The Imperial College of Business Studies, Lahore

GRADUATE EDUCATION POLICY

2023

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GRADUATE EDUCATION POLICY 2023

PREAMBLE

In pursuance of the Higher Education Commission Notification No. 15-54/Coord/2019/HEC/ QAD/560 dated 10.07.2023 this policy will be implemented from Fall 2023.

This policy has three parts:

i. Minimum Standards and Guidelines for Launching a Program and Awarding Degrees
ii. Governance of Doctoral Research System
iii. Quality Assurance

The purpose of Graduate Education Policy 2023 is that the Doctor of Philosophy (PhD) is the highest university degree, awarded in most disciplines. Those who qualify at level 08 as per Pakistan Qualification Framework (PQF), are expected to serve highly consequential functions in the society, including in the fields of teaching and research. With in-depth training and immersion in a particular field of study, that they can utilize in teaching and further research, as well as in problem-solving and innovation to address important societal challenges.

Applicability

i. This policy shall be effective from Fall 2023. Any additional requirements in this policy in comparison with the HEC's previously applicable policies on MS/MPhil/Equivalent & PhD Programs (2016 and 2021) shall apply from the Effective Date and shall not be retrospectively applicable.
ii. To assess whether a graduating student is compliant with the HEC's policies, the HEC shall generally consider this policy applicable to the date of student enrollment in the graduate program.
iii. ICBS adopted the Graduate Education Policy 2023 vide letter No. Reg:08/23-24 dated 10th of August, 2023.

Guiding Principles Given by Hec

i. **University Autonomy:** Within the ambit of their Charter/Act and HEC's policies
ii. **Access:** All qualified individuals with equal opportunity.
iii. **Relevance:** Local needs and national policies.
iv. **Alignment:** The outcomes defined in National Qualification Framework and Graduate Education Policy.
v. **Contextualizing:** Without compromising over the global standards.
vi. **Academic Freedom:** Thoughts and conceiving ideas.
vii. **Originality:** Thoughts leading to innovation by adhering to academic ethics.
viii. **Academic Flexibility:** Conducting research activities without violating disciplinary guidelines.
ix. **Collaboration, networking, and partnerships:** At the local, national, and international levels for the development and execution of graduate programs.
x. **Quality:** Promoting high standards of academic and research excellence and student success.

Definitions

- **Academic Calendar:** A schedule of the whole academic year (including fall, spring and summer semesters, semester starting date, holidays during the semester, semester termination date, Mid-Term exam week, Final exam week, Result notification date etc.)

- **Accreditation Councils:** A council established either by the Act of Parliament or under clause 10(e) of the HEC ordinance 2002 to carry out accreditation of institutions including their departments, faculties, and disciplines by giving them appropriate ratings.

- **Adjunct Faculty:** A contractual faculty member, temporary or part-time, hired outside their fulltime profession such as researchers and scientists by The Imperial College of Business Studies, Lahore to teach specific courses or provide instructional support.

- **Credits Hours:** A uniformly recognized measure of time and effort expended to acquire knowledge, skills, competencies, and recognition that a learner has successfully completed the prior course of learning, corresponding to the qualification at a given level. One credit hour is equal to one hour of student – teacher contact per week for the aforementioned purpose.

- **Graduate level:** As defined in the National Qualifications Framework, this is equivalent to level-7 and level-8 qualifications.

- **Guidelines for the Implementation of Uniform Semester System:** Policy guidelines issued by the Academic Division of HEC providing a uniform system to make Academic Year of Pakistani universities compatible with international standards.

- **H Index:** Measured by Web of Science.

- **Intra-disciplinary Qualifications:** Refers to sub-disciplines occurring within one of the ten broad disciplines defined by UNESCO's International Standard Classification of Education (ISCED-F-2013).

- **Level 5 Degree Programs:** Defined and mentioned in the National Qualifications Framework, including Ordinary Bachelor which includes associate degrees.

- **Level 6 Degree Programs:** As defined and mentioned in the National Qualifications Framework including Bachelor (Hons): BS, B.E., B Arch., BSc (Eng), BSc (Agri), B.Tech. (Hons), LLB, B. Com, MBBS, DVM, BDS, Pharm D etc.

- **Level 7 Degree Programs:** As defined and mentioned in the National Qualifications Framework including MS, MPhil, MBA, MSc (Eng.), ME, M. Tech., LLM etc.

- **Level 8 Degree Programs:** As defined and mentioned in the National Qualifications Framework, this includes PhD.

- **National Qualification Framework:** An approved framework of Pakistan's national qualifications classifying them into eight hierarchical levels that is from level-1 to level-8, based on learning outcomes *i.e.*, skill, competence and knowledge specified against each.

- **Sustainable Development Goals (SDGs):** A framework of seventeen goals established by United Nations in 2015 addressing various social, economic, and environmental challenges to be met by 2030.

Pakistan Qualifications Framework (PQF)

| Formal & Higher Education |

	Years	Levels	Award Type	Award Example
Higher Education Levels	21 20 19	8	Doctoral	PhD
	18 17	7	Masters	M.Phil./MS/MBA, M.Sc. (Eng.), M.E, MArch etc
	16 15	6	Bachelor	BS, B.E, B.Arch., BSc (Eng.), BSc (Agri), MA/MSc (16 year), LLB, B.Com (Hons), MBBA, DVM, PharmD, etc
	14 13	5	Associate Ordinary Bachelor	BA/BSc (Pass), ADE, Associate Degrees etc
Intermediate Level	12 11	4	Higher Secondary School Certificate (HSSC)	F.A, F.Sc, ICS, I.Com, DBA, D.Com etc
Matriculation Level	10 9	3	Secondary School Certificate (SSC)	Matric
		2	Middle (3 Years)	
		1	Primary (1-5 Years) Pre-Primary (1-2 Years)	

Abbreviations

APA:	American Psychological Association
CGPA:	Cumulative Grade Point Average
CH:	Credit Hour
COPE:	Committee on Publication Ethics
DAI:	Degree Awarding Institute
DASR:	Directorate of Advance Studies and Research
F.A:	Faculty of Arts
F.Sc:	Faculty of Science
GEP:	Graduate Education Policy
GRE:	Graduate Record Examination
HAT:	Higher Education Aptitude Test
HEC:	Higher Education Commission
HEIs:	Higher Education Institutions
HJRS:	HEC Journal Recognition System
HSSC:	Higher Secondary School Certificate
GEP:	Graduate Education Policy, 2023
ICBS:	The Imperial College of Business Studies, Lahore.
IEEE:	Institute for Electrical and Electronics Engineers
ISCED:	International Standard Classification of Education
MLA:	Modern Language Association
MOOCS:	Massive Open Online Courses
MPhil:	Master of Philosophy
MS:	Master of Science
NAHE:	National Academy of Higher Education
NOCs:	No Objection Certificates
NQF:	National Qualification Framework
PhD:	Doctor of Philosophy
RAC:	Relevance Assessment Committee
SDGs:	Sustainable Development Goals
UNESCO:	United Nations Educational, Scientific and Cultural Organization
WOS:	Web of Science
HR:	Human Resource

PART-I: LAUNCHING A PROGRAM AND AWARDING DEGREE

1. **Minimum Requirements to Launch Graduate Programs at ICBS**

    The Graduate Education Policy of HEC provides a broad framework for achieving national goals through academic and research excellence. ICBS has adopted all the minimum requirement for launching of all graduate programmes. In future ICBS enhanced the requirement of graduate programmes at maximum level according to the international standards for quality education.

    1.1 Before launching any new graduate program, ICBS will ensure all the following requirements as given by HEC :

    a. The Charter of the ICBS allows to be offer the postgraduate programs at all levels with the NOC of HEC vide letter No. 16(35)/A&A/Acc/HEC-2009/759 dated 14.02.2024. **(Annexure – 1)**

    b. Before launching of any programme, ICBS will establish the rationale of the programme according to the need, scope, and objectives in terms of market demand; try to resolved the societal problems, and employability of graduates.

    c. The title of the program is defined in light of the "Criteria for Use of Titles/Nomenclature for the Degree" as listed in the National Qualification Framework (2015). **(Annexure – 2)**

    d. The curriculum of the program is consistent with the guidelines issued by the HEC and international best practices.

    e. Admission policy will be implemented with the following information as mentioned in GEP-2023:

        i.   Academic Calendar as per HEC and ICBS policy

        ii. Adopted the procedures and processes to submit application for admission explaining the manual and electronic ways.

        iii. Ensure processes ensuring the dissemination of admission information to prospective students.

        iv. Fulfilled all the documentary requirements for admission

        v.   Strictly follow the merit determination criteria defined and explained.

        vi. Grants admission only to those candidates who fulfilled the minimum eligibility criteria of admission.

    f. The program completion requirements satisfy the HEC's minimum criteria for awarding graduate degrees.

    g. The other requirements of HEC regarding the arrangement of relevant faculty (in terms of numbers, level, student-to-teacher ratio, student-to-supervisor ratio etc.),

establishment of a library and laboratory have been met.

    h. The degree program has been approved for launch by all relevant statutory bodies of the ICBS.

    i. If any graduating program requires an approval from accreditation councils to launch the program ICBS will obtain necessary approval before landing.

    j. ICBS will inculcate all the Policies for the development of research culture by incorporating a system of research supervision that has been approved by relevant statutory bodies and governed following the guidelines delineated in this policy.

    k. Policies to ensure academic research ethics have been developed, approved by the relevant statutory bodies and implemented as prescribed in this policy.

    l. Policies to address academic grievances of graduate students have been outlined, approved by the relevant statutory bodies and implemented through a grievance management system, as advised in this policy.

    m. If applicable, HEC's permission has been sought to launch a new graduate program.

2. Minimum Requirements to Award MS/M.Phil (Level 7)

2.1 Eligibility requirements for Admission in MS/MPhil

i. **Basic Academic Qualification:** Sixteen years of schooling or 4 year education (Minimum 120 credit hours) after HSSC/F.A./F.Sc./Grade 12 or Equivalent shall be required for admission in the MPhil/MS/Equivalent program.

ii. **Admission Test:**

    a) ICBS will conduct an admission test as an eligibility condition for admission to MS/MPhil, with a passing score of 60%.

    OR

    b) Accept the GRE/HAT General/Equivalent tests, with a passing score of 50%.

iii. **Intradisciplinary Qualifications**

The intradisciplinary admission also be allowed subject to fulfilment of the following requirements:

Note: Intradisciplinary refers to sub-disciplines occurring within one of the ten broad disciplines defined by UNESCO's International Standard Classification of Education (ISCED-F-2013). **(Annexure – 3)**

    a) The applicant has a strong interest in pursuing an MS/MPhil in a different discipline.

    b) The applicant has passed GRE-Subject/equivalent test (In case the GRE-Subject test for a specific field/discipline is not available/conducted in Pakistan) with minimum 50% marks in the discipline of admission and has taken 6-9 CH of deficiency

courses of level 6.

c) The admission committee is satisfied that the applicant's knowledge of primary area (level 6) has sufficiently prepared him or her to undertake the course of studies of the MS/MPhil (or, in the opinion of the admission committee, the preparation can be deemed satisfactory by taking a few additional courses after starting the program).

2.2 Coursework Requirement for Award of MS/MPhil

For award of MPhil/MS/equivalent degree, candidates shall:

a. Either need to complete 30 credit hours of course work or

b. Complete **24** credit hours of coursework along with a minimum of six **(6)** credit hours for research work/thesis.

c. In case a degree is offered with research work, the ICBS shall develop a policy regarding thesis defense and evaluation through its statutory bodies.

2.3 Degree Completion Timeline

i. The MS/MPhil degree shall be awarded by the ICBS not before the completion of 1.5 years or three (03) regular semesters and not after completion of four (04) years or eight (08) regular semesters, under the unavoidable circumstances the time bar cases will be dealt as mentioned in clause 2.3(ii).

ii. In case a student is unable to secure an MS/MPhil within the prescribed timeframe and claims for extension in duration, the ICBS may constitute appropriate authority and determine the causes of delay. In the event of force majeure (*i.e.*, delay on account of circumstance beyond the control of student), the ICBS may grant an extension in the period of award of MS/MPhil degree in accordance with the duration limiting factor(s) and shall also take corrective measures in case the delay is caused by process or administrative reasons.

2.4 Credits Transfer, Evaluation and Grading

i. The credit transfer of coursework from other university/DAI/HEI to ICBS, before transfer the students' academic performance will be evaluated (both formative and summative) and award of grades, according to the HEC's Policy Guidelines, for implementation of the Uniform Semester Examination System in Higher Education Institutes of Pakistan. (https://www.hec.gov.pk/english/services/universities/ Documents/Final%20Examination%20Policy%20Guidelines.pdf)

ii. The transfer of research work is permissible, provided that the host ICBS accepts the research conducted at the parent university prior to the credit transfer.

3. Minimum Requirements for Award Of Doctoral Degree (Level 8)

3.1 Qualification

i. Prior to admission into a PhD program, the student shall have been awarded MS/MPhil or equivalent degree as described in the GEP 2023

ii. The ICBS may accept candidate who got the MS /MPhil degree without research with fulfillment of HEC requirement.

iii. Students pursuing MS/MPhil studies and interested in continuing to PhD may be granted provisional admission upon satisfaction with the Admission Committee regarding Statement of Purpose and students' commitment to the PhD program, provided that confirmation of the admission shall be subject to the fulfilment of the following conditions within a period of one year from the date of provisional admission:

    a. Award of MS/MPhil degree, as prescribed in this policy.

    b. Clearance of the admission test, as prescribed in this policy.

3.2 Intra-disciplinary Qualifications

Consistent with best practices internationally (including leading global universities), intradisciplinary admissions may only be allowed by ICBS, if:

Note: Intra-disciplinary refers to sub-disciplines that occur within one of the ten broad disciplines defined by UNESCO's International Standard Classification of Education (ISCED-F-2013).

i. The applicant has a strong interest in pursuing a PhD in a different discipline.

ii. The applicant has passed GRE-Subject/Equivalent Test (In case the GRE-Subject test for a specific field/discipline is not available/conducted in Pakistan) with minimum 50% marks in the discipline of admission and has taken 6-9 CH of deficiency courses of level 7.

iii. If the admission committee is satisfied that the applicant's knowledge of the primary area (level 7) has sufficiently prepared him or her to undertake the course of study of the doctoral program (or, in the opinion of the admissions committee, the preparation can be deemed satisfactory by taking a few additional courses after starting the program).

3.3 CGPA

a) For admission in PhD programs, a minimum CGPA of 3.0 (out of 4.0 in the semester system) 60% (in the annual system) in the MS/MPhil/equivalent degree being considered for admission, is required, whether such degree was obtained

from Pakistani or foreign universities.

> **Note:** As decided by the NQAD, in its 22nd meeting held on January 09, 2017, the HEIs should preferably use four (04) grade point system (Ref. 1-22/NQAC/QAD/2017/HEC/03-360, dated March 24, 2017). However, the HEIs using other grade point scales shall refer to HEC's Policy Guidelines, issued from time to time, for Implementation of Uniform Semester Examination System in Higher Education Institutes of Pakistan.

b) If the CGPA/Percentage is not mentioned on the transcript, the candidate must produce equivalent weightage from the parent university.

c) The students having strong demonstrated interest in obtaining PhD degree, but their CGPA is below 3.00 (out of 4.0 in the semester system) or 60% marks (in the annual system) in the most recent degree obtained, may be admitted to a PhD program after fulfilling the following requirements:

   i. Shall study additional courses of 9-12 CH of level 7 taking a zero semester at admission awarding university/HEI/DAI and score minimum 3.00 out of 4.00 GPA, and

   ii. The admission committee is satisfied that the applicant's knowledge of primary area (level 7) has sufficiently prepared him or her to undertake the course of studies of the doctoral program.

   iii. These requirements shall be in addition to any other requirements set in this policy for admission to a PhD program.

3.4 Admission Test

   i. Conduct the test equivalent to GRE/HAT General developed by the ICBS, with the passing score of M.Phil. 70%.

   ii. ICBS also accept a test equivalent to GRE/HAT General, conducted by testing bodies accredited by HEC, with a passing score of 70%.

3.5 Statement of Purpose

As part of the application for admission to PhD programs, applicants shall be required to submit a statement of purpose, which shall form an integral part of the application. The admissions committee shall use the information provided to ascertain the preparedness and interest of the candidate in pursuing doctoral studies, and whether the department has the requisite resources to train and supervise the doctoral candidate in the subspeciality in which the applicant is interested. A statement of purpose shall, at least, include the following:

   i. Title of the potential research proposal

ii. Clear articulation of the current understanding of the intended field and ideas for potential research

iii. Explanation of the intended impact of the proposed research

iv. The prospective candidates shall demonstrate passion and enthusiasm for the area of research.

