecture Building design Cartography/Land surveying City planning Community development Community planning Landscape architecture Rural development Structural architecture Surveying Topography Town and country planning Town and regional planning Town planning Urban planning Urban studies 582 Building and civil engineering Bricklaying Brickwork and masonry Bridge construction **Building construction** Building engineering Building maintenance **Building** renovation Building technology Carpentry and joinery (building) Cement working Civil engineering Constructing plant operation Construction technology Constructional engineering Constructional metalwork (building) Demolition Dock and harbour engineering Drawing, technical Excavation engineering Floor and wall tiling Floor covering Glazing Insulation

Irrigation and drainage (construction) Joining and carpentry Mason and tile setting Masonry Painting and wall covering Pipe fitting Plastering (building) Plumbing Quantity surveying Road building Roof fixing Sanitation (building) Scaffolding work Stonemasonry Structural engineering Technical drawing Water supply and sewerage engineering Water technology and engineering Ventilation (building) 620 Agriculture, forestry and fishery (broad programmes) Agriculture, forestry and fishery (broad programmes) 621 Crop and livestock production Agricultural business/agribusiness operations Agricultural economics Agricultural sciences Agriculture Agronomy and crop science Animal breeding Animal husbandry Animal training Basic skills in agriculture Crop husbandry Dog breeding Farm and ranch management Farm maintenance Farming Fruit growing Fruit production Goose keeping Grain growing Horse breeding Horse husbandry Irrigation techniques Olive growing Orchards construction Pig farming Poultry husbandry Race horse care Rye and wheat growing Sheep farming Soil and water technician programmes Soil fertility Soil science Vegetable plantation Wine growing

Vineyard construction Viticulture

622 Horticulture

Floriculture Gardening Greenhouse operations Greenkeeping Horticultural technique Horticulture Landscape gardening Maintaining sports turf Nursery management (horticulture) Production of ornamental plants Sports grounds maintenance Turf cultivation Turf management

623 Forestry

Forest keeping Forest product techniques Forest ranging Forestry Hunting and trapping

624 Fisheries

Deep sea fishing Fish breeding Fish farms Fish husbandry Fishery Fishery science and technology Mariculture Shellfish breeding

640 Veterinary

Animal health care Animal reproduction (science) Veterinary assisting Veterinary medicine Veterinary science

720 Health (broad programmes)

Health (broad programmes) Public health programmes

721 Medicine

Anaesthesiology Anatomy Audiology/hearing sciences Bacteriology Cardiology Cytology Dermatology Epidemiology Forensic medicine General medicine Gerontology Gynaecology Haematology Histology Homeopathic medicine Immunology

Internal medicine Medical science Medical training Medicine Naturopathic medicine Neurology Obstetrics and gynaecology Oncology Ophthalmic Ophthalmology **Paediatrics** Pathology Physiology Plastic surgery Preventive and social medicine Psychiatry Stomatology Surgery Training of doctors Training of physicians 723 Nursing and caring Assistant nursing **Basic** nursing Care of old people Care of the disabled Community nursing Elder care Gerontological services Health care programmes Hygiene, medical Infant hygiene (nursing) Midwifery Mothercraft nursing Nursing Nursing aide/Orderly Psychiatric nursing 724 Dental studies Clinical dentistry Dental assisting Dental hygiene Dental laboratory technology Dental nursing Dental science Dental surgery Dental technology Dentistry Odontology Orthodontics 725 Medical diagnostic and treatment technology Ambulance service Ambulance technology Auditory prosthetics Emergency para-medical technologies Forensic medicine technology Hearing aid technology Medical laboratory technology Medical technology

Nuclear medicine technologies Optical lens making Optical prosthetics/lenses Optical technology Orthopaedic prosthetics Prosthetic technology Radiography Radiology technology Radiotherapy X-ray technology (medical) 726 Therapy and rehabilitation Chiropractic Dietician programmes Massage (medical) Mental health services Nutrition/dietetics Nutrition and dietetics Occupational therapy Optometry Osteopathy Physiotherapy Reflexology Rehabilitation Speech pathology and therapy Vocational rehabilitation 727 Pharmacy Dispensing pharmacy Pharmacy 761 Child care and youth services Child care Children recreation programmes Youth recreation programmes Youth services Youth worker programmes 762 Social work and counselling Alcohol and drug abuse counselling Alcohol, tobacco, drugs (knowledge about) Career advising Counselling Crisis support Family and marriage counselling Maltreatment (knowledge about) Mobbing (knowledge about) Social care Social policy Social practice Social theory (applied) Social work (welfare) Vocational counselling Vocational guidance 810 Personal services (broad programmes) Personal services (broad programmes) 811 Hotel, restaurant and catering Bar service Bartender/mixologist Catering Cooking (restaurant and hotel-type)