3.6 Coursework and Residency Requirement

The following requirements will be fulfilled before the award of a PhD Degree:

a. The students shall complete the coursework of at least:

    i. 18 credit hours if they are from the same discipline.

    ii. 9-12 extra credit hours if they are from the other discipline to meet the deficiency.

    iii. 9-12 extra credit hours as recommended by admission committee, if they have CGPA less than 3.00/4.00 or less than 60 % in case of annual system

    iv. The courses shall be offered through regular classes (*i.e.*, classes taught on campus by full-time faculty members of the ICBS)

    v. ICBS will be prefer to teach the courses of 800 level. (800 level courses are offered at the doctoral level) **Annexure- 4**

    vi. PhD degree should be based on research, not only on credit hours.

3.7 Comprehensive Examination

i. Following the completion of coursework, every PhD student shall be required to pass the comprehensive examination to be granted candidacy as a PhD researcher, with the provision that the student failing to pass the comprehensive exam, shall be allowed to retake the exam once.

ii. It is mandatory for Supervisor to submit the research report of the student after every three months to the QEC.

iii. The required coursework, comprehensive exam, and defense of synopsis/research proposals should be completed within the 1st six semesters of the registration into a PhD program. The responsibility in this regard rests collectively with the PhD student, supervisor and concerned HOD. In case of noncompliance, the registration shall be cancelled and transcripts for completion of coursework may be issued to the student and disciplinary action will be taken against the supervisor and concerned HOD.

iv. In an event of force majeure *i.e.*, noncompliance on account of circumstances beyond the control of student, the ICBS may consider the matter in accordance with the procedure prescribed at 3.12(iv).

As per following guidelines of HEC the Comprehensive Examination will be conducted:

The Exam shall be based on recapitulation of the conceptual knowledge of the discipline to which the student is admitted.

a. The exam shall cover the courses studied, preferably at the graduate level, conducted on one composite question paper.

b. The evaluation shall be on an aggregate basis, expressed in terms of pass/fail and shall not be graded.

3.8 Doctoral Dissertation

Each Ph.D. researcher shall write a doctoral dissertation reflecting relevance, credibility, effectiveness, and legitimacy of the research. The dissertation must be an original and innovative contribution to knowledge that contributes to solving socioeconomic problems. To improve the quality of a doctoral dissertation, some regulations have been suggested in the following areas:

3.8.1 Selection of Research Area

The supervisor may prefer the following in allocation of research area to the Ph.D. scholar shall:

i. Correspond to the community needs at regional and local levels and comply with the priority national research agenda.

ii. Reflect the basic and pure research.

iii. Signify emerging areas of research that coincide preferably with sustainable development goals (SDGs)

3.8.2 Quality in Reporting

The quality of presentation and reporting in dissertation shall reflect the following characteristics:

i. The document is well written.

ii. The contents are balanced, well organized, appropriately styled; clearly structured, and well cohered; and

iii. The document is free from grammatical and spelling errors and flawed terminology.

iv. Minor shortcomings such as inaccurate use of acronyms and clumsy looking sentence structure have been addressed.

v. Quantitative research proposals must include a valid statistical design for data analysis.

vi. Formatting shall be compatible with international standards.

3.8.3 Methodological Quality

To produce PhD researchers capable of conducting research independently, ensuring the technical soundness of their PhD dissertations is integral. The following guidelines shall be useful in making the PhD research methodologically sound:

A. **Guidelines ensuring the quality of Qualitative Research:** A PhD research dissertation, based on the Qualitative Research methods should satisfy, at least, the following questions: (Boaz and Ashby (2003)

   a. "Does the research, as reported, illuminate the subjective meaning, actions and contexts of those being researched?"

   b. "Is there evidence of the adaption and responsiveness of the research design to the circumstances and issues of real-life social settings met during the course of the study?"

   c. "Does the sample produce the type of knowledge necessary to understand the structures and processes within which the individuals or situations are located?"

   d. "Is the description provided detailed enough to allow the researcher or reader to interpret the meaning and context of what is being researched?'

   e. "How are the different sources of knowledge about the same issue compared and contrasted?"

   f. "Are subjective perceptions and experiences treated as knowledge in their own right?"

   g. "How does the research move from a description of the data through quotation or examples to an analysis and interpretation of the meaning and significance of it?"

B. **Guidelines ensuring the quality of Quantitative Research**: A PhD dissertation with Quantitative Research methods should satisfy, at least, the following questions: (Popay, Rogers, and Williams ,1998)

   a. **Reliability** – are the results repeatable?

   b. **Validity** – does it measure what it says?

   c. **Internal validity** – do the research results indicate what they appear to be?

   d. **External validity** – can the results be generalized to other settings (ecological validity) and to other populations (population validity?

   e. **Replicability** – are the results of the study reproducible?

3.8.4 Appropriateness of the Methods to the Aims of the Study

To achieve the research objectives, the alignment of the research approach and methods is necessary. Therefore, a PhD dissertation, at least, shall:

   a. Reflect a fair proportion of latest knowledge of contemporary techniques and methods in relation to study objectives.

   b. Contain detailed and easily comprehensible discussions regarding the applied methods and techniques.

   c. Justify the use of methods and techniques to achieve study objectives.

   d. Show evaluation of obtained results in relation with study objectives. And:

   e. The methods and techniques used should justify the results obtained.

   f. The obtained results should support the study objectives.

3.8.5 Relevance to the Policy and Practice

The research should have significantly answered questions related to policy and practice in that area, establishing its usefulness and usability. Accordingly, a PhD dissertation, at least, shall:

a. Reflect judicious evaluation of study results in relation with policy related aims and goals undertaken while starting the research.

b. Discuss the practical implications of the study results in association with the developing practices in that area.

c. Establish usefulness of the study results for devising policy as stated in the beginning.

d. Discuss how the resulting policy would be useful for the organization/society. And:

e. The study output should be significant enough to be published or patented.

f. The assessment of the results performed by the author must not be superficial and lacking substance.

3.9 External Evaluation of PhD Dissertation

i. The criteria for the PhD dissertation evaluation are:

    a. At least two external experts to evaluate the PhD dissertation who shall be:

        i. PhD faculty member from the world top 500 universities ranked by the Times Higher Education or QS World Ranking in the year corresponding to dissertation evaluation year OR

        ii. Pakistan-based Distinguished National Professors, Meritorious Professors from any national university; or professors from top universities ranked by HEC; or professors from any Pakistani University having a minimum H-Index 30 for sciences, 15 for Social Sciences or 8 for Art & Humanities as determined by Web of Science.

    OR

    b. In case of at least one external expert qualifying any one of the conditions mentioned at 'a' above if the PhD candidate publishes dissertation research in a peer-reviewed journal that is classified by the HEC in category W for Sciences and X or above for Social Sciences.

ii. The following general guidelines shall, at least, be observed while selecting external evaluator by ICBS:

    a. **Relevance of Expertise**: in the same or related fields as in the dissertation.

    b. **No Conflict of Interest:** in personal, financial, or professional stakes in a particular decision or outcome.

    c. **Objectivity:** capable of making unbiased evaluations.

d. **Diversity:** in terms of geography, culture, professional backgrounds etc.

e. **Reputation:** must be good in the field, with a track record of fair and thorough evaluations.

f. **Availability:** should have the time and availability to review the dissertation.

g. **Professionalism:** capable of conducting themselves in a professional and respectful manner throughout the evaluation and defense process (if applicable).

h. **Communication:** capable of providing clear and constructive feedback on the dissertation.

i. **Confidentiality:** capable of maintaining confidentiality and protecting the intellectual property of the dissertation.

j. **Compatibility:** well-versed with the research methodology, approach, and theories used in the dissertation.

3.10 Plagiarism, Similarity Test and Open Defense

a. ICBS will not accept any dissertation based on plagiarized research under any circumstances. It is the primary responsibility of both PhD researchers and their supervisors to prevent plagiarism. To avoid plagiarism, it is important to follow the provisions outlined in the HEC document *i.e.*, Governing Research Supervision and Research Ethics.

b. For Plagiarism COPE (the Committee on Publication Ethics (COPE) is a forum for editors of peer-reviewed journals to discuss issues related to the integrity of the scientific record. It supports and encourages editors to report, catalog and instigate investigations into ethical problems in the publication process. Elsevier) guidelines must be followed.

c. If a PhD dissertation is found to be plagiarized, it will be handled in accordance with the Anti-Plagiarism Policy issued by the Higher Education Commission 2023, Pakistan, as updated from time to time.

d. A similarity test, in accordance with the HEC's Anti-Plagiarism Policy, must be conducted on the dissertation before its submission to the external experts by the student.

e. An open defense of the dissertation is required after positive evaluation of the dissertation by committee members. In general, the following minimum principles and guidelines shall be ensured by ICBS:

i. **Public Announcement**: On the university website and other forums of communication, so that anyone interested can participate.

ii. **Public Access**: Within or outside the university such as community/town

halls or important public venues.

iii. **Neutral Chair**: To ensure that defense was conducted fairly and in accordance with the rules and regulations.

iv. **Review Committee**: To evaluate the dissertation and defense.

v. **Presentation**: of the dissertation by the PhD researcher

vi. **Question and Answer Session**: To provide a basis for defense evaluation.

vii. **Objective Evaluation**: based on the quality of the research and the researcher's ability to defend.

viii. **Final Decision**: expressed in the following terms:

- Pass or
- Pass with minor amendments or
- Deferred for resubmission and re-defense or.
- Fail (in exceptional circumstances and for the reasons to be recorded by the defense committee)

3.11 Research Publication

For award of PhD degree, a PhD researcher shall be required to publish research articles by meeting the following criteria:

Note: A research article appearing online with valid DOI on website of an HEC's recognized research journal shall be considered published w.e.f. the date it appeared online with DOI.

i. At least:

a. One research article in W category (As categorized in HJRS at the time of acceptance of the research article) journal or two research articles in X category journals, for Science disciplines

b. One research article in X category journal or two research articles in Y category journals, for Social Science disciplines

ii. The PhD researcher shall be the first author of these publications.

iii. The research article shall be relevant to the PhD research work of the PhD researcher.

iv. The article shall be published after approval of the research synopsis.

v. The article shall be published in a relevant research journal.

3.12 Degree Completion Timeline

i. ICBS will award the PhD degree not before the completion of three years or six regular semesters and not after completion of eight years or 16 regular semesters, except under the unavoidable circumstances as mentioned in the clause 3.12(iv).

ii. The completion date of PhD degree shall be reckoned with the date of notification

of the award of PhD degree.

iii. The maximum duration shall be determined from the date of student enrollment until the date of the completion notification of the PhD degree.

iv. In case a student is unable to secure a PhD degree within the prescribed timeframe and claims for extension in duration, extension case be submitted to the BASAR for the determination of causes of delay. In event of force majeure *i.e.*, delay on account of circumstance beyond the control of student, the ICBS may grant an extension in the period of award of PhD degree in accordance with the duration limiting factor(s) and shall also take corrective measures in case the delay is caused due to process or administrative reasons. Notifications of extension will be issued after the approval from statuary bodies of ICBS.

3.13 Credits Transfer, Evaluation and Grading

i. HEC's Policy Guidelines for the Implementation of Uniform Semester System shall also be applicable to Level-8 programs for credit transfer of coursework from other university/DAI's to ICBS, students' assessment, awards of grades, etc.

The transfer of research work is permissible by the ICBS, if the research conducted at the parent university prior to the credit transfer is acceptable.

3.14 Award of Post Graduate Diploma/Certificate

ICBS will issue the Post Graduate Diploma/Certificate/Transcript to the student who successfully completes coursework and passes the comprehensive examination but is unable to defend a PhD synopsis/research proposal or does not complete the required research for obtaining a PhD degree within the specified timeframe or another MS/MPhil upon completion of 06 credit research work or necessary requirements as per HEC policies.

PART-II: GOVERERNING THE SYSTEMS OF DOCTORAL RESEARCH

4. Governing for The Research Supervision

4.1 Principles and Purposes

To inculcate a research culture to produce high-quality research, policies and procedures governing the overall system of research in the ICBS.

4.2 Supervision of Doctoral Dissertation

4.2.1. General Conditions to Supervise Doctoral Research

At the time of supervisor allocation, the supervisors should fulfill following requirements:

i. Shall be a PhD degree holder complying with the criteria and standards as mentioned in GEP2023.

ii. Must be relevant to the field of research in which the student intends to conduct research.

iii. Should have NO CONFLICT OF INTEREST in personal, financial, or professional stakes.

iv. Should have the time and availability to supervise PhD dissertation and give clear and constructive feedback.

v. Should be capable of conducting themselves in a professional and respectful manner throughout the supervision process.

vi. Should be capable of maintaining confidentiality and protecting the intellectual property of the dissertation.

vii. Should, primarily, be a regular/adjunct faculty member of the supervisee's of ICBS.

In addition to the aforementioned guidelines:

viii. **The research supervisor shall be allocated to a doctoral student from the date of enrollment.**

ix. The supervisory workload of research supervisors should be determined based on the availability of teaching and research facilities, and the academic standing of supervisors. However, it is mandated that the maximum supervisory load shall not exceed five PhD students, simultaneously. Further, **fresh PhDs can supervise MS/MPhil and co-supervise PhD students**, while a PhD faculty member, after **two years** of obtaining a PhD degree, can supervise **one PhD student** in **3rd year**, **two PhD** students in 4th year and maximum up to 5 PhD students from 5th year onward, subject to fulfillment of other conditions provided in this policy.

x. The ICBS shall allocate supervision/research space to the doctoral students.

xi. PhD research work completed under supervision is a shared property of supervisor and supervisee. All publications resulting from such research shall reflect the authorship of both parties and shall be subject to mutual consent.

xii. The guidelines for PhD supervision will be followed in letter and spirit, as prescribed in this policy.

Note: The "General Conditions to Supervise Doctoral Research" along with the "Criteria to be a PhD Supervisor" are applicable on fresh PhDs intending to supervise PhD research and effective from the date of enactment of this policy. All the previously approved supervisor shall remain approved until the date mentioned on their award letter.

4.2.2. Criteria to be a PhD Supervisor

To be a PhD research supervisor, an individual shall meet the following requirements:

i. General Requirements

a) A PhD degree from an HEC recognized national/international university/degree awarding institute (DAI).

b) The research supervisor shall be given opportunities to attend and qualify course(s) on MS/MPhil/PhD Supervision which should also have contents on research ethics, publications, patents, etc. Such courses may include certified self- paced MOOCS, or a course designed/offered by National Academy of Higher Education (NAHE) or by the ICBS.

   i. Basic level course: to supervise students of MS/MPhil/equivalent degrees.

   ii. Advance level course: to supervise PhD researchers.

c) ICBS adapted a policy of adjunct faculty according to the HEC policy as mentioned below:

   A regular/adjunct faculty member or researcher at a public or private university or DAI, or position of researcher or scientist at any R&D or public/private sector organization. However, in the case of a non-faculty PhD supervisor, who otherwise meets the criteria of being a PhD supervisor, shall be taken as an adjunct faculty member, for a period not less than the minimum time required to complete the student's PhD research, prior to assigning a PhD supervision. Such a person shall also provide an NOC from the parent organization.

ii. Publication Requirements

In addition to fulfilling the General Requirements, a PhD supervisor must publish

research articles in the HEC's recognized research journals and the category specified in the HJRS for the publication year. These conditions are different for different disciplines. Specific Requirements for Science and Technology:

For indigenous and foreign PhDs:

   i.   Within the last 3 years after PhD: at least one research publications in W category journal. OR

   ii. Within last 5 years after PhD: at least five research publications in X category journal.

B. **Specific Requirements for Social Science, Arts and Humanities and Business Education**

For indigenous and foreign PhDs:

   i.   Within the last 3 years after PhD: at least one research publication in W category journal. OR

   ii. With the last 5 years after Ph.D. at least five research publication in X and Y   category journal

C. **Specific Requirements for Regional and National Languages**

For indigenous and foreign PhDs:

   i.   Within the last 3 years after PhD: at least one research publication in X category journal. OR

   ii. Within the last 5 years after PhD: at least five research publications in X or Y category journal.

4.2.3.   Supervisory Process

For supervisory process of doctoral dissertation ICBS will follow the following to get the desired goals for transparency and quality of research.

   i)   Devise a supervision manual and ensure its implementation,

   ii) Constitute a Supervisory Committee for each individual doctoral student.

   i.   The research supervision manual shall elaborate the following areas to guide the supervisory process:

      a.   Description of roles of supervisor & supervisee

      b.   Prescription of supervision timespan

      c.   Guidance about preparation for best supervision

      d.   Guidance to discuss questions and problems with constructive comments by observing the elements of mutual respect.

      e.   Guidance on setting reasonable amount of work and receiving constructive feedback.

f. Directions for supervision as per the social norms

g. Provision of tentative timetable and schedule of meetings

h. Provision of proformas/registers showing meetings and research records etc.

i. Provision of grievances policy

ii. ICBS will constitute a **Supervisory Committee**, for each doctoral researcher, to supervise the doctoral research with the following composition.

a. Supervisor of the PhD researcher   Convener

b. Co-supervisor (if any)   Member

c. Expert(s) from the field of research (External/Internal)   Member

d. Any member from Research Ethic Committee (If applicable) Member

4.3 Board of Advance Studies and Research (BASAR)

i. The Chair Board of Advance Studies and Research **(BASAR)** as per ordinance of ICBS, shall be responsible for the quality of all the graduate degree programs being offered by the ICBS as well as the research that shall be conducted under these programs.

ii. Under the supervision of Chair of BASAR, the Prospectus of graduate Studies shall be prepared, describing the complete process for award of a graduate degree and ensuring that the booklet shall be available for guidance of all graduate students.

iii. The members of BASAR will monitor and ensure that thesis/dissertation is progressing in accordance with the time prescribed in the booklet. It includes, but is not limited to, the timely approval of the research synopsis, evaluation of the research thesis/dissertation in accordance with the HEC guidelines as well as its submission, and finally the conduct of open defense.