Culinary arts Food and hospitality services Food serving Hospitality services Hotel receptionist training Hotel services Hotel- and restaurant programmes Hotel/motel and restaurant services Waiting and bar service 812 Travel, tourism and leisure Ground crew training (airport) Guiding, tour leading Leisure and tourism Recreation and leisure Recreation management Tourism Tourist trades programmes Travel agency services Travel and tourism Travel services 813 Sports Bookmaking (horses etc) Diving (sport) Football playing **Gymnastics** Jockeying Physical training (sports) Sport leadership Sport trainer training Sports Sports coaching Sports instructor training Umpires and other sports officials **814 Domestic services** Caretaking, housekeeping, homeservice Chimney sweeping Cleaning Consumer economics Cooking (home) Custodian/caretaker Domestic science Dry-cleaning Funeral services and mortuary science Home economics Laundry Needlework (home) Sewing (home) 815 Hair and beauty services Barbering Beauty therapy Cosmetic services Cosmetology Fitness and weight control **Fitness services** Hairdressing Make-up Manicure

Massage (beauty) Pedicure Salon services (beauty therapy) Wig making 840 Transport services Air crew programmes (flying and navigation) Air traffic control Aircraft operation Aviation Bus and coach driving Cabin crew training Communication (air, railway, road etc.) programmes Crane driving Driving programmes Flying and navigation Fork-lift driving Mail operations Nautical science Navigation technologies Postal service **Railway** operations Road motor vehicle operations Seamanship Seamen's programmes Ship operation Stewardess/steward training (air) Transport programmes Truck driving **850** Environmental protection (broad programmes) Environmental conservation Environmental protection Environmental studies Natural resource use programmes Natural resources conservation Soil and water conservation 851 Environmental control and technology Air pollution control Ecological technology Environmental control Environmental protection technology Industrial discharge control Noise pollution control Recycling Water pollution control 852 Natural environments and wildlife Conservation and land management National parks and wildlife management

Nature conservation Wildlife management Wildlife ranger studies **853** Community sanitation services Garbage disposal Hygiene, community Hygienic standards Refuse collection Refuse/sewage disposal Sanitation, community Street cleaning Water supply (service) 860 Security services (broad programmes) Security services (broad programmes) 861 Protection of persons and property Civil security Customs programmes Diving (professional) Fire technology Fire-protection (fire fighting) Law enforcement Life guarding Police work Policing studies Prison work Public security Security and loss prevention services Security guarding 862 Occupational health and safety Ergonomics (occupational health and safety) Health and safety in the work place Industrial welfare Job safety Labour protection Labour security Labour welfare (safety) Occupational health and industrial hygiene Occupational health and safety Stress at work Work environment 863 Military and defence Army training Defence studies Military science National security War theory

Alphabetic Code List

Α

- 344 Accounting
- 441 Acoustics
- 212 Acting and directing
- 462 Actuarial science
- 345 Administration
- 346 Administrative and secretarial services
- 342 Advertising
- 525 Aeronautical engineering
- 525 Aerospace engineering
- 211 Aesthetics
- 621 Agricultural business/agribusiness operations
- 621 Agricultural economics
- 621 Agricultural sciences
- 621 Agriculture
- 525 Agriculture machinery mechanics
- 621 Agronomy and crop science
- 840 Air crew programmes (flying and navigation)
- 851 Air pollution control
- 840 Air traffic control
- 522 Air-conditioning programmes
- 525 Air-craft engineering
- 525 Air-craft maintenance
- 840 Aircraft operation
- 762 Alcohol and drug abuse counselling
- 762 Alcohol, tobacco, drugs (knowledge about)
- 461 Algebra
- 725 Ambulance service
- 725 Ambulance technology
- 721 Anaesthesiology
- 442 Analytical chemistry
- 721 Anatomy
- 621 Animal breeding
- 640 Animal health care
- 621 Animal husbandry
- 640 Animal reproduction (science)
- 621 Animal training
- 213 Animation
- 461 Applied mathematics
- 225 Archaeology
- 581 Architectural urban design and planning
- 581 Architecture
- 322 Archival sciences
- 090 Argumentation technique
- 863 Army training
- 211 Art history
- 211 Art studies
- 211 Art theory
- 210 Arts (broad programmes)