4.4 Teaching Assistantships and Research Assistantships

ICBS may offer Teaching and Research Assistantships to outstanding PhD enrolled students. Teaching assistantship provides an opportunity to PhD students to assist professors in preparing teaching and research materials for groups of students enrolled in their classes.

i. Research assistantships are paid fellowship stipends for outstanding research scholars for assisting a professor, who pays the research assistant out of the research grant she has received. The stipend varies based on the level of effort and budget available to the Principal Investigator.

ii. ICBS may promote the named scholarships policy to promote quality research

by philanthropic donors based on priority themes and topics on the national research agenda.

iii. ICBS may also promote the academic and industry linked research and tried to get stipend from industry for the research students.

5. Practicing the Academic Research Ethics

5.1 Principles and Purposes

The International Center for Academic Integrity (https://academicintegrity.org/) (2022) defines   Academic Integrity as "*commitment,* even in the face of adversity, to six fundamental values*: **honesty, trust, fairness, respect, responsibility, and courage.*** From these values flow principles of behavior that enable academic communities to translate ideals into action."

5.2 Guidelines to Ensure Academic Research Integrity

To inculcate a culture of academic integrity, the ICBS will be follow the Tertiary Education Quality and Standard Agency, Australia.

i. Developed and adopt tertiary education standards and regularly publicize policies promoting academic integrity and dealing with allegations of academic misconduct.

ii. Developed procedures to prevent foreseeable risks to academic and research integrity.

iii. Strengthen the system governing the conduct of doctoral research.

iv. All statuary bodies of ICBS ensure that the occurrence of academic misconduct and breaches are monitored, and action taken to document and address the underlying cause.

v. Regularly educate and train students/faculty and admin staff about what constitutes academic or research misconduct and maintain good practices.

vi. Ensure that information to maintain academic integrity is available to all prospective and current students.

vii. Ensure that unauthorized access to private and sensitive information is detained/controlled.

viii. Regularly assess and ensure that academic and research integrity is maintained in accordance with developed policies and procedures. In this regard, it shall be ensured that a **self-assessment checklist** has been prepared and implemented.

ix. Acquire a license for similarity detection software (Turnitin) and develop policies and procedures to ensure productive use. In this regard, some guidelines are provided in the following sections:

5.3 Guidelines on Ethics of Using Similarity Detection Software (for Administrators)

i. Students/faculty members of ICBS will strictly follow the HEC Anti-Plagiarism Policy and Turnitin service.

ii. ICBS Administrators of Turnitin will create accounts of all faculty members. (The Administrator shall maintain their privacy and shall not disclose any report to anyone except the concerned person or to the concerned authorities, if required).

iii. If the Supervisor /scholar is involved in the screening of papers and theses of other authors, then the administrator shall report to the ICBS authorities with evidence.

5.4 Guidelines on Ethics of Using Similarity Detection Software (for Supervisor)

i. COPE (Committee on Publication Ethics) guidelines shall be followed for publication and theses.

ii. Supervisor are required to create classes and enroll students in them in Turnitin software.

iii. Students/scholars should be informed that their work will be checked through anti- plagiarism services; therefore, they must follow proper documentation style in writing reports/papers/theses.

iv. References/bibliographies and tables of contents must be removed from the submitted documents. If these are included, the similarity index of the document will increase.

v. Supervisors may allow students to view reports. The Supervisors shall maintain privacy and will not disclose any report to anyone except the concerned person and to the concerned authorities, if required.

vi. If a scholar/student is involved in checking papers and theses of any other person, the Supervisors shall report to university authorities about that with valid proof.

vii. Originality/similarity reports generated by Turnitin provide clues in the form of text matches as well as proverbs, universal truths, phrases, etc. Scholars/students must ensure that the documents they are submitting are in proper documentation style (*i.e.*, IEEE, Chicago, MLA, APA, etc.) and are free of plagiarism.

viii. If the report has a similarity index of ≤19%, then the benefit of doubt may be given to the author; however, if any single source has a similarity index ≥5% without citations then it needs to be revised.

ix. If the similarities of a report are from the author's own (previous) work, then they may be ignored only if the material has been cited by the author.

x. Documents that are checked through this service have not yet been published and no benefit is acquired; therefore, no punishment or penalty is recommended. It is advised that similarities at a greater level should be taken care of in the light of the HEC plagiarism policy.

5.5 Guidelines on Interpreting Originality Report

i. The similarity index of the originality report showing matches of submitted work with internet content does not mean that the document is plagiarized.

ii. The similarity index is based on the percentage of matched text out of the total number of words in a document.

iii. Supervisor/faculty members must verify each similarity index to identify potential clue to plagiarism.

iv. If similarities in the document are significant, then the scholar/student may be guided, accordingly, or a case may be reported based on the evidence.

v. The similarities in the document may contain matches with the author's previous work; they may be ignored if it is the same work.

vi. Bibliography and quoted material may be excluded after verification. It is important to note that too much quoted material is not desired as per the policy.

vii. Common phrases and proper nouns also appear as similarities in the report; therefore, every instructor or faculty member should ignore the matches returned from them.

viii. The originality report will show similarities from three major sources: the **Internet**, **periodicals**, and **student repositories**. Similarities returned from the student repository may be ignored if they are the author's own work. Similarities from the student repository help in detecting collusions in the documents.

ix. The graphs, tables, formulae, and other pictorial materials are not matched through the service; therefore, they will only offer similarities with text.

x. Instructor/faculty members supervising students/scholars can provide verdicts of plagiarism after interpreting reports.

6. Managing the Grievances of Graduate Students

6.1 Principles and Purposes

ICBS will constitute a Committee to deal and mange grievances of graduate students. The purpose of this committee constituted by ICBS is to address the grievances of graduate students and establish a grievance management system, so that all grievances/complaints of graduate students/prospective students and stakeholders are addressed in a fair, equitable, and timely manner, by adhering to the following principles:(Health Education

Collaborative Grievance and Harassment Policy (2020), (https://healthec.com.au/)

a. Provide timely responses to grievances from students, potential students, or stakeholders.

b. The aim is to develop a culture in which grievances are viewed as opportunities for improvement.

c. Ensure that students or potential students are free to complain without fear of discrimination.

d. Ensure that staff are aware of grievance processes and are appropriately trained to ensure that the processes are consistently applied.

e. Requires respectful behavior among all parties when handling grievances.

f. Communicate effectively in a timely manner to keep all parties up to date with the progress of grievances.

g. Ensure that all information is held at the utmost confidence.

h. Ensure that the principles of natural justice are applied.

i. To ensure that grievances are resolved to the satisfaction of all parties.

6.2 Guidelines to Establish a Grievance Management System

i. ICBS will develop grievance management policy through its statutory bodies, covering:

   a. The nature of grievances. In general, all grievances of an academic nature include, but are not limited to, issues related to student progress, assessment, curriculum, and awards during study.

   b. Values to inculcate a culture in which grievances are viewed as an opportunity for improvement. In general, such values may include, but are not limited to, valuing diversity, inclusiveness, equality, confidentiality, and showing respect for all parties involved. Therefore, a culture of reporting through appropriate forums should be encouraged.

   c. The principal authorities of ICBS are responsible for addressing academic grievances/complaints: The Heads of the Departments/Directors/Deans and the Rectors shall be responsible for addressing the grievances of graduate students/prospective students and stakeholders in line with the grievance management policy of ICBS.

   d. Complainant's rights, roles, and responsibilities: Procedures/processes and timelines for easily accessing grievance settlement procedure/system, lodging grievances/complaints, timely response thereto, and settlement thereof, up to the satisfaction of all parties must be ensured.

e. Rules ensuring that the complainants shall have a fair opportunity to formally present their case and each party to a grievance may be accompanied and assisted by a support person (such as a family member, friend, counsellor, or other professional support person other than a legal representative) at any relevant meeting must be ensured.

f. Methods and rules ensuring that complainants and respondents shall not be victimized and/or discriminated against at any time.

g. Procedures of maintaining records and confidentiality.

h. Guidance to give hearing to the parties involved, taking notes, reasoning for decisions to be written, and actions taken.

i. Process of elaborating how and when to launch an appeal in case the decision does not support the complainer or the accused.

j. Process to implement the decision and/or required corrective and preventive actions in case the decision supports the complaint.

ii. The structure of the grievance management system shall be hierarchal, starting from the lowest authority such as Head/Chair of the Department, then Dean/Director of the faculty/institute, and shall finally be presented to the Academic Board/Committee constituted to hear grievances in case the grievance/complaint is not settled at each level. However, the intent of the system should be to resolve grievances/complaints at the lowest level with minimal impact. **(Plagiarism Standing committee)**

iii. To make the system more effective and efficient, the ICBS will develop a parallel, informal system to preempt grievances/complaints by allocating counselors to the students and mentors to employees. Counselors and mentors should be competent to use consultative and teaching approaches to raise awareness and prevent issues.

iv. ICBS will create awareness about the grievance management system and inculcate its values, ICBS by conducting seminars and training for students, faculty, and non-academic staff.

v. The system/policy shall be reviewed after an appropriate time to be decided by the ICBS committee constituted to hear the grievances.

PART-III: QUALITY ASSURANCE

7. Quality Assurance

Following are the quality standards/requirements given by HEC for the launching of graduate programmes.

7.1 Minimum Requirement for Academic Human Resource (HR)

7.1.1 Faculty and supervisory requirement

a. At least two (2) full time faculty members holding PhD degrees in the relevant field shall be available/appointed to the department to launch an MS/MPhil/Equivalent program that may be increased up to three (3) if a PhD program is also to be launched in the same discipline and department. (Exceptions may be granted by the Commission for specified fields/disciplines).

b. The minimum appointment tenure for full-time faculty members must not be less than the duration of the intended degree program.

c. The teacher to student ratio shall be 1:12, where a supervisor can supervise a total of twelve

(12) MS/MPhil/PhD students at a time with no more than five (5) of these students being PhD students. Graduate teaching and supervision load shall be adjusted, accordingly.

7.1.2 Determining relevance of faculty with subject/degree program

a) Wherever required, the subject and supervisory relevance of faculty members shall be determined based on:

   i. Qualifications including Bachelor, Master, and Doctoral degrees.

   ii. The research includes thesis/dissertation and published articles.

   iii. Experience consisting of teaching and administrative domains.

b) To ascertain the relevance of the faculty in the related discipline to the program and supervision of theses, ICBS will follow the following:

   i. Constitute a Relevance Assessment Committee (RAC), with the approval of the Rector.

   ii. The RAC of ICBS be constituted consisting of the following members :-

      a. Respective Dean

      b. Director QEC

      c. Two External subject experts not less than a Professor /Associate Professor level

      d. Program Team/Assessment Team member who was involved in

preparing self- assessment report of the program.

c) The RAC will be submitting a report with detailed reasons and rationale for the assessment decision.

d) The Report will be approved from relevant statutory bodies.

7.2 Penalties of Violation of HEC Rules

In addition to the aforementioned, the following retributive actions defined in the HEC Policy and shall also be applicable in case the rules and regulations mentioned in this policy are violated:

Sr.	Quality Parameter	Nature of Violation23	Proposed Action(s) if Existing Policy is Violated
i.	Admission Criteria	Violation of admission criteria	i. Admission be cancelled.
ii.	Illegal Admission	Admission of students without NOC from HEC	ii. University to return three times the amount received from students. iii. Disciplinary action against responsible staff.
iii.	Course Work	Degree awarded without fulfilling the minimum credit hours requirement	i. The degree shall be considered equivalent to the MS/MPhil/Equivalent degree. ii. Disciplinary action against Department Chair and relevant staff.
iv.	Comprehensive Examination	Failure to pass Comprehensive Examination within the prescribed number of attempts.	i. Termination of PhD candidature / registration of student.
v.	Supervision of dissertation	Supervision of a PhD dissertation by a person who does not fulfil the minimum criteria for a PhD supervisor.	i. Disciplinary action against the Department Chair
vi.	Maximum number of Supervisee	A supervisor, supervising PhD students beyond the maximum number specified by the HEC.	i. The supervisor shall be banned from supervising new PhD researchers for a maximum of five (5) years. ii. Disciplinary action against the Department Chair.
vii.	External Evaluation of PhD dissertation	The external evaluation of a thesis is not in accordance with the prescribed criteria of HEC. Unjustified delay in sending dissertation for external evaluation	i. One additional paper shall be published by the student from his/her dissertation before degree attestation. ii. Disciplinary action against Department Chair and officer(s) responsible for sending dissertations for external evaluation. iii. Officer(s) responsible for sending dissertations for external evaluation shall be warned.

ix.	Relevance	The dissertation has no relevancy to the Title and Scope of the degree	i. Supervisor shall be banned from supervising new PhD researchers for a maximum of five (5) years. ii. Disciplinary action against Department Chair.
x.	Research Publication	i. No research papers were published but a degree was awarded. ii. Papers published but not in HEC's recognized journal. iii. Papers published but not in the required category of journals. iv. Paper published after the award of a PhD degree. v. Degree awarded based on a paper published before the approval of the PhD research synopsis. vi. Degree awarded based on a paper that has no relevance to the dissertation.	i. Paper to be published in the required category of the HEC recognized journal before attestation of degree. ii. Supervisor be banned from supervising the new PhD researchers for maximum 05 years. ii. Disciplinary action against the Department Chair and the relevant staff of the Controller of Examinations.
xii.	Plagiarism	Degree awarded, and major or minor plagiarism found in the thesis at any stage in the future.	i. The PhD researcher/degree holder and his supervisor will be penalized as per the provisions of the Anti- Plagiarism Policy of the HEC.
xiii.	Degree Issued in Violation of University's Own Rules / Law	Degree issued in violation of the university's PhD Policy/rules in addition to HEC guidelines.	i. Supervisor be banned from supervising the new PhD researchers for a maximum of 05 years. i. Disciplinary action against the Department Chair and the Controller of Examination.
xiv.	Poor Governance System of the Doctoral Research	Absence of the systems elaborated in Part-II of this policy i.e., Governing the Systems of Doctoral Research	i. In addition to the actions mentioned in clause "Cancellation of NOC and/or demotion to the lower category", disciplinary actions shall be taken against the relevant officers/heads of the Directorate of Advanced Studies and Research/Equivalent Body, Quality Assurance / Equivalent Body, Controller of Examination etc., if applicable

7.2 Requirements for Entering PhD Country Directory (PCD)

It is mandatory for every Ph.D. student to inclusion of his /her data in PCD. Graduates are required to submit an online application following the prescribed procedure as mentioned by HEC.

Part IV: COMPLIANCE OF NOC INSTRUCTION BY HEC

ICBS Authority will follow the instruction regarding the issuance of NOC for the Launch of any new M.Phil/MS/Ph.D Program

8. NOC Requirements for Launching Graduate Programs

8.1 Classification-based application of NOC requirement

a) Effective from the enactment date of this policy, the top-ranked universities/DAIs/HEIs need NOT obtain the No Objection Certificate (NOC) from HEC, provided that these universities/DAIs have not violated the HEC's rules, regulations or policies in any material respect in the last two years. The top- ranked universities/DAIs/HEIs, found violating the HEC's rules/regulations/policies, shall be included in the lower category and may be dealt with in accordance with the HEC's policy for violation of rules.

b) All the universities/DAIs/HEIs enlisted in the categories below the top category must obtain NOC, prior to the launch of any graduate program, adhering to the following timelines:

- **Graduate Programs Launched Prior to November 7, 2013**

   For any graduate program launched before November 7, 2013, universities shall be required to ensure compliance with this policy. HEC shall ensure compliance systematically by applying an approved quality assurance mechanism.

- **Graduate Programs Launched After November 7, 2013**

   Any graduate program started after November 7, 2013, without getting an NOC from the HEC, shall not be recognized, and degrees awarded by such programs shall not be attested by the HEC.

c) The lower-category universities/DAIs/HEIs that have taken adequate and timely remedial measures to rectify the deficiencies/violations and have demonstrated an ability of sustainable compliance with the HEC's requirements may be included in the top category at the sole discretion of HEC.

d) Similarly, the top category universities may also be demoted to lower category where such universities have been found violating HEC's requirements within the past two years. For this purpose, the under-observation universities/DAIs/HEIs must take adequate and timely remedial measures to rectify violations.

e) The lowest category (Unclassified/Ineffective) universities shall not be allowed to launch more than two (2) PhD programs in a single year.

f) The Higher Education Commission shall issue lists of universities that are categorized in the aforementioned terms.

g) The universities/DAIs/HEIs, which are found violating the HEC's rules/regulations/policies, shall be dealt with in accordance with the HEC's policy.

8.2 Process and timelines for obtaining an NOC to launch graduate programs

The process and timeline for requesting NOCs to launch graduate programs shall be as follows:

a) Universities intending to launch a new graduate program shall submit a prescribed dossier, duly signed by the Dean, Registrar, Director Quality Enhancement, and head

b) f the relevant university, who shall certify the correctness of the information provided and shall ensure that all required documents are attached to the application dossier.

c) Universities shall apply for the NOC, before launching any new graduate programs, and no admissions shall be advertised unless the NOC has been obtained from the HEC.

d) Universities requesting NOCs to launch graduate programs in the fall semester shall apply no later than March 31 of the same year.

e) Universities requesting NOCs to launch a graduate program in the spring semester, shall apply no later than September 30 of the last year.

f) The HEC may, at its discretion, require an external review or zero visit in connection with the launch of graduate programs by a university.

8.3 Continuing compliance with the HEC's policies

If a university's application for launching a graduate program is successful, it shall be granted an NOC to start the program. Upon receiving NOC from the HEC, the university may launch the program subject to the following conditions:

a) The university shall ensure that it will continue to comply with the requirements set in this policy during the entire period in which it offers the graduate program.

b) If an ongoing program fails to meet any of the requirements set in this policy, the university shall immediately stop further admissions to the program and notify the HEC, including providing information on remedial actions being taken.

8.4 Cancellation of NOC and/or demotion to the lower category

If a graduate program fails to meet the requirements set in this policy, HEC may:

a) Stop all activities of the program for six months to compensate for the deficiencies, save exceptions mentioned at clause 7.2.4(c.iv).

b) Further intake may be stopped if deficiencies are not fulfilled within six (6) months of the date of the review report.

c) In case the major deficiencies are not fulfilled even one year after the date of review report, HEC may take the following actions:

- The university may be demoted to lower categories (if applicable), and

- NOC of the deficient graduate program may be cancelled; and/or

- Further, NOC for the under-consideration program may be banned for at least two years.

- In case a program is stopped, or NOC is cancelled, the students who are at an advanced stage *i.e.*, have passed Comprehensive Examinations and their research synopses have been notified by the Directorate of Advance Studies (or equivalent department), may be allowed to continue with their research if research supervisors are available. However, those who are yet to pass a comprehensive exam may stop or be allowed to quit or shift to another university at the risk and cost of the parent university.

d) The officers responsible for the cancellation of the NOC shall be subject to dealing under the retributive action policy. Retributive Actions for violation of rules

بانير ايجوكيشن كميشن
HIGHER EDUCATION COMMISSION
Government of Pakistan
Sector H-9, Islamabad,

Director General
(Attestation & Accreditation)

No.16(35)/A&A/Acc/HEC-2009//759
February 14, 2024
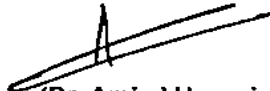
Subject: **Degree Verification of Imperial College of Business Studies (ICBS), Lahore in WP No 69095-21 Abid Hussain Vs HEC**

  Referring to your letter No: Reg/160623/10-53 dated June 16, 2023, upon evaluation of the submitted information by your office regarding the degree program of Transitional Doctor of Optometry and Post Professional Doctor of Optometry, it has been observed that no academic anomaly is observed, subject to the attestation/verification of previous credentials of the enrolled students by HEC. However, using the title Doctor is not permissible in light of the letter issued by HEC vide No. 9-1/HEC/Acad-Curri/2018/2372 dated September 04, 2018 (Copy enclosed). Hence, degree holders would not use the title of Doctor as explained in the annexed letter after the specified date.

2. However, it is important to mention that such students may not fall under the ban period of Imperial College of Business Studies i.e. Admissions were closed/banned from **19ᵗʰ October 2017**, Wherein, they were allowed to reopen admission in the following manner:

- For Undergraduate Programs from **19ᵗʰ September 2018** and
- For Post Graduate Programs from **11ᵗʰ January 2019**.

3. Given the aforesaid policy, the degrees of the students will be considered for attestation subject to the fulfillment of codal formalities.

(Dr. Amjad Hussain)

The Registrar,
Imperial College of Business Studies,
Lahore.

Copy for Information to:

1. **The Vice-Chancellor, Imperial College of Business Studies, Lahore**
2. **The Director General (Coordination), HEC, Islamabad**
3. **Office Copy**

Pakistan Qualifications Framework (PQF)

| Formal & Higher Education |

Years	Levels	Award Type	Award Example
21 20 19	8	Doctoral	PhD
18 17	7	Masters	M.Phil./MS/MBA, M.Sc. (Eng.), M.E, MArch etc
16 15	6	Bachelor	BS, B.E, B.Arch., BSc (Eng.), BSc (Agri), MA/MSc (16 year), LLB, B.Com (Hons), MBBA, DVM, PharmD, etc
14 13	5	Associate Ordinary Bachelor	BA/BSc (Pass), ADE, Associate Degrees etc

Higher Education Levels (rows for Years 13–21)

	12 11	4	Higher Secondary School Certificate (HSSC)	F.A, F.Sc, ICS, I.Com, DBA, D.Com etc

Intermediate Level

	10 9	3	Secondary School Certificate (SSC)	Matric

Matriculation Level

	2	Middle (3 Years)

	1	Primary (1-5 Years) Pre-Primary (1-2 Years)

INTERNATIONAL STANDARD CLASSIFICATION OF EDUCATION

Fields of education and training 2013 (ISCED-F 2013) – Detailed field descriptions

UNESCO
United Nations
Educational, Scientific and
Cultural Organization

UNESCO
INSTITUTE
for
STATISTICS

UNESCO

The constitution of the United Nations Educational, Scientific and Cultural Organization (UNESCO) was adopted by 20 countries at the London Conference in November 1945 and entered into effect on 4 November 1946. The Organization currently has 195 Member States and 9 Associate Members.

The main objective of UNESCO is to contribute to peace and security in the world by promoting collaboration among nations through education, science, culture and communication in order to foster universal respect for justice, the rule of law, and the human rights and fundamental freedoms that are affirmed for the peoples of the world, without distinction of race, sex, language or religion, by the Charter of the United Nations.

To fulfil its mandate, UNESCO performs five principal functions: 1) prospective studies on education, science, culture and communication for tomorrow's world; 2) the advancement, transfer and sharing of knowledge through research, training and teaching activities; 3) standard-setting actions for the preparation and adoption of internal instruments and statutory recommendations; 4) expertise through technical co-operation to Member States for their development policies and projects; and 5) the exchange of specialised information.

UNESCO is headquartered in Paris, France.

UNESCO Institute for Statistics

The UNESCO Institute for Statistics (UIS) is the statistical office of UNESCO and is the UN depository for global statistics in the fields of education, science and technology, culture and communication.

The UIS was established in 1999. It was created to improve UNESCO's statistical programme and to develop and deliver the timely, accurate and policy-relevant statistics needed in today's increasingly complex and rapidly changing social, political and economic environments.

The UIS is based in Montreal, Canada.

Contents

Introduction

The International Standard Classification of Education (ISCED) is a framework for assembling, compiling and analysing cross-nationally comparable statistics on education. ISCED is a member of the United Nations International Family of Economic and Social

Classifications and is the reference classification for organizing education programmes and related qualifications by levels and fields of education. First developed in the mid-1970s by the United Nations Educational, Scientific and Cultural Organization (UNESCO), ISCED has been revised several times, including in both 2011 and 2013.

The revision in 2011, concentrated primarily on changes to the levels of education of programmes (ISCED-P) and introduced, for the first time, a classification of levels of educational attainment based on qualifications (ISCED-A). The 2013 revision focused on the fields of education and training (ISCED-F). The ISCED revisions arethe product of international agreement and are adopted formally by the General Conference of UNESCO Member States.

The current document describes the subject content of each of the detailed fields of the 2013 revision of the ISCED Fields of Education and Training classification (ISCED-F 2013). Where possible each description gives examples both of subjects which belong to each field and some boundary cases which are included in other fields. Such exclusions help to better distinguish one field from another especially where the content of two fields appears to be similar.

At the end of the document there are alphabetical and numerical listings of subjects and fields. These lists include more examples of subjects than are mentioned in the field descriptions themselves.

A summary of all possible field codes and their place in the classification hierarchy is also included.

00 Generic programmes and qualifications

Generic programmes and qualifications are those providing fundamental and personal skills education which cover a broad range of subjects and do not emphasise or specialise in a particular broad or narrow field.

This broad field should not be used as a residual category. Programmes and qualifications with a **specific subject emphasis** should be classified in broad fields 01 to 10. In particular, education at the tertiary level should only by way of exception be classified here.

001 Basic programmes and qualifications

0011   Basic programmes and qualifications

Basic programmes and qualifications are designed to provide participants with fundamental skills 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. These programmes and qualifications are normally offered at primary and lower secondary levels. Broad, non-specialised programmes at upper secondary level are also classified here even if there is **some** concentration on, for example, humanities, social science, natural science etc. Vocational programmes and qualifications are included here only by way of exception.

Programmes and qualifications with the following main subject content are classified here:

> Basic programmes and qualifications

> Broad, generic (non-specialised) programmes and qualifications

> General programmes and qualifications with no specific subject emphasis

> Programmes and qualifications at primary level

Inclusions

Basic programmes and qualifications at upper secondary level (in some countries at lower secondary level) with some emphasis on e.g. humanities, social sciences or natural sciences but still covering other fields of knowledge are included in this detailed field. In some countries such programmes or qualifications are offered on a modular basis and should also be classified here.

Exclusions

Programmes that are considered as general in the programme orientation sense (non-vocational) but have a **clear** emphasis on a detailed, narrow or broad field are excluded from this detailed field and included in one of the broad fields 01-10, depending on the subject covered.

002   Literacy and numeracy

0021   Literacy and numeracy

Literacy and numeracy are programmes or qualifications arranged mainly for **adults**, designed to teach fundamental skills in reading, writing and arithmetic. The typical age range of participants can be used to distinguish between detailed field 0011 'Basic programmes and qualifications' and this detailed field.

Programmes and qualifications with the following main content are classified here:

Basic remedial programmes for youth or adults
Literacy
Numeracy

003   Personal skills

0031   Personal skills

Personal skills are defined by reference to the effects on the individual's capacity (mental, social etc.). This detailed field covers personal skills programmes not included in 0011 'Basic programmes and qualifications' or 0021 'Literacy and numeracy', giving key competencies and transferable skills.

Programmes and qualifications 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
Parenting courses
Public speaking
Self-esteem skills
Social competence
Time management

Inclusions

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

Education and training related to the *work place* or to *work assignments* is included in this detailed field if it has more to do with personal development than work development. Personal skills courses can be taught at the workplace, but still be classified here based on their content.

Programmes for people with special needs 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 detailed field 0413 'Management and administration'.

01 Education

011 Education

0111 Education science

Education science is the study of the learning process and the theories, methods and techniques of imparting knowledge to others.

Programmes and qualifications with the following main content are classified here:

> Curriculum studies
> Didactics
> Educational assessment, testing and measurement
> Educational evaluation and research
> Paedagogical sciences

Exclusions

Teacher training programmes which combine education science with the practice of teaching are excluded from this detailed field and included in one of the detailed fields for teacher training (0112-0114).

0112 Training for pre-school teachers

Training for pre-school teachers is the study of the theories, methods and practice of teaching very young children up to 7 years of age within formal school settings at pre-primary or early childhood educational development levels.

Programmes and qualifications with the following main content are classified here:

> Early childhood teaching (within formal school settings)
> Pre-primary teacher training

Exclusions

Training in caring for children outside formal school settings is excluded from this detailed field and included in detailed field 0922 "Child care and youth services"

0113 Teacher training without subject specialisation

Training for teachers without subject specialisation is the study of the theories, methods and practice of providing children between approximately 5 and 15 years of age with the fundamental skills in reading, writing and mathematics along with an elementary understanding of other subjects such as history, geography, social science etc. and laying the foundation for lifelong learning. Subject specialisation is stressed less than in detailed field 0114 'Teacher training with subject specialisation'. The study of teaching children with special needs is included in this detailed field, likewise the study of teaching adults fundamental reading and writing skills and teaching immigrants these types of skills in their home or first language.

Programmes and qualifications with the following main content are classified here:

    Class teacher training
    Indigenous teacher training
    Primary teaching
    Teacher training for children with special needs

Inclusions

The study of teaching adults basic literacy and numeracy skills is included here. Teacher's aide (teaching assistant) is also included here.

Exclusions

Teacher training with subject specialisation even if intended for the teaching of children in primary or lower secondary education is excluded from this detailed field and included in detailed field 0114 'Teacher training with subject specialisation'.

0114 Teacher training with subject specialisation

Teacher training with subject specialisation is the study of the theories, methods and practice of teaching a specific subject, mostly at secondary or higher levels of education. Programmes and qualifications included in this detailed field often comprise both studies as well as the subject/subjects that are going to be taught.

Programmes and qualifications 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 – second languages
    Teacher training − specific theoretical subjects, e.g. English, mathematics, history
    Teacher training − technical subjects
    Teacher training – vocational subjects
    Training of driving instructors
    Training of trainers

Inclusions

Teacher training courses for university teachers, instructors of work place and working life skills and in practical and artistic subjects are included here.

Exclusions

Training of sports trainers is excluded from this detailed field and included in detailed field 1014 'Sports'.

018   Inter-disciplinary programmes and qualifications involving education

0188   Inter-disciplinary programmes and qualifications involving education

Inter-disciplinary programmes and qualifications to which the greatest intended learning time is devoted to education are classified here.

02 Arts and Humanities

021 Arts

0211 Audio-visual techniques and media production

Audio-visual techniques and media production is the study of techniques and skills to produce books or newspapers, radio or TV production, film or video production, recorded music production and graphic reproduction. It includes programmes and qualifications 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 and qualifications with the following main content are classified here:

    Animation
    Bookbinding
    Camera operating
    Compositing (printing)
    Computer game production
    Computer type-setting
    Film and video production
    Graphic design
    Graphic reproduction
    Illustration
    Interactive media design
    Media techniques
    Multimedia production
    Photography
    Pre-press operations
    Print finishing and binding
    Printing
    Publishing design, lay-out
    Radio and TV production
    Recorded music production
    Sound techniques
    Type-setting

Inclusions

Desktop publishing and lay-out are included here.

Exclusions

Programmes and qualifications in the use of specific software applications for desktop publishing and website development are excluded from this detailed field and included in detailed field 0611 'Computer use".

Study of journalism (wording and content of messages) is excluded from this detailed field and included in detailed field 0321 'Journalism and reporting'.

0212   Fashion, interior and industrial design

Fashion, interior and industrial design is the study of creatively combining line, form and fabric in designing and constructing e.g. fashion garments, industrial products and interiors.

Programmes and qualifications 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 detailed field and included in detailed field 0731 'Architecture and town planning'.

Study of Industrial design is excluded from this detailed field if emphasis is given to technical subjects and not to artistic design, and included in the appropriate detailed field under 071 'Engineering and engineering trades'.

Publishing design and graphic design are excluded from this detailed field and included in detailed field 0211 'Audio-visual techniques and media production'.

0213   Fine arts

Fine arts is the study of visual forms of creative expression, dealing with theory, history, techniques, performance and production in fine arts.

Programmes and qualifications with the following main content are classified here:

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

Exclusions

Training in ceramics, pottery etc is excluded from this detailed field and included in detailed field 0214 'Handicrafts'.

Study of architecture is excluded from this detailed field and included in detailed field 0731 'Architecture and town planning'.

Teacher training in arts is excluded from this detailed field and included in detailed field 0114 'Teacher training with subject specialisation'.

0214   Handicrafts

Handicrafts is the study of techniques and skills in a chosen craft, such as jewellery, pottery, weaving, woodcarving etc.

Programmes and qualifications with the following main content are classified here:

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

Exclusions

Study of industrial (large scaled mechanised) production of pottery, woven materials, embroidery etc. is excluded from this field and included in one of the detailed fields under broad field 07 'Engineering, manufacturing and construction'.

0215   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 and qualifications with the following main content are classified here:

    Acting and directing
    Ballet
    Choreography
    Circus
    Composition (music)
    Conducting (music)
    Creative and performance art
    Dance
    Drama
    History of film and theatre
    History of music
    Music
    Music conducting
    Musicology
    Theatre/Theatre sciences

Study of music and performing arts history and theory is included here.

Exclusions

Teacher training in music and other performing arts is excluded from this detailed field and included in detailed field 0114 'Teacher training with subject specialisation'.

022   Humanities (except languages)

0221   Religion and theology

Religion and theology is the study of religious beliefs, concepts, symbols, expressions and texts of spirituality.