- 210 Arts and craft (broad programmes)
- 090 Assertiveness
- 723 Assistant nursing
- 441 Astronomy
- 441 Astrophysics
- 443 Atmospheric sciences
- 341 Auctioneering
- 721 Audiology/hearing sciences
- 344 Auditing
- 725 Auditory prosthetics
- 523 Automation
- 525 Automotive electricity
- 525 Automotive engineering
- 840 Aviation

В

- 721 Bacteriology
- 541 Baking
- 343 Bank teller programmes
- 343 Banking and finance
- 811 Bar service
- 815 Barbering
- 811 Bartender/mixologist
- 723 Basic nursing
- 010 Basic programmes
- 080 Basic remedial programmes for adults
- 621 Basic skills in agriculture
- 815 Beauty therapy
- 541 Beer brewing
- 310 Behavioural sciences
- 521 Bicycle production
- 521 Bicycle repair
- 213 Binding and finishing (printing)
- 524 Biochemical technologies
- 421 Biochemistry
- 421 Biology
- 421 Biometrics
- 421 Biophysics
- 524 Biotechnology engineering
- 543 Boat building (non-motor)
- 521 Boilermaking and welding
- 213 Bookbinding
- 344 Bookkeeping
- 813 Bookmaking (horses etc)
- 421 Botany
- 541 Brewing
- 582 Bricklaying
- 582 Brickwork and masonry
- 582 Bridge construction

- 321 Broadcast journalism
- 523 Broadcasting electronics
- 582 Building construction
- 581 Building design
- 582 Building engineering
- 582 Building maintenance
- 582 Building renovation
- 582 Building technology
- 840 Bus and coach driving
- 345 Business administration
- 340 Business and administration (broad programmes)
- 346 Business correspondence
- 343 Business finance
- 340 Business programmes, broad
- 340 Business studies (broad programmes)
- 541 Butchering
- 341 Buying and selling

С

- 840 Cabin crew training
- 543 Cabinet making
- 211 Calligraphy
- 213 Camera operating
- 543 Cane willow and bamboo work
- 721 Cardiology
- 723 Care of old people
- 723 Care of the disabled
- 762 Career advising
- 814 Caretaking, housekeeping, homeservice
- 543 Carpentry (not building)
- 582 Carpentry and joinery (building)
- 581 Cartography/Land surveying
- 811 Catering
- 582 Cement working
- 215 Ceramics (craft)
- 543 Ceramics (industrial)
- 541 Cheese production
- 524 Chemical engineering
- 524 Chemical process engineering
- 442 Chemistry
- 761 Child care
- 761 Children recreation programmes
- 814 Chimney sweeping
- 726 Chiropractic
- 212 Choreography
- 213 Cinematography
- 212 Circus
- 581 City planning
- 313 Civics
- 582 Civil engineering
- 861 Civil security
- 144 Class teacher training
- 814 Cleaning
- 346 Clerical programmes
- 347 Clients' needs
- 522 Climate engineering

- 724 Clinical dentistry
- 542 Clothing industry
- 542 Clothing trades programmes
- 542 Clothing, apparel and textile working

65

- 090 Co-operation
- 525 Coachwork
- 544 Coal mining
- 380 Commercial law
- 840 Communication (air, railway, road etc.)
- 090 Communication skills
- 523 Communication systems
- 321 Communication, mass- (wording and content)
- 523 Communications equipment installation
- 523 Communications equipment maintenance
- 581 Community development
- 723 Community nursing
- 581 Community planning
- 347 Company knowledge
- 225 Comparative literature
- 213 Compositing (printing)
- 212 Composition (music)
- 213 Composition equipment operating
- 523 Computer repairing
- 523 Computer engineering
- 213 Computer graphics
- 481 Computer programming
- 481 Computer science
- 482 Computer software use
- 481 Computer system analysis
- 481 Computer system design
- 213 Computer type-setting
- 482 Computer use
- 212 Conducting (music)
- 541 Confectionery
- 852 Conservation and land management
- 215 Conservation of cultural material
- 582 Constructing plant operation
- 582 Construction technolgy
- 582 Constructional engineering
- 582 Constructional metalwork (building)

811 Cooking (restaurant and hotel-type)

- 814 Consumer economics
- 341 Consumer services
- 523 Control engineering
- 814 Cooking (home)