Programmes and qualifications with the following main content are classified here:

> Religious history
> Study of sacred books
> Study of different religions
> Theology

Inclusions

Included in this detailed 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 detailed field and included in 0011 'Basic programmes and qualifications'. Islamic sharia programmes and qualifications are excluded from this detailed field and included in detailed field 0421 'Law'.

0222   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. History of medicine is classified here, 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 and qualifications with the following main content are classified here:

> Archaeology
> Cultural history
> Folklore studies
> History
> History of literature
> History of medicine
> History of science and ideas
> History of technology

Restoration and preservation of artistic heritage are included here.

Exclusions

Study of literature combined with study of a specific language is excluded from this detailed field and included in detailed field 0232 'Literature and linguistics'.

Study of classical languages (Latin etc.) is excluded from this detailed field and included in detailed field 0231 'Language acquisition'.

Study of History of art is excluded from this detailed field and included in detailed field 0213 'Fine arts'.

Study of Music and performing arts history is excluded from this detailed field and included in detailed field 0215 'Music and performing arts'.

Study of Economic history/history of economics is excluded from this detailed field and included in detailed field 0311 'Economics'.

0223   Philosophy and ethics

Philosophy and ethics is the study of philosophy, ethics and related subjects dealing with the conception of life.

Programmes and qualifications with the following main content are classified here:

Ethics
Logic
Morals
Philosophy

Exclusions

Study of religion is excluded from this detailed field and included in detailed field 0221 'Religion'.

Study of Philosophy of arts is excluded from this detailed field and is included in detailed field 0213 'Fine arts'

023   Languages

0231   Language acquisition

Language acquisition is the study of the structure and composition of languages taught as second or foreign languages (i.e. that are intended for non-native or non-fluent speakers of the language). It includes the study of related cultures, literature, linguistics and phonetics if related to the specific language being acquired and forms part of the same programme or qualification. Classical or dead languages are included here as it is assumed there are no native speakers of the language and hence the manner of teaching and the content of the curriculum are more similar to the teaching of foreign languages.

Programmes and qualifications with the following main content are classified here:

> Classical languages
> Exogenous languages
> Foreign languages
> Interpretation
> Phonetics
> Second languages, for example English as a second language
> Sign language
> Sign language interpreting
> Translation

Inclusions:

Language and linguistics studies are included here if the linguistics are related to a specific language or languages being acquired and forming part of the same programme or qualification. Translation and interpretation are included here.

Exclusions:

The study of the mother tongue or first language (i.e. that are intended for native, fluent or competent speakers of the language), even if this language is not a national language of the country of study (e.g. programmes for immigrants learning their mother tongue) are excluded from this detailed field and included in detailed field 0232 'Literature and linguistics'.

0232   Literature and linguistics

Literature and linguistics is here defined as the study of language(s) intended for native, fluent or competent speakers of the language. It includes the study of related literature and linguistics and may or may not include the structure and composition of the language.

Programmes and qualifications with the following main content are classified here:

> Creative writing
> First language
> Indigenous languages
> Linguistics
> Literature
> "Mother tongue" languages
> Native first languages

Inclusions

Languages **taught as the first language ("mother tongue")**, even if the language is not the national language of the country of study (e.g. programmes for immigrants in their home or first language) are included here. Local and regional languages are included here if they are first languages spoken by a significant minority in the country and are intended for at least competent speakers of the language.

Study of comparative literature is included here. Study of general linguistics (not related to the study of a particular language) is included here. Study of literature in general (not combined with study of a special language) is included here.

Exclusions

Language programmes are excluded from this detailed field if the language is taught as a foreign or a second language, and are then included in 0231 'Language acquisition'.

Programmes in literacy and numeracy are excluded from this detailed field and included in detailed field 0021 'Literacy and numeracy'.

Sign language programmes are excluded from this detailed field and included in detailed field 0231 'Language acquisition'.

028   Inter-disciplinary programmes and qualifications involving arts and humanities

0288   Inter-disciplinary programmes and qualifications involving arts and humanities

Inter-disciplinary programmes and qualifications to which the greatest intended learning time is devoted to arts and humanities are classified here.

03 Social Sciences, Journalism and Information

031   Social and behavioural sciences

0311   Economics

Economics is the study of economic policy, economic theory and economic decisionmaking.

Programmes and qualifications with the following main content are classified here:

Econometrics
Economic history
Economics
Political economics

Exclusions

Study of economics where emphasis is given to business studies is excluded from this detailed field and classified under 041 'Business and administration'. Study of home economics is excluded from this detailed field and included in the detailed field 1011 'Domestic services'.

0312   Political sciences and civics

Political sciences and civics is the study of government and political principles or practice. The study of the rights and duties of the citizens are included here.

Programmes and qualifications with the following main content are classified here:

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

Exclusions

Study of political economics is excluded from this detailed field and included in the detailed field 0311 'Economics'.

0313   Psychology

Psychology is the study of the human mind and behaviour as a result of individual differences, experience and environment.

Programmes and qualifications with the following main content are classified here:

Cognitive science
Psychoanalysis
Psychology
Psychotherapy

0314   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 society. The study of ethnology and social anthropology are included here, likewise the study of human and social geography.

Programmes and qualifications with the following main content are classified here:

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

Exclusions

Social welfare where emphasis is given to practical social work is excluded from this detailed field and included in detailed field 0923 'Social work and counselling'.

Physical geography is excluded from this detailed field and included in detailed field 0532 'Earth science'.

032   Journalism and information

0321   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 and qualifications with the following main content are classified here:

Broadcast journalism
Editing
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 detailed field and included in detailed field 0211 'Audio-visual techniques and media production'.

Study of lay-out and publishing design is excluded from this detailed field and included in detailed field 0211 'Audio-visual techniques and media production'.

Study of public relations is excluded from this detailed field and included in detailed field 0414 'Marketing and advertising'.

0322   Library, information and archival studies

Library, information and archival studies is the study of the methods of selecting, acquiring, organizing and storing collections of information, and facilitating the use of information. Museum and library studies are included here.

Programmes and qualifications with the following main content are classified here:

    Archival sciences
    Curatorial studies
    Documentation
    Information science
    Library studies
    Museum documentation
    Museum studies
    Museology

Exclusions

Restoration and preservation of artistic heritage are excluded from this field and included in field 0222 'History and archaeology'.

038 Inter-disciplinary programmes and qualifications involving social sciences, journalism and information

0388   Inter-disciplinary programmes and qualifications involving social sciences, journalism and information

Inter-disciplinary programmes and qualifications to which the greatest intended learning time is devoted to social sciences, journalism and information are classified here.

04 Business, Administration and Law

041 Business and administration

0411 Accounting and taxation

Accounting and taxation is the study of maintaining, auditing and recording financial transactions.

Programmes and qualifications with the following main content are classified here:

Accounting
Auditing
Bookkeeping
Tax accounting
Tax management

Exclusions

Study of tax laws is excluded from this detailed field and included in detailed field 0421 'Law'.

0412 Finance, banking and insurance

Finance, banking and insurance is the study of planning, directing, organizing and controlling financial activities and services. It includes the control and monitoring of the financial resources of organizations, institutions and individuals, and the provision of financial services at the corporate and individual level.

Programmes and qualifications with the following main content are classified here:

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

Exclusions

Study of actuarial science is excluded from this detailed field and included in detailed field 0542 'Statistics'.

0413 Management and administration

Management and administration is the study of planning, directing and operating the functions and activities of organizations and institutions. Programmes in management also including administration, economics, finance etc. are included here if emphasis is given to management and administration.

Programmes and qualifications with the following main content are classified here:

Administration
Educational management
Employment management
Entrepreneurship
Health administration
Logistic management
Management science
Office management
Organizational theory and behaviour
Personnel administration
Personnel management
'Start your own business' courses
Supply change management
Training management

Inclusions:

Study of leadership in the context of management is included here.

Exclusions:

Training in leadership in the context of personal development is excluded from this detailed field and included in detailed field 0031 'Personal skills'.

Study of administration in the meaning of office work is excluded from this detailed field and included in detailed field 0415 'Secretarial and office work'.

0414   Marketing and advertising

Marketing and advertising is the study of promoting the exchange processes of goods and services between organizations 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 and qualifications with the following main content are classified here:

Advertising
Consumer behaviour
Market research
Marketing
Merchandising
Public relations

0415   Secretarial and office work

Secretarial and office work is the study of administrative procedures and practices, 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 and qualifications 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 equipment
Receptionist training
Secretarial programmes
Shorthand
Switchboard operating
Typing

Inclusions

Broad secretarial programmes comprising among other things computer courses are included here.

Exclusions

Separate programmes or qualifications in using a specific computer software are excluded from this detailed field and included under detailed field 0611 'Computer use".

Office management is excluded from this detailed field and included in detailed field 0413 'Management and administration'.

Hotel receptionist programmes are excluded from this detailed field and included in detailed field 1013 'Hotel, restaurant and catering'.

0416   Wholesale and retail sales

Wholesale and retail sales is the study of buying and selling goods and services, including stock management, pricing practices, loss prevention, sales 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 and qualifications 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 here.

0417   Work skills

Work skills 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 work assignments.

Programmes and qualifications with the following main content are classified here:

Clients' needs
Company knowledge
Customer service training
'Introduction to work' courses
Organization at work
Quality assurance
Trade union courses (general)
Work development

Inclusions

Staff training related to the work place or work assignments is included here.

Exclusions

Training related to the work place or work assignments is excluded from this detailed field if it has more to do with personal development than work development and is included in detailed field 0031 'Personal skills'.

Staff training which can be classified to any other field is excluded from this detailed field and included in the appropriate field (e.g. quality courses should, if technical, be included in the detailed fields under 071 'Engineering and engineering trades'.)

Programmes in work environment should be included in detailed field 1022 '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 from this detailed field and included in the detailed fields under 031 'Social and behaviour sciences'.

042   Law

0421   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 and qualifications with the following main content are classified here:

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

<u>Exclusions</u>

Court reporting programmes and legal secretary programmes are excluded from this detailed field and included in detailed field 0415 "Secretarial and office work".

Police studies are excluded from this detailed field and included in detailed field 1032 'Protection of persons and property'.

048   Inter-disciplinary programmes and qualifications involving business, administration and law

0488   Inter-disciplinary programmes and qualifications involving business, administration and law

Inter-disciplinary programmes and qualifications to which the greatest intended learning time is devoted to business, administration and law are classified here.

<u>Inclusions</u>

Study of business and administration where emphasis is not given towards any of the detailed fields under 041 is included in this field.

<u>Exclusions</u>

Business programmes where emphasis is given to any of the detailed fields under 041 'Business and administration' (management, administration, marketing etc.) should be classified according to the specialisation.

05 Natural Sciences, Mathematics and Statistics

051 Biological and related sciences

0511 Biology

Biology is the study of the structure, function, reproduction, growth, evolution and behaviour of all living organisms.

Programmes and qualifications with the following main content are classified here:

Biology
Botany
Cell biology
Entomology
Genetics
Mycology
Zoology

Exclusions

Study of environmental sciences, which is the study of the relation between living organisms and the environment, is excluded from this detailed field and included in detailed field 0521 'Environmental sciences'. Study of chemical processes in living organisms (biochemistry, toxicology, pharmacology etc.) is excluded from this detailed field and included in detailed field 0512 'Biochemistry'.

0512 Biochemistry

Biochemistry, sometimes called Biological chemistry, is the study of the chemistry of living organisms, including but not limited to, living matter.

Programmes and qualifications with the following main content are classified here:

Biological chemistry
Cell technology
Forensic sciences
Genetic code (DNA, RNA) studies
Genetic engineering
Pharmacology
Tissue culture technology
Toxicology
Virology

Inclusions

Biotechnology is included here.

052 Environment

0521 Environmental sciences

Environmental sciences are the study of organisms in relation to one another and to the environment.

Programmes and qualifications with the following main content are classified here:

Ecology
Environmental science

Exclusions

The study of biology and toxicology are excluded from this detailed field and included under narrow field 051 'Biological and related sciences'.

0522 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 the study of establishing and maintaining national parks in order to preserve their original natural state.

Programmes and qualifications with the following main content are classified here:

National parks and wildlife management
Nature conservation
Wildlife

Exclusions

Study of agriculture, horticulture and forestry are excluded from this detailed field and included in some of the detailed fields under 08 'Agriculture, forestry, fisheries and veterinary'.

Study of hunting and trapping is excluded from this detailed field and included in detailed field 0821 'Forestry'.

053 Physical sciences

0531 Chemistry

Chemistry is the study of substances and their elements and how they react when combined.

Programmes and qualifications with the following main content are classified here:

Inorganic chemistry
Organic chemistry
Physical chemistry

Exclusions

Biochemistry is excluded from this detailed field and included in detailed field 0512 'Biochemistry'.

0532   Earth sciences

Earth sciences is the study of the composition and structure of earth including the hydrosphere and the atmosphere.

Programmes and qualifications with the following main content are classified here:

Climate research
Earth science
Geodesy
Geography (physical)
Geology
Geomatics
Geospatial technology
Meteorology
Oceanography
Seismology

Exclusions

Social geography is excluded from this detailed field and included in detailed field 0314 'Sociology and cultural studies'. Soil science is excluded from this detailed field and included in detailed field 0811 'Crop and livestock production'.

0533   Physics

Physics is the study of properties and interactions of matter and energy. It includes the study of astronomy and space science.

Programmes and qualifications with the following main content are classified here:

Astronomy
Astrophysics
Chemical physics
Medical physics
Optics
Physics
Space science

Exclusions

Opticians' practice is excluded from this detailed field and included in detailed field 0914 'Medical diagnostic and treatment technology'.

054   Mathematics and statistics

0541   Mathematics

Mathematics is the study of abstract deductive systems. It includes algebra, arithmetic, geometry, real and complex analysis and pure and applied mathematics.

Programmes and qualifications with the following main content are classified here:

  Algebra
  Geometry
  Mathematics
  Numerical analysis
  Operational research

0542   Statistics

Statistics is the study of collecting, describing, arranging and analysing numerical data. The study of probability theory and actuarial science is included.

Programmes and qualifications with the following main content are classified here:

  Actuarial science
  Probability theory
  Statistics, applied
  Survey design
  Survey sampling

Inclusions

Study of mathematical (theoretical) statistics is included here.

Exclusions

Demography/population studies is excluded from this detailed field and included in detailed field 0314 'Sociology and cultural studies'.

058 Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics

0588   Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics

Inter-disciplinary or broad programmes and qualifications to which the greatest intended learning time is devoted to natural sciences, mathematics and statistics are classified here.

06 Information and Communication Technologies

061   Information and Communication Technologies

0611   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 and qualifications with the following main content are classified here:

> Computer use
> Use of software for calculating (spread sheets)
> Use of software for data processing
> Use of software for desk top publishing
> Use of software for word processing
> Use of Internet

0612   Database and network design and administration

Database and network design and administration is the study of the design, maintenance and integration of software applications. Computer media applications are included.

Programmes and qualifications with the following main content are classified here:

> Computer administration and management
> Computer media applications
> Computer network installation and maintenance
> Database administrator studies
> Information technology administration
> Information technology security
> Network administration
> Network design
> Web design

0613   Software and applications development and analysis

Software and applications development and analysis is the study of the design and development of computer systems and computing environments.

Programmes and qualifications with the following main content are classified here:

> Computer programming
> Computer science
> Computer systems analysis
> Computer systems design
> Informatics
> Operating systems
> Programming languages development
> Software development
> Software programming

<u>Exclusions</u>

Computer engineering (hardware) is excluded from this detailed field and included in detailed field 0714 'Electronics and automation'.

Programmes and qualifications in using computer applications are excluded from this detailed field and included in detailed field 0611 'Computer use'. Database and network design and administration is excluded from this detailed field and included in detailed field 0612 'Database and network design and administration'.

0619   Information and Communication Technologies not elsewhere classified

Information technology studies not fitting in the detailed fields are classified here:

>   Artificial intelligence

068 Inter-disciplinary programmes and qualifications involving Information and Communication Technologies

0688   Inter-disciplinary programmes and qualifications involving Information and Communication Technologies

Inter-disciplinary programmes and qualifications to which the greatest intended learning time is devoted to information and communication technologies (ICTs) are classified here.

07 Engineering, Manufacturing and Construction

071 Engineering and engineering trades

0711 Chemical engineering and processes

Chemical engineering and processes 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 and qualifications with the following main content are classified here:

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

Inclusions

Laboratory technology is included here if emphasis is not given to a specific application.

Exclusions

Laboratory technology is excluded from this detailed field if emphasis is given to a specific application (biological, medical, etc.) and is included under the appropriate detailed field (0914 etc.). Biotechnology is excluded from this detailed field and included in detailed field 0512 'Biochemistry'.

Programmes and qualifications with emphasis on the production of a specific material are excluded from this detailed field (e.g. studies with emphasis on paper processing should be included in detailed field 0722 'Materials (glass, paper, plastic, wood)'.