815 Cosmetic services

815 Cosmetology

762 Counselling

214 Costume design

346 Court reporting

840 Crane driving

312 Criminology

762 Crisis support

621 Crop husbandry

223 Creative writing

380 Criminal justice studies

215 Craft programmes

215 Crafts, folk arts and artisanry

- 811 Culinary arts
- 312 Cultural geography
- 225 Cultural history
- 312 Cultural studies
- 142 Curriculum development (theory)
- 814 Custodian/caretaker
- 542 Custom tailoring
- 861 Customs programmes
- 542 Cutting and tailoring
- 721 Cytology

D

- 541 Dairy foods (industrial)
- 341 Dairy retailing
- 541 Dairy science
- 212 Dance
- 461 Data analysis (mathematics)
- 346 Data entry
- 523 Data processing technology
- 215 Decorative metal crafts
- 624 Deep sea fishing
- 863 Defence studies
- 312 Demography/population studies
- 582 Demolition
- 341 Demonstration techniques
- 724 Dental assisting
- 724 Dental hygiene
- 724 Dental laboratory technology
- 724 Dental nursing
- 724 Dental science
- 724 Dental surgery
- 724 Dental technology
- 724 Dentistry
- 721 Dermatology
- 214 Design
- 214 Design of industrial products (artistic)
- 213 Desktop publishing
- 311 Development and child psychology
- 090 Development of behavioural capacities
- 090 Development of mental skills
- 090 Development of personal organisational capacities
- 142 Didactics
- 726 Dietician programmes
- 523 Digital technology
- 212 Directing (theatre)
- 213 Discjockey training
- 727 Dispensing pharmacy
- 142 Distance education methodology
- 541 Distilling
- 861 Diving (professional)
- 813 Diving (sport)
- 582 Dock and harbour engineering
- 322 Documentation
- 621 Dog breeding
- 814 Domestic science
- 212 Drama

- 211 Drawing (artistic)
- 582 Drawing, technical
- 542 Dressmaking
- 146 Driver and safety teacher education

66

- 146 Driving instructor training
- 840 Driving programmes
- 814 Dry-cleaning

Ε

- 143 Early childhood teaching
- 443 Earth science
- 851 Ecological technology
- 422 Ecology
- 314 Econometrics
- 314 Economic history
- 314 Economics
- 340 Economics, business
- 142 Education science
- 140 Education technology
- 142 Educational assessment, testing and measurement
- 142 Educational evaluation and research
- 345 Educational management
- 723 Elder care
- 522 Electrical appliances repairing
- 522 Electrical engineering
- 522 Electrical fitting
- 522 Electrical power generation
- 522 Electrical trades programmes
- 523 Electronic data processing
- 523 Electronic engineering
- 523 Electronic equipment servicing
- 144 Elementary teacher education
- 212 Elocution
- 215 Embroidery (craft)
- 542 Embroidery and needlework (industrial)
- 725 Emergency para-medical technologies
- 345 Employment management
- 522 Energy programmes
- 522 Energy studies
- 520 Engineering (broad programmes)
- 520 Engineering industry programmes
- 500 Engineering physics
- 090 Enhancing personal skills
- 345 Enterprise training
- 421 Entomology
- 850 Environmental conservation

851 Environmental protection technology

862 Ergonomics (occupational health and safety)

851 Environmental control

422 Environmental science

850 Environmental studies

582 Excavation engineering

721 Epidemiology

226 Ethics

312 Ethnology

211 Etching (artistic)

850 Environmental protection

F

- 762 Family and marriage counselling
- 090 Family life development training
- 621 Farm and ranch management
- 621 Farm maintenance
- 621 Farming
- 214 Fashion design
- 212 Fashion modelling
- 215 Fibre, textile and weaving arts
- 213 Film production
- 213 Film and TV editing
- 343 Finance theory
- 343 Finance, banking, insurance
- 343 Financial management
- 211 Fine art printmaking
- 861 Fire technology
- 861 Fire-protection (fire fighting)
- 624 Fish breeding
- 624 Fish farms
- 624 Fish husbandry
- 624 Fishery
- 624 Fishery science and technology
- 815 Fitness and weight control
- 815 Fitness services
- 146 Flight instructor training
- 582 Floor and wall tiling
- 582 Floor covering
- 622 Floriculture
- 215 Floristry (flower arranging)
- 840 Flying and navigation
- 541 Food and drink processing
- 811 Food and hospitality services
- 541 Food handling/hygiene
- 541 Food preparation
- 541 Food preservation
- 541 Food processing industry
- 541 Food programmes
- 541 Food science
- 541 Food science and technology
- 811 Food serving
- 541 Food technique
- 813 Football playing
- 542 Footwear making
- 346 Foreign language secretary programmes
- 721 Forensic medicine
- 725 Forensic medicine technology
- 623 Forest keeping
- 623 Forest product techniques
- 623 Forest ranging
- 623 Forestry
- 840 Fork-lift driving
- 621 Fruit growing
- 621 Fruit production
- 080 Functional literacy
- 814 Funeral services and mortuary science
- 542 Fur making