0712 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 and qualifications with the following main content are classified here:

Air pollution control
Ecological technology
Energy efficiency
Environmental engineering
Industrial discharge control
Noise pollution control
Recycling
Water pollution control

Programmes and qualifications dealing with hygienic standards in food, water etc. are excluded from this detailed field and included in detailed field 1021 'Community sanitation'.

Construction related to waste and water management is excluded from this detailed field and included in detailed field 0732 'Building and civil engineering'.

0713   Electricity and energy

Electricity and energy 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 and qualifications with the following main content are classified here:

> Air-conditioning trades
> Climate engineering
> Electrical appliances repairing
> Electrical engineering
> Electrical fitting
> Electrical power generation
> Electrical trades
> Energy studies
> Gas distribution
> Heating trades
> Nuclear, hydraulic and thermal energy
> Power line installation and maintenance
> Power production
> Refrigeration
> Solar power
> Wind turbines

Inclusions

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

Exclusions

Study of vehicle electrical systems is excluded from this detailed field and included in detailed field 0716 'Motor vehicles, ships and aircraft'.

0714   Electronics and automation

Electronics and automation is the study of planning, designing, developing maintaining and monitoring electronic equipment, machinery and systems. It includes designing computers and equipment for communication.

Programmes and qualifications with the following main content are classified here:

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

Exclusions

Computer science (Software and applications development) is excluded from this detailed field and included under 0613 'Software and applications development and analysis'.

0715   Mechanics and metal trades

Mechanics and metal 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 study in this detailed field is machines, mechanical systems and metal products.

Programmes and qualifications with the following main content are classified here:

    Gunsmithing
    Hydraulics
    Locksmithing and safe repairing
    Mechanical engineering
    Mechanical trades
    Metal casting and patternmaking
    Metal fitting, turning and machining
    Metallurgical engineering
    Precision mechanics
    Sheet metal working
    Steel production
    Tool and die making
    Welding

Exclusions

The study of motor vehicle mechanics and engineering is excluded from this detailed field and included in detailed field 0716 'Motor vehicles, ships and aircraft'.

0716   Motor vehicles, ships and aircraft

Motor vehicles, ships and aircraft is the study of designing, developing, producing, maintaining, diagnosing faults in, repairing and servicing motor vehicles, including earth moving equipment and agriculture machines, ships, trains and aircraft. Typical is the combination of studies in both metal structures and motors.

Programmes and qualifications with the following main content are classified here:

> Aerospace engineering
> Aircraft engineering
> Aircraft maintenance
> Automotive electrical systems
> Automotive engineering
> Avionics
> Coachwork
> Marine engineering
> Motorcycle engineering
> Panel beating
> Shipbuilding
> Train repair and maintenance
> Vehicle building and repairing
> Vehicle varnishing/spraying

Inclusions

Study of vehicle electrical systems is included here.

Exclusions

Study of producing and repairing non-motorised vehicles is excluded from this detailed field and included in 0715 'Mechanics and metal work' (e.g. bicycles) or 0722 'Materials (glass, paper, plastic, wood)' (e.g. non-motor boats).

0719   Engineering and engineering trades not elsewhere classified

Engineering studies not covered by other detailed fields are classified here:

> Nanotechnology

072   Manufacturing and processing

0721   Food processing

Food 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 and qualifications with the following main content are classified here:

Baking
Beer brewing
Butchery
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 here.

Exclusions

Restaurant and catering are excluded from this detailed field and included in detailed field 1013 'Hotel, restaurant and catering'.

Nutrition science is excluded from this detailed field and included in narrow field 051 'Biological and related sciences'.

0722   Materials (glass, paper, plastic and wood)

Materials is the study of the **manufacturing of products** in glass, paper, plastic, wood or other materials like stone, clay, artificial materials etc. Programmes and qualifications included in this detailed field have more to do with a specific material than general technical knowledge.

Programmes and qualifications with the following main content are classified here:

Boat building (non-motor)
Cabinet making
Carpentry (furniture)
Ceramics (industrial)
Furniture making
Glass working (industrial)
Industrial diamond production
Paper manufacturing and processing
Plastic manufacturing
Rubber processing
Timber technology
Wood machining and turning
Woodwork trades

Study of metal work is excluded from this detailed field and included in detailed field 0715 'Mechanics and metal trades'.

Study of building carpentry and joinery is excluded from this detailed field and included in detailed field 0732 'Building and civil engineering'.

Study of chemical processing in general is excluded from this detailed field and included in detailed field 0711 'Chemical engineering and processes'.

Study of printing and bookbinding is excluded from this detailed field and included in detailed field 0211 'Audio-visual techniques and media production'.

Handicrafts programmes (glass arts and crafts, woodcarving etc) are excluded from this detailed field and included in detailed field 0214 'Handicrafts'.

0723   Textiles (clothes, footwear and leather)

Textiles (clothes, footwear and leather) is the study of the manufacture of textiles, textile and leather products, clothing and related items, shoes and other forms of footwear.

Programmes and qualifications with the following main content are classified here:

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

Exclusions

Handicrafts studies (weaving, embroidery etc.) are excluded from this detailed field and included in detailed field 0214 'Handicrafts'.

0724   Mining and extraction

Mining and extraction is the study of assessing, planning, developing, and directing the extraction of minerals, oil and gas from the earth.

Programmes and qualifications with the following main content are classified here:

> Coal mining
> Mineral technology
> Mining of minerals
> Oil and gas drilling
> Oil and gas extraction
> Raw material extraction

Exclusions

Study of metallurgical engineering is excluded from this detailed field and included in 0715 'Mechanics and metal trades'

Study of geology is excluded from this detailed field and included in detailed field 0532 'Earth sciences'.

073 Architecture and construction

0731 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 and qualifications 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

Exclusions

Study of interior design is excluded from this detailed field and included in detailed field 0212 'Fashion, interior and industrial design'. Geomatics is excluded from this detailed field and included in detailed field 0532 'Earth science'.

The laying out and construction of parks and gardens is excluded from this detailed field and included in detailed field 0812 'Horticulture'.

0732   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 and qualifications with the following main content are classified here:

> Bricklaying
> Bridge construction
> Building construction
> Building engineering
> Building technology
> Carpentry and joinery (building)
> Civil engineering
> Construction equipment
> Constructional metalwork (building)
> Dock and harbour engineering
> Floor and wall tiling
> Floor covering
> House building
> Industrial abseiling (commercial)
> Masonry 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 detailed field and included in detailed field 0713 'Electricity and energy'. Similarly, installing and repairing of heating, air-conditioning and refrigeration equipment is excluded from this detailed field and included in detailed field 0713 'Electricity and energy'.

078 Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction

0788   Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction

Inter-disciplinary or broad programmes and qualifications to which the greatest intended learning time is devoted to engineering, manufacturing and construction are classified here.

08 Agriculture, Forestry, Fisheries and Veterinary

081   Agriculture

0811   Crop and livestock production

Crop and livestock production 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 and qualifications with the following main content are classified here:

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

Inclusions

Study of soil fertility and irrigation techniques are included here.

Study of growing intensively managed crops such as fruit and vegetables is included here.

Exclusions

Study of wine production is excluded from this detailed field and is included in detailed field 0721 'Food processing'.

Jockeying is excluded from this detailed field and is included in detailed field 1014 'Sports'

0812   Horticulture

Horticulture is the study of horticultural technology and management, floriculture, greenhouse methods, nursery management, landscape gardening etc.

Programmes and qualifications with the following main content are classified here:

Floriculture
Gardening
Green keeping
Horticultural techniques
Nursery management
Turf cultivation

Inclusions

The laying out and construction of urban and domestic parks and gardens is included here.

Gardening programmes combining floriculture and growing vegetables are included here.

Exclusions

Study of growing edible crops (such as wheat, rice, fruit, vegetables etc,) is excluded from this detailed field and included in detailed field 0811 'Crop and livestock production'.

Study of soil science, soil fertility and irrigation techniques is excluded from this detailed field and included in detailed field 0811 'Crop and livestock production'.

Study of National park management is excluded from this detailed field and included in detailed field 0522 'Natural environments and wildlife'.

Study of Landscape architecture is excluded from this detailed field and included in detailed field 0731 'Architecture and town planning'.

082 Forestry

0821   Forestry

Forestry is the study of establishing, cultivating, harvesting and managing forests. It includes the study of hunting and trapping.

Programmes and qualifications with the following main content are classified here:

Charcoal burning
Forest keeping
Forest product techniques
Forestry
Hunting and trapping
Logging
Tree felling

Exclusions

Study of National park management is excluded from this detailed field and included in detailed field 0522 'Natural environments and wildlife'.

Timber technology (sawmill production etc) is excluded from this detailed field and included in detailed field 0722 'Materials (glass, paper, plastic and wood)'.

083 Fisheries

0831   Fisheries

Fisheries is the study of breeding, rearing and harvesting fish and other seafood.

Programmes and qualifications with the following main content are classified here:

Aquaculture
Fish breeding
Fish farms
Fishery science and technology
Pearl cultivating
Seafood farming
Shellfish breeding

Inclusions

Programmes for operating fishing boats are included here.

Exclusions

Study of industrial processing of fish is excluded from this detailed field and included in detailed field 0721 'Food processing'.

084 Veterinary

0841   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. It also includes the study of providing assistance to veterinary scientists.

Programmes and qualifications with the following main content are classified here:

Animal health care
Animal reproduction (science)
Artificial insemination (of animals)
Veterinary assisting
Veterinary medicine
Veterinary nursing
Veterinary science

Inclusions

The science of animal reproduction is included here.

Exclusions

Study of animal breeding is excluded from this detailed field and included in detailed field 0811 'Crop and livestock production'.

088 Inter-disciplinary programmes and qualifications involving agriculture, forestry, fisheries and veterinary

0888   Inter-disciplinary programmes and qualifications involving agriculture, forestry, fisheries and veterinary

Inter-disciplinary or broad programmes and qualifications to which the greatest intended learning time is devoted to agriculture, forestry, fisheries and veterinary are classified here.

09 Health and Welfare

091   Health

0911   Dental studies

Dental studies are 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 and qualifications with the following main content are classified here:

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

Inclusions

Study of public dental health is included here.

0912   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 detailed field consists of training of physicians/doctors.

Programmes and qualifications with the following main content are classified here:

Anaesthetics
Forensic medicine
Forensic pathology
General medicine
Gerontology
Gynaecology
Medical science
Medical training
Medicine
Paediatrics
Psychiatry
Surgery
Training of physicians/doctors

0913   Nursing and midwifery

Nursing 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 of patients during illness and rehabilitation. It includes health care of old people and health care of the disabled. **Midwifery** is the study of providing care to childbearing women during pregnancy, labour and birth and during the postpartum period. It also includes caring for the new born and assisting the mother with breast feeding.

Programmes and qualifications with the following main content are classified here:

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

Inclusions

Care programmes comprising **both health care and social care** e.g. for old people, are included here.

Exclusions

Veterinary nursing is excluded from this detailed field and is included in detailed field 0841 'Veterinary'.

Dental nursing is excluded from this detailed field and is included in detailed field 0911 'Dental studies'.

Non-medical care of children (not health care) is excluded from this detailed field and included in detailed field 0922 'Child care and youth services'.

Non-medical care of the elderly (not health care) is excluded from this detailed field and included in detailed field 0921 'Care of the elderly and disabled adults'.

0914   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 and qualifications with the following main content are classified here:

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

Exclusions

Study of laboratory technology is excluded from this detailed field if emphasis is not given to medical laboratory technology. General laboratory technology is included in detailed field 0711 'Chemical engineering and processes'. Laboratory technology where emphasis is given to other specific applications (biology, chemistry, physics etc) is included in the appropriate detailed field (0511, 0531, 0533 etc.).

Study of dental technology is excluded from this detailed field and included in detailed field 0911 'Dental studies'.

0915   Therapy and rehabilitation

Therapy and rehabilitation is the study of restoring normal physical conditions to those incapacitated by temporary or permanent disability.

Programmes and qualifications with the following main content are classified here:

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

Exclusions

Study of psychotherapy is excluded from this detailed field and included in detailed field 0313 'Psychology'.

Study of nutrition **science** is excluded from this detailed field and included in narrow field 051 'Biological and related sciences'.

0916   Pharmacy

Pharmacy is the study of drugs and their effects on humans. It includes their preparation, dispensing and administration.

Programmes and qualifications with the following main content are classified here:

   Dispensing pharmacy
   Pharmacy

<u>Exclusions</u>

Study of pharmacology is excluded from this detailed field and included in detailed field 0511 'Biology'.

0917   Traditional and complementary medicine and therapy

Traditional and complementary medicine is the study of alternative medicine.

Programmes and qualifications with the following main content are classified here:

   Acupuncture and oriental medicine
   Aromatherapy
   Ayurvedic medicine
   Herbalism
   Herbology
   Holistic medicine
   Homeopathic medicine
   Traditional medicine, for example Chinese

092 Welfare

0921   Care of elderly and of disabled adults

Care of the elderly and of disabled adults is the study of **non-medical care** of the elderly and disabled.

Programmes and qualifications with the following main content are classified here:

   Care of the elderly
   Non-medical care of disabled adults
   Personal care of adults

<u>Exclusions</u>

Study of health care of the elderly and disabled is excluded from this detailed field and included in detailed field 0913 'Nursing and midwifery'.

0922   Child care and youth services

Child care and youth services are the study of the development and **non-medical care** of children and youths. It includes the study of recreation and leisure activities as a social service for school children and young adults.

Programmes and qualifications with the following main content are classified here:

    Child care
    Child recreation programmes
    Day care
    Non-medical care of disabled children
    Youth services
    Youth worker programmes

Exclusions

Study of early childhood education in pre-schools is excluded from this detailed field and included in detailed field 0112 'Training for pre-school teachers'.

Study of health care of children is excluded from this detailed field and included in detailed field 0913 'Nursing and midwifery'.

0923   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 and qualifications 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)
    Parole officer training
    Probation officer training
    Social policy
    Social practice
    Social theory (applied)
    Social work (welfare)
    Vocational counselling
    Vocational guidance

Exclusions

Study of sociology and social science is excluded from this detailed field and included in detailed field 0314 'Sociology and cultural studies'.

Studies combining health care and social care (e.g. for old people) are excluded from this detailed field and included in detailed field 0913 'Nursing and midwifery'.

098   Inter-disciplinary programmes and qualifications involving health and welfare

0988   Inter-disciplinary programmes and qualifications involving health and welfare

Inter-disciplinary or broad programmes and qualifications to which the greatest intended learning time is devoted to health and welfare are classified here.

10 Services

101 Personal services

1011 Domestic services

Domestic services are the study of various domestic services, such as housekeeping, cleaning, laundering, sewing etc.

Programmes and qualifications with the following main content are classified here:

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

Inclusions

Cleaning is included here even if directed towards cleaning schools, hospitals, factories etc.

Exclusions

Study of building maintenance is excluded from this detailed field and included in detailed field 0732 'Building and civil engineering'.

1012 Hair and beauty services

Hair and beauty services are the study of caring for the hair and the body for beautification.

Programmes and qualifications with the following main content are classified here:

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

1013 Hotel, restaurants and catering

Hotel, restaurants and catering is the study of providing food, beverages, accommodation and related services at hotels, restaurants etc.

Programmes and qualifications with the following main content are classified here:

Catering
Cooking (restaurant and hotel-type)
Fast food preparation
Food serving
Hospitality services
Hotel and restaurant studies
Hotel receptionist training
Hotel services
Waiting and bar service

Exclusions

Study of food processing (industrial) is excluded from this detailed field and included in detailed field 0721 'Food processing'.

Receptionist training (general) is excluded from this detailed field and included in detailed field 0415 'Secretarial and office work'.

1014   Sports

Sports is the study of techniques and skills in a chosen sport.

Programmes and qualifications with the following main content are classified here:

Sport trainer studies
Techniques and skills in a chosen sport
Training of umpires/referees and other sports officials

Inclusions

Jockeying is included here. Chess playing is included here.

Exclusions

Training of school teachers in physical education (sports teachers) is excluded from this detailed field and included in detailed field 0114 'Teacher training with subject specialisation'.

Fitness services are excluded from this detailed field and included in detailed field 1012 'Hair and beauty services'.

1015   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 and qualifications with the following main content are classified here:

Abseiling (rope climbing)
Adventure based activities
Ground crew training (airport)
Guiding, tour leading
Recreation and leisure
Tourist trades programmes
Travel agency services
Travel and tourism
Travel services

Inclusions

Basic training in how to treat tourists is included here.

Exclusions

Study of recreation and leisure activities for school children is excluded from this detailed field and included in detailed field 0922 'Child care and youth services'.

102   Hygiene and occupational health services

1021   Community sanitation

Community sanitation 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 and qualifications with the following main content are classified here:

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

1022   Occupational health and safety

Occupational health and safety is the study of recognising, evaluating and controlling environmental factors associated with the workplace.