- 543 Furniture crafts
- 543 Furniture making
- 542 Furrier
- 312 Futurology

G

- 853 Garbage disposal
- 622 Gardening
- 542 Garment production
- 522 Gas distribution
- 312 Gender studies
- 721 General medicine
- 010 General programmes with no special subject emphasis

67

- 421 Genetics
- 443 Geodesy
- 312 Geography (social)
- 443 Geography (nature)
- 443 Geography (physical)
- 443 Geology
- 461 Geometry
- 443 Geophysics
- 443 Geoscience
- 723 Gerontological services
- 721 Gerontology
- 215 Glass arts and craft
- 543 Glass production
- 543 Glass working (industrial)
- 582 Glazing
- 215 Goldsmithing
- 621 Goose keeping
- 621 Grain growing
- 213 Graphic design
- 213 Graphic reproduction
- 622 Greenhouse operations
- 622 Greenkeeping
- 812 Ground crew training (airport)
- 812 Guiding, tour leading
- 521 Gunsmith
- 813 Gymnastics
- 721 Gynaecology

Η

- 721 Haematology
- 815 Hairdressing
- 215 Handicrafts

721 Histology

211 History of art

225 History

720 Health (broad programmes)862 Health and safety in the work place

522 Heating trades programmes

225 History and philosophy of science and technology

723 Health care programmes

725 Hearing aid technology

525 Helicopter construction

- 212 History of film and theatre
- 380 History of law
- 212 History of music
- 225 History of science and ideas
- 814 Home economics
- 223 Home language
- 144 Home language teacher training
- 721 Homeopathic medicine
- 621 Horse breeding
- 621 Horse husbandry
- 622 Horticultural technique
- 622 Horticulture
- 811 Hospitality services
- 811 Hotel receptionist training
- 811 Hotel services
- 811 Hotel- and restaurant programmes
- 811 Hotel/motel and restaurant services
- 345 Human resources management
- 312 Human geography
- 313 Human rights
- 220 Humanities (broad programmes)
- 623 Hunting and trapping
- 521 Hydraulics
- 443 Hydrogeology
- 443 Hydrology
- 853 Hygiene, community
- 723 Hygiene, medical
- 853 Hygienic standards

I

- 213 Illustration
- 721 Immunology
- 541 Industrial bakery/flour production
- 214 Industrial design (artistic)
- 543 Industrial diamond production
- 851 Industrial discharge control
- 347 Industrial relations
- 862 Industrial welfare
- 723 Infant hygiene (nursing)
- 481 Informatics (computer science)
- 321 Information (wording and content)
- 346 Information processing/data entry
- 322 Information science
- 322 Information searching
- 582 Insulation
- 343 Insurance
- 214 Interior architecture
- 214 Interior decorating
- 214 Interior design
- 721 Internal medicine
- 314 International economics
- 313 International relations
- 482 Internet use programmes
- 222 Interpretation programmes
- 347 Introductory courses at work
- 343 Investment analysis
- 343 Investments and securities

582 Irrigation and drainage (construction)

68

621 Irrigation techniques

J

- 215 Jewellery design
- 215 Jewellery making (craft)
- 862 Job safety
- 090 Job-seeking programmes
- 813 Jockeying
- 582 Joining and carpentry
- 321 Journalism
- 380 Jurisprudence

Κ

- 346 Keyboard skills
- 542 Knitting (industrial)

L

- 524 Laboratory assistant programmes
- 524 Laboratory technician programmes
- 524 Laboratory technology
- 380 Labour law
- 862 Labour protection
- 862 Labour security
- 862 Labour welfare (safety)
- 581 Landscape architecture
- 622 Landscape gardening
- 223 Language maintenance
- 222 Languages, dead
- 222 Languages, foreign
- 223 Languages, native
- 215 Lapidary and jewellery
- 814 Laundry
- 380 Law
- 861 Law enforcement
- 213 Lay-out
- 542 Leather goods maker
- 542 Leather goods production
- 542 Leather processing
- 542 Leather trades programmes
- 380 Legal practice
- 346 Legal secretary programmes

090 Life orientation programmes

222 Linguistics, foreign languages

223 Linguistics, native language

- 380 Legal studies
- 812 Leisure and tourism
- 322 Librarianship training
- 322 Library programmes

225 Literature history

211 Lithography

861 Life guarding

421 Life sciences

421 Limnology

080 Literacy

- 345 Local public administration
- 521 Locksmith and safe repairer
- 226 Logic
- 345 Logistic management

М

- 314 Macro economics
- 840 Mail operations
- 622 Maintaining sports turf
- 520 Maintenance engineering (broad programmes)
- 815 Make-up
- 215 Making of musical instruments (not industrial)
- 345 Management of education
- 345 Management science
- 345 Management skills
- 346 Management support services
- 815 Manicure
- 624 Mariculture
- 525 Marine construction
- 443 Marine science
- 525 Maritime engineering
- 342 Market research
- 342 Marketing
- 582 Mason and tile setting
- 582 Masonry
- 321 Mass communication (wording and content)
- 815 Massage (beauty)
- 726 Massage (medical)
- 520 Materials technology
- 462 Mathematical (theoretical) statistics
- 461 Mathematics
- 541 Meat processing
- 521 Mechanical engineering
- 521 Mechanical trades programmes
- 213 Media techniques
- 725 Medical laboratory technology
- 721 Medical science
- 346 Medical secretary programmes
- 725 Medical technology
- 721 Medical training
- 721 Medicine
- 225 Medieval and renaissance studies
- 726 Mental health services
- 342 Merchandising
- 521 Metal casting and patternmaking
- 521 Metal fitting, turning and machining
- 521 Metal trades programmes
- 521 Metallurgical engineering
- 521 Metallurgical technology
- 443 Meteorology
- 421 Microbiology
- 521 Micromechanics
- 723 Midwifery
- 863 Military science
- 544 Mineral technology
- 443 Mineralogy
- 544 Mining engineering

- 544 Mining technology
- 762 Mobbing and maltreatment
- 421 Molecular biology
- 226 Morals
- 223 Mother tongue programmes
- 723 Mothercraft nursing
- 525 Motorbike mechanics
- 525 Motorcycle engineering
- 213 Multimedia production
- 225 Museology
- 322 Museum documentation
- 212 Music
- 212 Music and the stage
- 215 Musical instruments (repairing and tuning)

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Ν

- 314 National accounts
- 852 National parks and wildlife management
- 863 National security
- 850 Natural resource use programmes
- 850 Natural resources conservation
- 852 Nature conservation
- 721 Naturopathic medicine
- 840 Nautical science
- 525 Naval engineering
- 840 Navigation technologies
- 215 Needle craft
- 814 Needlework (home)
- 481 Network administration
- 523 Network technology
- 721 Neurology
- 321 News reporting
- 851 Noise pollution control
- 380 Notary/Notary's practise
- 725 Nuclear medicine technologies
- 441 Nuclear physics
- 522 Nuclear, hydraulic and thermal energy
- 080 Numeracy
- 461 Numerical analysis
- 622 Nursery management (horticulture)
- 723 Nursing

0

723 Nursing aide/Orderly

726 Nutrition and dietetics

726 Occupational therapy

443 Ocean life sciences

346 Office automation

443 Oceanography

724 Odontology

721 Obstetrics and gynaecology

862 Occupational health and safety

862 Occupational health and industrial hygiene

- 146 Nursing teacher training
- 726 Nutrition/dietetics
- 421 Nutrition science

- 345 Office management
- 544 Oil and gas extraction
- 524 Oil refining
- 524 Oil/gas/petrochemicals processing
- 621 Olive growing
- 721 Oncology
- 481 Operating systems
- 346 Operation of office machines
- 461 Operations research
- 721 Ophthalmics
- 721 Ophthalmology
- 725 Optical lens making
- 725 Optical prosthetics/lenses
- 725 Optical technology
- 441 Optics
- 726 Optometry
- 621 Orchards construction
- 442 Organic chemistry
- 347 Organisation at work
- 345 Organisational theory and behaviour
- 421 Ornithology
- 724 Orthodontics
- 725 Orthopaedic prosthetics
- 726 Osteopathy

Ρ

- 721 Paediatrics
- 211 Painting (art)
- 582 Painting and wall covering
- 443 Palaeontology
- 525 Panel beating
- 543 Paper manufacturing and processing
- 380 Para-legal studies
- 421 Parasitology
- 541 Pastry cooking
- 721 Pathology
- 313 Peace and conflict studies
- 142 Pedagogical sciences (education)
- 815 Pedicure
- 542 Pelt worker
- 343 Pension insurance
- 345 Performance appraisal
- 212 Performing arts
- 090 Personal career planning
- 090 Personal development
- 345 Personnel administration
- 345 Personnel management
- 442 Petrology
- 421 Pharmacology
- 727 Pharmacy
- 223 Philology (native language)
- 226 Philosophy
- 211 Philosophy of art
- 213 Photo developing
- 213 Photography
- 146 Physical education teacher training
- 813 Physical training (sports)