Programmes and qualifications 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 management
> Work environment

Exclusions

Study of vocational rehabilitation and occupational therapy is excluded from this detailed field and included in detailed field 0915 'Therapy and rehabilitation'.

Study of labour law is excluded from this detailed field and included in 0421 'Law'.

Study of ergonomics is excluded from this detailed field if emphasis is given to technical aspects and is included in the appropriate detailed field under 071 'Engineering and engineering trades'.

103   Security services

1031   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 and qualifications with the following main content are classified here:

> Air force training
> Army training
> Defence studies
> Military science
> Navy training
> War theory

Exclusions

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

1032   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 and qualifications with the following main content are classified here:

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

Exclusions

Study of law is excluded from this detailed field and included in 0421 'Law'.

Study of criminology is excluded from this detailed field and included in detailed field 0314 'Sociology and cultural studies'.

104 Transport services

1041   Transport services

Transport is the study of operating, navigating and directing ships, train, aircraft and other forms of transportation.

Programmes and qualifications with the following main content are classified here:

Aircraft operation
Air traffic control
Air traffic safety
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
Shipping
Transport studies

<u>Exclusions</u>

Programmes in telephone network services are excluded from this detailed field and included in detailed field 0714 'Electronics and automation'. Programmes in switchboard operating are excluded from this detailed field and included in detailed field 0415 'Secretarial and office work'.

108   Inter-disciplinary programmes and qualifications involving services

1088   Inter-disciplinary programmes and qualifications involving services

Inter-disciplinary programmes and qualifications to which the greatest intended learning time is devoted to services are classified here.

Appendix I

ISCED-F 2013: List of possible codes

Broad field	Narrow field	Detailed field
00 Generic programmes and qualifications	000 Generic programmes and qualifications not further defined	0000 Generic programmes and qualifications not further defined
	001 Basic programmes and qualifications	0011 Basic programmes and qualifications
	002 Literacy and numeracy	0021 Literacy and numeracy
	003 Personal skills and development	0031 Personal skills and development
	009 Generic programmes and qualifications not elsewhere classified	0099 Generic programmes and qualifications not elsewhere classified
01 Education	011 Education	0110 Education not further defined 0111 Education science 0112 Training for pre-school teachers 0113 Teacher training without subject specialisation 0114 Teacher training with subject specialisation 0119 Education not elsewhere classified
	018 Inter-disciplinary programmes and qualifications involving education	0188 Inter-disciplinary programmes and qualifications involving education
02 Arts and humanities	020 Arts and humanities not further defined	0200 Arts and humanities not further defined
	021 Arts	0210 Arts not further defined 0211 Audio-visual techniques and media production 0212 Fashion, interior and industrial design 0213 Fine arts 0214 Handicrafts 0215 Music and performing arts 0219 Arts not elsewhere classified
	022 Humanities (except languages)	0220 Humanities (except languages) not further defined 0221 Religion and theology 0222 History and archaeology 0223 Philosophy and ethics 0229 Humanities (except languages) not elsewhere classified
	023 Languages	0230 Languages not further defined 0231 Language acquisition 0232 Literature and linguistics 0239 Languages not elsewhere classified
	028 Inter-disciplinary programmes and qualifications involving arts and humanities	0288 Inter-disciplinary programmes and qualifications involving arts and humanities
	029 Arts and humanities not elsewhere classified	0299 Arts and humanities not elsewhere classified

Broad field	Narrow field	Detailed field
03 Social sciences, journalism and information	030 Social sciences, journalism and information not further defined	0300 Social sciences, journalism and information not further defined
	031 Social and behavioural sciences	0310 Social and behavioural sciences not further defined 0311 Economics 0312 Political sciences and civics 0313 Psychology 0314 Sociology and cultural studies 0319 Social and behavioural sciences not elsewhere classified
	032 Journalism and information	0320 Journalism and information not further defined 0321 Journalism and reporting 0322 Library, information and archival studies 0329 Journalism and information not elsewhere classified
	038 Inter-disciplinary programmes and qualifications involving social sciences, journalism and information	0388 Inter-disciplinary programmes and qualifications involving social sciences, journalism and information
	039 Social sciences, journalism and information not elsewhere classified	0399 Social sciences, journalism and information not elsewhere classified
04 Business, administration and law	040 Business, administration and law not further defined	0400 Business, administration and law not further defined
	041 Business and administration	0410 Business and administration not further defined 0411 Accounting and taxation 0412 Finance, banking and insurance 0413 Management and administration 0414 Marketing and advertising 0415 Secretarial and office work 0416 Wholesale and retail sales 0417 Work skills 0419 Business and administration not elsewhere classified
	042 Law	0421 Law
	048 Inter-disciplinary programmes and qualifications involving business, administration and law	0488 Inter-disciplinary programmes and qualifications involving business, administration and law
	049 Business, administration and law not elsewhere classified	0499 Business, administration and law not elsewhere classified

Broad field	Narrow field	Detailed field
05 Natural sciences, mathematics and statistics	050 Natural sciences, mathematics and statistics not further defined	0500 Natural sciences, mathematics and statistics not further defined
	051 Biological and related sciences	0510 Biological and related sciences not further defined 0511 Biology 0512 Biochemistry 0519 Biological and related sciences not elsewhere classified
	052 Environment	0520 Environment not further defined 0521 Environmental sciences 0522 Natural environments and wildlife 0529 Environment not elsewhere classified
	053 Physical sciences	0530 Physical sciences not further defined 0531 Chemistry 0532 Earth sciences 0533 Physics 0539 Physical sciences not elsewhere classified
	054 Mathematics and statistics	0540 Mathematics and statistics not further defined 0541 Mathematics 0542 Statistics
	058 Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics	0588 Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics
	059 Natural sciences, mathematics and statistics not elsewhere classified	0599 Natural sciences, mathematics and statistics not elsewhere classified
06 Information and Communication Technologies (ICTs)	061 Information and Communication Technologies (ICTs)	0610 Information and Communication Technologies (ICTs) not further defined 0611 Computer use 0612 Database and network design and administration 0613 Software and applications development and analysis 0619 Information and Communication Technologies (ICTs) not elsewhere classified
	068 Inter-disciplinary programmes and qualifications involving Information and Communication Technologies (ICTs)	0688 Inter-disciplinary programmes and qualifications involving Information and Communication Technologies (ICTs)

Broad field	Narrow field	Detailed field
07 Engineering, manufacturing and construction	070 Engineering, manufacturing and construction not further defined	0700 Engineering, manufacturing and construction not further defined
	071 Engineering and engineering trades	0710 Engineering and engineering trades not further defined 0711 Chemical engineering and processes 0712 Environmental protection technology 0713 Electricity and energy 0714 Electronics and automation 0715 Mechanics and metal trades 0716 Motor vehicles, ships and aircraft 0719 Engineering and engineering trades not elsewhere classified
	072 Manufacturing and processing	0720 Manufacturing and processing not further defined 0721 Food processing 0722 Materials (glass, paper, plastic and wood) 0723 Textiles (clothes, footwear and leather) 0724 Mining and extraction 0729 Manufacturing and processing not elsewhere classified
	073 Architecture and construction	0730 Architecture and construction not further defined 0731 Architecture and town planning 0732 Building and civil engineering
	078 Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction	0788 Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction
	079 Engineering, manufacturing and construction not elsewhere classified	0799 Engineering, manufacturing and construction not elsewhere classified
08 Agriculture, forestry, fisheries and veterinary	080 Agriculture, forestry, fisheries and veterinary not further defined	0800 Agriculture, forestry, fisheries and veterinary not further defined
	081 Agriculture	0810 Agriculture not further defined 0811 Crop and livestock production 0812 Horticulture 0819 Agriculture not elsewhere classified
	082 Forestry	0821 Forestry
	083 Fisheries	0831 Fisheries
	084 Veterinary	0841 Veterinary
	088 Inter-disciplinary programmes and qualifications involving agriculture, forestry, fisheries and veterinary	0888 Inter-disciplinary programmes and qualifications involving agriculture, forestry, fisheries and veterinary
	089 Agriculture, forestry, fisheries and veterinary not elsewhere classified	0899 Agriculture, forestry, fisheries and veterinary not elsewhere classified

Broad field	Narrow field	Detailed field
09 Health and welfare	090 Health and welfare not further defined	0900 Health and welfare not further defined
	091 Health	0910 Health not further defined 0911 Dental studies 0912 Medicine 0913 Nursing and midwifery 0914 Medical diagnostic and treatment technology 0915 Therapy and rehabilitation 0916 Pharmacy 0917 Traditional and complementary medicine and therapy 0919 Health not elsewhere classified
	092 Welfare	0920 Welfare not further defined 0921 Care of the elderly and of disabled adults 0922 Child care and youth services 0923 Social work and counselling 0929 Welfare not elsewhere classified
	098 Inter-disciplinary programmes and qualifications involving health and welfare	0988 Inter-disciplinary programmes and qualifications involving health and welfare
	099 Health and welfare not elsewhere classified	0999 Health and welfare not elsewhere classified
10 Services	100 Services not further defined	1000 Services not further defined
	101 Personal services	1010 Personal services not further defined 1011 Domestic services 1012 Hair and beauty services 1013 Hotel, restaurants and catering 1014 Sports 1015 Travel, tourism and leisure 1019 Personal services not elsewhere classified
	102 Hygiene and occupational health services	1020 Hygiene and occupational health services not further defined 1021 Community sanitation 1022 Occupational health and safety 1029 Hygiene and occupational health services not elsewhere classified
	103 Security services	1030 Security services not further defined 1031 Military and defence 1032 Protection of persons and property 1039 Security services not elsewhere classified
	104 Transport services	1041 Transport services
	108 Inter-disciplinary programmes and qualifications involving services	1088 Inter-disciplinary programmes and qualifications involving services
	109 Services not elsewhere classified	1099 Services not elsewhere classified
99 Field unknown	999 Field unknown	9999 Field unknown

Appendix II

Numerical code list

00 Generic programmes and qualifications

000 Generic programmes and qualifications not further defined

0000 Generic programmes and qualifications not further defined

001 Basic programmes and qualifications

0011 Basic programmes and qualifications

Basic programmes and qualifications

Broad generic (non-specialised) programmes and qualifications

General programmes and qualifications with no specific subject emphasis

Programmes and qualifications at primary level

002 Literacy and numeracy

0021 Literacy and numeracy

Basic remedial programmes for youth or adults

Functional literacy

Literacy

Numeracy

Simple literacy

003 Personal skills and development

0031 Personal skills and development

Argumentation and presentation

Assertiveness training

Communication skills

Co-operation

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

Parenting courses

Personal career planning

Personal development

Positive thinking

Presentation techniques

Public speaking

Self-confidence

Self-esteem skills

Social competence

Teamwork

Time management

009 Generic programmes and qualifications not elsewhere classified

0099 Generic programmes and qualifications not elsewhere classified

01 Education

011 Education

0110 Education not further defined

0111 Education science

Curriculum development (theory)

Curriculum studies

Didactics

Distance education methodology

Education science

Educational assessment, testing and measurement

Educational evaluation and research

Paedagogical sciences (education)

0112 Training for pre-school teachers

Early childhood teaching (within formal school settings)

Pre-primary teacher training

0113 Teacher training without subject specialisation

Adult literacy and numeracy teacher training

Class teacher training

Elementary teacher education

Indigenous teacher training

Lower secondary teaching

Primary teaching

Special education teaching

0114 Teacher training with subject specialisation

Teacher training - arts and crafts

Teacher training – commercial subjects

Teacher training – music

Teacher training – nursing

Teacher training – physical training

Teacher training – second languages

Teacher training – specific theoretical subjects (e.g. mathematics, history)

Teacher training – technical subjects

Teacher training – vocational subjects

Teacher training courses for university teachers

Training of driving instructors

0119 Education not elsewhere classified

018   Inter-disciplinary programmes and qualifications involving education

0188 Inter-disciplinary programmes and qualifications involving education

02   Arts and humanities

020   Arts and humanities not further defined

0200 Arts and humanities not further defined

021 Arts

0210 Arts not further defined

0211 Audio-visual techniques and media production

Animation

Binding and finishing (printing)

Bookbinding

Camera operating

Cinematography

Compositing (printing)

Composition equipment operating

Computer game production

Computer graphics

Computer type-setting

Desktop publishing

Disc jockey training

Film and TV editing

Film and video production

Graphic design

Graphic reproduction

Illustration

Interactive media design

Lay-out

Media techniques

Multimedia production

Photo developing

Photography

Pre-press operations

Print finishing and binding

Printing

Printing machining

Publishing design

Radio and TV production

Recorded music production

Sound and vision

Sound techniques

Type-setting

0212 Fashion, interior and industrial 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

0213 Fine arts

Aesthetics

Art history

Art studies

Art theory

Calligraphy

Drawing (artistic)

Etching (artistic)

Fine art printmaking

History of art

Lithography

Painting (art)

Philosophy of art

Sculpture

Sketching (art)

0214 Handicrafts

Ceramics (craft)

Conservation of cultural material

Craft programmes

Crafts, folk arts and artisan

Decorative metal crafts

Embroidery (craft)

Fibre, textile and weaving arts

Floristry (flower arranging)

Glass arts and craft

Goldsmithing

Handicrafts

Indigenous crafts

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

0215 Music and performing arts

Acting and directing

Ballet

Choreography

Circus

Composition (music)

Conducting (music)

Creative and performance art

Dance

Directing (theatre)

Drama

Elocution

Fashion modelling

History of film and theatre

History of music

Music

Music and the stage

Music composition

Music conducting

Musicology

Performing arts

Theatre/theatre sciences

0219 Arts not elsewhere classified

022　Humanities (excluding languages)

0220 Humanities (excluding languages) not further defined

0221 Religion and theology

Religion

Religious history

Religious studies

Study of different religions

Study of sacred books

Theology

0222 History and archaeology

Archaeology

Cultural history

Folklore studies

History

History and philosophy of science and technology

History of literature

History of medicine

History of science and ideas

History of technology

Literature history

Medieval and renaissance studies

Preservation of artistic heritage

0223 Philosophy and ethics

Ethics

Logic

Morals

Philosophy

0229 Humanities (except languages) not elsewhere classified

023 Languages

0230 Languages not further defined

0231 Language acquisition

Classical languages

Exogenous languages

Foreign languages

Interpretation programmes

Phonetics

Second languages

Semantics, foreign languages

Sign language interpreting

Sign languages

Translation programmes

0232 Literature and linguistics

Comparative literature

Creative writing

First language programmes

Indigenous languages

Linguistics, general

Literature

Mother tongue programmes

Native first languages

Philology (first language)

Semantics (first language)

Speech and rhetorical studies

0239 Languages not elsewhere classified

028 Inter-disciplinary programmes and qualifications involving arts and humanities

0288 Inter-disciplinary programmes and qualifications involving arts and humanities

029 Arts and humanities not elsewhere classified

0299 Arts and humanities not elsewhere classified

03 Social sciences, journalism and information

030 Social sciences, journalism and information not further defined

0300 Social sciences, journalism and information not further defined

031 Social and behavioural sciences

0310 Social and behavioural sciences not further defined

0311 Economics

Econometrics

Economic history

Economics

International economics

Macro economics

National accounts

Political economics

0312 Political sciences and civics

Civics

Human rights

International relations

Peace and conflict studies

Political history

Political science

Politics

Public policy studies

0313 Psychology

Cognitive sciences

Conversational therapy

Development and child psychology

Psychoanalysis

Psychology

Psychotherapy

0314 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's studies

0319 Social and behavioural sciences not elsewhere classified

032 Journalism and information

0320 Journalism and information not further defined

0321 Journalism and reporting

Broadcast journalism

Editing

Information (wording and content)

Journalism

Mass communication (wording and content)

News reporting

Publishing (dissemination of messages)

0322 Library, information and archival studies

Archival sciences

Curatorial studies

Documentation

Information science

Information searching

Librarianship training

Library studies

Museum documentation

Museum studies

Museology

0329 Journalism and information not elsewhere classified

038 Inter-disciplinary programmes and qualifications involving social sciences, journalism and information

0388 Inter-disciplinary programmes and qualifications involving social sciences, journalism and information

039 Social sciences, journalism and information not elsewhere classified

0399 Social sciences, journalism and information not elsewhere classified

04 Business, administration and law

040 Business, administration and law not further defined

0400 Business, administration and law not further defined

041 Business and administration

0410 Business and administration not further defined

0411 Accounting and taxation

Accounting

Auditing

Bookkeeping

Tax accounting

Tax management

0412 Finance, banking and insurance

Bank teller studies

Banking and finance

Business finance

Finance, banking, insurance

Finance theory

Financial management

Insurance

Investment analysis

Investments and securities

Pension insurance

Social insurance

Stock-broking

0413 Management and administration

Administration

Business administration

Educational management

Employment management

Entrepreneurship

Enterprise training

Health administration

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

Supply change management

Training management

0414 Marketing and advertising

Advertising

Consumer behaviour

Market research

Marketing

Merchandising

Public relations

Sales and marketing

0415 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 equipment

Receptionist training

Secretarial programmes

Shorthand

Stenography

Switchboard operating

Typing

0416 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

0417 Work skills

Clients' needs

Company knowledge

Customer service training

Industrial relations

Introduction to work courses

Organisation at work

Quality assurance

Trade union courses (general)