- 441 Physics
- 721 Physiology
- 726 Physiotherapy
- 215 Picture framing
- 621 Pig farming
- 582 Pipe fitting
- 441 Planetary sciences
- 524 Plant and machine operation (processing)

70

- 582 Plastering (building)
- 543 Plastic manufacturing
- 721 Plastic surgery
- 582 Plumbing
- 861 Police work
- 861 Policing studies
- 314 Political economy
- 313 Political history
- 313 Political science
- 313 Politics
- 442 Polymer chemistry
- 090 Positive thinking
- 146 Post-school teacher training
- 840 Postal service
- 621 Poultry husbandry
- 522 Power production
- 522 Powerline installation and maintenance
- 140 Practical pedagogical courses
- 143 Pre-primary teacher training
- 521 Precision mechanics
- 090 Presentation technique
- 721 Preventive and social medicine
- 144 Primary teaching
- 213 Printing
- 213 Printing machining
- 861 Prison work
- 462 Probability theory
- 524 Process technology
- 622 Production of ornamental plants
- 481 Programming (computer)
- 481 Programming languages (Visual Basic, C++ etc.)
- 341 Property sales
- 725 Prosthetic technology
- 723 Psychiatric nursing

345 Public administration

720 Public health programmes

345 Public and institution management

321 Publishing (dissemination of messages)

341 Purchasing, procurement and contracts

721 Psychiatry

311 Psychology

311 Psychoanalysis

311 Psychotherapy

342 Public relations

861 Public security

090 Public speaking

213 Publishing design

341 Purchasing

Q

- 347 Quality assurance
- 520 Quality control (technical)
- 345 Quality management
- 582 Quantity surveying
- 544 Quarry supervision

R

- 621 Race horse care
- 213 Radio and TV production
- 725 Radiography
- 725 Radiology technology
- 725 Radiotherapy
- 840 Railway operations
- 544 Raw material extraction
- 341 Real-estate business
- 346 Receptionist training
- 213 Recorded music production
- 812 Recreation and leisure
- 812 Recreation management
- 345 Recruitment
- 851 Recycling
- 726 Reflexology
- 522 Refrigeration programmes
- 853 Refuse collection
- 853 Refuse/sewage disposal
- 312 Regional cultures
- 726 Rehabilitation
- 221 Religion
- 221 Religious history
- 221 Religious studies
- 341 Retailing
- 582 Road building
- 840 Road motor vehicle operations
- 523 Robotics
- 582 Roof fixing
- 543 Rubber processing
- 581 Rural development
- 621 Rye and wheat growing

S

- 221 Sacred books, study of
- 542 Saddlery
- 342 Sales and marketing
- 341 Sales representatives
- 815 Salon services (beauty therapy)
- 582 Sanitation (building)
- 853 Sanitation, community
- 582 Scaffolding work
- 211 Sketching (art)
- 213 Screen printing
- 211 Sculpture
- 840 Seamanship
- 840 Seamen's programmes
- 222 Second languages

- 145 Secondary teaching
- 346 Secretarial programmes
- 861 Security and loss prevention services

71

- 861 Security guarding
- 443 Seismology
- 090 Self esteem skills
- 090 Self-confidence
- 222 Semantics, foreign languages
- 223 Semantics, native language
- 814 Sewing (home)
- 542 Sewing (industrial)
- 621 Sheep farming
- 521 Sheetmetal working
- 624 Shellfish breeding
- 840 Ship operation
- 525 Shipbuilding
- 542 Shoe production
- 542 Shoe, boot and leather repairing
- 542 Shoemaking
- 346 Shorthand
- 223 Sign language
- 213 Silk screen printing
- 215 Silversmithing
- 080 Simple literacy
- 542 Skins and leather production
- 312 Social anthropology
- 762 Social care
- 090 Social competence
- 312 Social conflict theory
- 312 Social geography
- 343 Social insurance
- 762 Social policy
- 762 Social practice
- 310 Social sciences
- 762 Social theory (applied)
- 762 Social work (welfare)
- 312 Sociology
- 542 Soft furnishings
- 482 Software for calculating (spreadsheets)
- 482 Software for data processing
- 482 Software for desktop publishing
- 482 Software for word processing
- 481 Software localisation
- 481 Software testing
- 850 Soil and water conservation

144 Special education teaching

726 Speech pathology and therapy

145 Special subject teaching

621 Soil and water technician programmes

223 Speech and rhetorical studies (native language)

621 Soil fertility 621 Soil science

522 Solar energy

542 Spinning

813 Sport leadership

213 Sound and vision

213 Sound technique441 Space science

- 813 Sport trainer training
- 813 Sports
- 813 Sports coaching
- 622 Sports grounds maintenance
- 813 Sports instructor training
- 214 Stage designing
- 345 Start your own business-courses
- 462 Statistics
- 521 Steel production
- 346 Stenography
- 840 Stewardess/steward training (air)
- 343 Stock-broking
- 341 Stock-keeping
- 721 Stomatology
- 215 Stone carving (craft)
- 543 Stone cutting
- 582 Stonemasonry
- 853 Street cleaning
- 862 Stress at work
- 581 Structural architecture
- 582 Structural engineering
- 721 Surgery
- 462 Survey design
- 462 Survey sampling
- 581 Surveying
- 346 Switchboard operating
- 543 Synthetic fibre manufacturing

Т

- 542 Tailoring
- 344 Tax accounting
- 140 Teacher education
- 140 Teacher training
- 146 Teacher training in arts and crafts
- 146 Teacher training in commercial subjects
- 146 Teacher training in music
- 146 Teacher training in nursing
- 146 Teacher training in technical subjects
- 145 Teacher training, theoretical subjects
- 146 Teacher training, physical training
- 146 Teacher training, vocational subjects
- 090 Teamwork
- 582 Technical drawing
- 146 Technical teaching
- 500 Technology
- 523 Telecommunication technology
- 341 Telephone selling
- 523 Television and radio repairing
- 542 Textile technique
- 542 Textile trades programmes
- 542 Textiles, clothing and footwear
- 212 Theatre
- 214 Three dimensional design
- 543 Timber technology
- 090 Time management
- 541 Tobacco processing
- 521 Tool and die making

- 581 Topography
- 812 Tourism
- 812 Tourist trades programmes
- 581 Town and country planning
- 581 Town and regional planning
- 581 Town planning
- 421 Toxicology
- 347 Trade union courses (general)
- 345 Training management
- 721 Training of doctors
- 146 Training of instructors in companies etc.

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- 721 Training of physicians
- 146 Training of trainers
- 222 Translation programmes
- 840 Transport programmes
- 812 Travel agency services
- 812 Travel and tourism
- 812 Travel services
- 840 Truck driving
- 622 Turf cultivation
- 622 Turf management
- 213 Type-setting
- 346 Typing

U

- 813 Umpires and other sports officials
- 542 Upholstery
- 581 Urban planning
- 581 Urban studies

V

- 525 Varnishers/sprayers
- 621 Vegetable plantation
- 525 Vehicle and motor engineering
- 525 Vehicle building
- 525 Vehicle diagnostics
- 525 Vehicle electricity
- 525 Vehicle mechanics
- 525 Vehicle painting
- 525 Vehicle repairing
- 525 Vehicle trimming
- 582 Ventilation (building)
- 640 Veterinary assisting
- 640 Veterinary medicine
- 640 Veterinary science

421 Virology

621 Viticulture

443 Vulcanology

621 Vineyard construction

762 Vocational counselling

726 Vocational rehabilitation

146 Vocational teacher training

762 Vocational guidance

W

- 811 Waiting and bar service
- 863 War theory
- 341 Ware-housing
- 521 Watchmaking
- 851 Water pollution control
- 853 Water supply (service)
- 582 Water supply and sewerage engineering
- 582 Water technology and engineering
- 215 Weaving (craft)
- 542 Weaving (industrial)
- 521 Welding
- 341 Wholesaling
- 815 Wig making
- 852 Wildlife management
- 852 Wildlife ranger studies
- 214 Window dressing
- 621 Wine growing
- 541 Wine production
- 541 Wine science
- 541 Wine storing/maturing
- 312 Women studies
- 543 Wood machining and turning
- 543 Wood technology
- 215 Woodcarving
- 543 Woodwork trades programmes
- 543 Woodworking and carpentry
- 542 Wool science
- 347 Work development
- 862 Work environment
- 347 Working life

X

725 X-ray technology (medical)

Y

- 761 Youth recreation programmes
- 761 Youth services
- 761 Youth worker programmes

Ζ

421 Zoology