Work development

Work place skills

Working life

0419 Business and administration not elsewhere classified

042 Law

0421 Law

Commercial law

Criminal justice studies

History of law

Indigenous law

Islamic sharia

Jurisprudence

Labour law

Law

Legal practice

Legal studies

Notary/Notary's practise

Paralegal studies

048 Inter-disciplinary programmes and qualifications involving business, administration and law

0488 Inter-disciplinary programmes and qualifications involving business, administration and law

049 Business, administration and law not elsewhere classified

0499 Business, administration and law not elsewhere classified

05 Natural sciences, mathematics and statistics

050 Natural sciences, mathematics and statistics not further defined

0500 Natural sciences, mathematics and statistics not further defined

051 Biological and related sciences

0510 Biological and related sciences not further defined

0511 Biology

Biology

Biometrics

Botany

Cell biology

Entomology

Genetics

Life sciences

Limnology

Microbiology

Molecular biology

Mycology

Ornithology

Parasitology

Zoology

0512 Biochemistry

Biological chemistry

Biotechnology

Cell technology

Forensic sciences

Genetic code (DNA, RNA) studies

Genetic engineering

Pharmacology

Tissue culture technology

Toxicology

Virology

0519 Biological and related sciences not elsewhere classified

052 Environment

0520 Environment not further defined

0521 Environmental sciences

Ecology

Environmental science

0522 Natural environments and wildlife

Conservation and land management

National parks and wildlife management

Nature conservation

Wildlife management

Wildlife ranger studies

0529 Environment not elsewhere classified

053 Physical sciences

0530 Physical sciences not further defined

0531 Chemistry

Analytical chemistry

Chemistry

Inorganic chemistry

Organic chemistry

Petrology

Physical chemistry

Polymer chemistry

0532 Earth sciences

Atmospheric sciences

Climate research

Earth science

Geodesy

Geographic information systems (GIS)

Geography (nature)

Geography (physical)

Geoinformatics

Geology

Geomatics

Geophysics

Geoscience

Geospatial technology

Hydrogeology

Hydrology

Marine science

Meteorology

Mineralogy

Ocean life sciences

Oceanography

Palaeontology

Seismology

Vulcanology

0533 Physics

Acoustics

Astronomy

Astrophysics

Biophysics

Chemical physics

Medical physics

Nuclear physics

Optics

Physics

Planetary sciences

Space science

0539 Physical sciences not elsewhere classified

054 Mathematics and statistics

0540 Mathematics and statistics not further defined

0541 Mathematics

Algebra

Applied mathematics

Data analysis (mathematics)

Geometry

Mathematics

Numerical analysis

Operational research

Pure mathematics

0542 Statistics

Actuarial science

Applied statistics

Mathematical (theoretical) statistics

Probability theory

Survey design

Survey sampling

058 Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics

0588 Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics

059 Natural sciences, mathematics and statistics not elsewhere classified

0599 Natural sciences, mathematics and statistics not elsewhere classified

06 Information and Communication Technologies (ICTs)

061 Information and Communication Technologies (ICTs)

0610 Information and Communication Technologies (ICTs) not further defined

0611 Computer use

Computer software use

Computer use

Internet use

Use of software for calculating (spreadsheets)

Use of software for data processing

Use of software for desktop publishing

Use of software for word processing

0612 Database and network design and administration

Computer administration and management

Computer media applications

Computer network installation and maintenance

Computer support

Database administrator studies

Information technology administration

Information technology security

Network administration

Network design

Web design

0613 Software and applications development and analysis

Computer programming

Computer science

Computer systems analysis

Computer systems design

Informatics (computer science)

Operating systems

Programming (computer)

Programming languages development

Software development

Software localisation

Software programming

Software testing

0619 Information and Communication Technologies (ICTs) not elsewhere classified

Artificial intelligence

068 Inter-disciplinary programmes and qualifications involving Information and Communication Technologies (ICTs)

0688 Inter-disciplinary programmes and qualifications involving Information and Communication Technologies (ICTs)

07 Engineering, manufacturing and construction

070 Engineering, manufacturing and construction not further defined

0700 Engineering, manufacturing and construction not further defined

071 Engineering and engineering trades

0710 Engineering and engineering trades not further defined

0711 Chemical engineering and processes

Chemical engineering

Chemical process engineering

Laboratory assistant programmes

Laboratory technician programmes

Laboratory technology

Oil/gas/petrochemicals processing

Oil refining

Plant and machine operation (processing)

Process technology

0712 Environmental protection technology

Air pollution control

Ecological technology

Energy efficiency

Environmental control

Environmental engineering

Environmental protection technology

Industrial discharge control

Noise pollution control

Recycling

Water pollution control

0713 Electricity and energy

Air-conditioning trades (installation and maintenance)

Climate engineering

Electrical appliances repairing

Electrical engineering

Electrical fitting

Electrical power generation

Electrical trades

Energy studies

Gas distribution

Heating trades (installation and maintenance)

Nuclear, hydraulic and thermal energy

Power line installation and maintenance

Power production

Refrigeration

Solar energy

Solar power

Wind turbines

0714 Electronics and automation

Automation

Broadcasting electronics

Communication systems

Communications equipment installation

Communications equipment maintenance

Computer engineering

Computer repairing

Control engineering

Data processing technology

Digital technology

Electronic engineering

Electronic equipment servicing

Network technology

Robotics

Telecommunications technology

Television and radio repairing

0715 Mechanics and metal trades

Bicycle production

Bicycle repair

Boilermaking and welding

Gunsmithing

Hydraulics

Locksmithing and safe repairing

Mechanical engineering

Mechanical trades

Metal casting and patternmaking

Metal fitting, turning and machining

Metal trades programmes

Metallurgical engineering

Metallurgical technology

Micromechanics

Precision mechanics

Sheet metal working

Steel production

Tool and die making

Watchmaking

Welding

0716 Motor vehicles, ships and aircraft

Aeronautical engineering

Aerospace engineering

Agriculture machinery mechanics

Aircraft engineering

Aircraft maintenance

Automotive electrical systems

Automotive engineering

Avionics

Coachwork

Helicopter construction

Marine construction

Marine engineering

Maritime engineering

Motorcycle engineering

Motorcycle mechanics

Naval engineering

Panel beating

Shipbuilding

Train repair and maintenance

Vehicle and motor engineering

Vehicle building

Vehicle diagnostics

Vehicle electrical systems

Vehicle mechanics

Vehicle painting

Vehicle repairing

Vehicle trimming

Vehicle varnishers/sprayers

0719 Engineering and engineering trades not elsewhere classified

Nanotechnology

072 Manufacturing and processing

0720 Manufacturing and processing not further defined

0721 Food processing

Baking

Brewing

Butchery

Cheese production

Confectionery

Dairy foods (industrial)

Dairy science

Distilling

Food and drink processing

Food handling/hygiene

Food preparation

Food preservation

Food processing industry

Food science

Food science and technology

Food techniques

Industrial bakery/flour production

Meat processing

Pastry cooking

Tobacco processing

Wine production

Wine science

Wine storing/maturing

0722 Materials (glass, paper, plastic and wood)

Boat building (non-motor)

Cabinet making

Cane, willow and bamboo work

Carpentry (furniture)

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

Woodworking and carpentry

0723 Textiles (clothes, footwear and leather)

Clothing, apparel and textile working

Clothing industry

Clothing trades

Custom tailoring

Cutting and tailoring

Dressmaking

Embroidery and needlework (industrial)

Footwear making

Fur making

Furrier

Garment production

Knitting (industrial)

Leather goods production

Leather processing

Leather trades

Pelt worker

Saddlery

Sewing (industrial)

Shoe, boot and leather repairing

Shoemaking

Skins and leather production

Soft furnishings

Spinning

Tailoring

Textiles, clothing and footwear

Textile techniques

Textile trades

Upholstery

Weaving (industrial)

Wool science

0724 Mining and extraction

Coal mining

Drilling

Mineral technology

Mining engineering

Mining of minerals

Mining technology

Oil and gas drilling

Oil and gas extraction

Quarry supervision

Raw material extraction

0729 Manufacturing and processing not elsewhere classified

073 Architecture and construction

0730 Architecture and construction not further defined

0731 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

0732 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

Construction equipment

Construction 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

House building

Industrial abseiling (commercial)

Insulation

Irrigation and drainage (construction)

Joinery and carpentry (building)

Masonry and tile setting

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)

078 Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction

0788 Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction

079 Engineering, manufacturing and construction not elsewhere classified

0799 Engineering, manufacturing and construction not elsewhere classified

08 Agriculture, forestry, fisheries and veterinary

080 Agriculture, forestry, fisheries and veterinary not further defined

0800 Agriculture, forestry, fisheries and veterinary not further defined

081 Agriculture

0810 Agriculture not further defined

0811 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 growing

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

Sugar cane growing

Vegetable plantation

Wine growing

Vineyard construction

Viticulture

0812 Horticulture

Floriculture

Gardening

Green keeping

Greenhouse operations

Horticultural techniques

Horticulture

Landscape gardening

Nursery management (horticulture)

Ornamental plants production

Sports grounds maintenance

Turf cultivation and management

0819 Agriculture not elsewhere classified

082 Forestry

0821 Forestry

Charcoal burning

Forest keeping

Forest product techniques

Forest ranging

Forestry

Hunting and trapping

Logging

Tree felling

083 Fisheries

0831 Fisheries

Aquaculture

Deep sea fishing

Fish breeding

Fish farms

Fish husbandry

Fishery

Fishery science and technology

Mariculture

Pearl cultivating

Sea food breeding

Shellfish breeding

084 Veterinary

0841 Veterinary

Animal health care

Animal reproduction (science)

Artificial insemination (of animals)

Veterinary assisting

Veterinary medicine

Veterinary nursing

Veterinary science

088 Inter-disciplinary programmes and qualifications involving agriculture, forestry, fisheries and veterinary

0888 Inter-disciplinary programmes and qualifications involving agriculture, forestry, fisheries and veterinary

089 Agriculture, forestry, fisheries and veterinary not elsewhere classified

0899 Agriculture, forestry, fisheries and veterinary not elsewhere classified

09 Health and welfare

090 Health and welfare not further defined

0900 Health and welfare not further defined

091 Health

0910 Health not further defined

0911 Dental studies

Clinical dentistry

Dental assisting

Dental hygiene

Dental laboratory technology

Dental nursing

Dental science

Dental surgery

Dental technology

Dentistry

Odontology

Oral surgery

Orthodontics

0912 Medicine

Anaesthetics

Anatomy

Audiology/hearing sciences

Bacteriology

Cardiology

Cytology

Dermatology

Epidemiology

Forensic medicine

Forensic pathology

General medicine

Gerontology

Gynaecology

Haematology

Histology

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

0913 Nursing and midwifery

Assistant nursing

Basic nursing

Community nursing

General nursing

Gerontological services

Health care of old people

Health care of the disabled

Health care programmes

Hygiene, medical

Infant hygiene (nursing)

Midwifery

Mother craft nursing

Nursing

Nursing aide/Orderly

Psychiatric nursing

Specialised nursing

0914 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

Optical technology

Orthopaedic prosthetics

Prosthetic technology

Radiography

Radiology technology

Radiotherapy

X-ray technology (medical)

0915 Therapy and rehabilitation

Chiropractice

Dietician programmes

Massage (medical)

Mental health services

Nutrition and dietetics

Occupational therapy

Optometry

Osteopathy

Physiotherapy

Reflexology

Rehabilitation

Speech pathology and therapy

Vocational rehabilitation

0916 Pharmacy

    Dispensing pharmacy

    Pharmacy

0917 Traditional and complementary medicine and therapy

    Acupuncture and oriental medicine

    Aromatherapy

    Ayurvedic medicine

    Herbalism

    Herbology

    Holistic medicine

    Homeopathic medicine

    Traditional medicine, for example Chinese

0919 Health not elsewhere classified

092 Welfare

0920 Welfare not further defined

0921 Care of the elderly and of disabled adults

    Care (non-medical) of the elderly

    Non-medical care of disabled adults

    Personal care of adults

0922 Child care and youth services

    Child care (non-medical)

    Child recreation programmes

    Day care

    Non-medical care of disabled children

    Youth recreation programmes

    Youth services

    Youth worker programmes

0923 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)

    Parole officer training

    Probation officer training

    Social care

    Social policy

    Social practice

    Social theory (applied)

    Social work (welfare)

    Vocational counselling

    Vocational guidance

0929 Welfare not elsewhere classified

098 Inter-disciplinary programmes and qualifications involving health and welfare

0988 Inter-disciplinary programmes and qualifications involving health and welfare

099 Health and welfare not elsewhere classified

0999 Health and welfare not elsewhere classified

10 Services

100 Services not further defined

1000 Services not further defined

101 Personal services

1010 Personal services not further defined

1011 Domestic services

    Caretaking, housekeeping, home service

    Chimney sweeping

    Cleaning

    Cooking (home)

    Custodian/caretaker

    Domestic science

Dry-cleaning

Funeral services and mortuary science

Home economics

Laundry

Needlework (home)

Sewing (home)

Window cleaning

1012 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

1013 Hotel, restaurants and catering

Bar service

Bartender/mixologist

Catering

Cooking (restaurant and hotel-type)

Croupier training

Culinary arts

Fast food preparation

Food and hospitality services

Food serving

Hospitality services

Hotel and restaurant studies

Hotel receptionist training

Hotel services

Waiting and bar service

1014 Sports

Bookmaking (horses etc)

Diving (sport)

Football playing

Gymnastics

Jockeying

Physical training (sports)

Sport leadership

Sport trainer studies

Sports

Sports coaching

Sports instructor training

Umpires and other sports officials

1015 Travel, tourism and leisure

Abseiling (leisure)

Adventure based activities

Ground crew training (airports)

Guiding, tour leading

Leisure and tourism

Recreation and leisure

Recreation management

Tourism

Tourist trades

Travel agency services

Travel and tourism

Travel services

1019 Personal services not elsewhere classified

102 Hygiene and occupational health services

1020 Hygiene and occupational health services not further defined

1021 Community sanitation

Garbage disposal

Hygiene, community

Hygienic standards

Refuse collection

Refuse/sewage disposal

Sanitation, community

Street cleaning

Water supply (service)

Waste management

1022 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 management

Work environment

1029 Hygiene and occupational health services not elsewhere classified

103 Security services

1030 Security services not further defined

1031 Military and defence

Army training

Defence studies

Military science

National security

Navy training

War theory

1032 Protection of persons and property

Civil security

Customs programmes

Diving (professional)

Fire-protection (fire-fighting)

Fire technology

Law enforcement

Life guarding

Police work

Policing studies

Prison work

Public security

Security and loss prevention services

Security guarding

1039 Security services not elsewhere classified

104 Transport services

1041 Transport services

Air crew (flying and navigation)

Air traffic control

Air traffic safety

Aircraft operation

Aviation

Bus and coach driving

Cabin crew training

Communications (air, railway, road etc.)

Crane and truck driving

Driving training

Flying and navigation

Fork-lift truck driving

Mail operations

Nautical science

Navigation technologies

Postal services

Railway operations

Road motor vehicle operations

Seamanship

Seamen's programmes/qualifications

Ship operation

Shipping	**109 Services not elsewhere classified**
Stewardess/steward training (air)	**1099 Services not elsewhere classified**
Transport studies	**99 Field unknown**
Truck driving	**999 Field unknown**
108 Inter-disciplinary programmes and qualifications involving services	**9999 Field unknown**
1088 Inter-disciplinary programmes and qualifications involving services	

Appendix III

Alphabetical list

A

1015 Abseiling (leisure)

0411 Accounting

0533 Acoustics

0215 Acting and directing

0542 Actuarial science

0917 Acupuncture and oriental medicine

0413 Administration

0415 Administrative and secretarial services

1015 Adventure based activities

0414 Advertising

0113 Adult literacy and numeracy teacher training

0716 Aeronautical engineering

0716 Aerospace engineering

0213 Aesthetics

0811 Agricultural business/agribusiness operations

0811 Agricultural economics

0811 Agricultural sciences

0811 Agriculture

0716 Agriculture machinery mechanics

0811 Agronomy and crop science

1041 Air crew (flying and navigation)

0712 Air pollution control

1041 Air traffic control

1041 Air traffic safety

0713 Air-conditioning programmes

0716 Aircraft engineering

0716 Aircraft maintenance

1041 Aircraft operation

0923 Alcohol and drug abuse counselling

0923 Alcohol, tobacco, drugs (knowledge about)

0541 Algebra

0914 Ambulance service

0914 Ambulance technology

0912 Anaesthetics

0531 Analytical chemistry

0912 Anatomy

0811 Animal breeding

0841 Animal health care

0811 Animal husbandry

0841 Animal reproduction (science)

0811 Animal training

0211 Animation

0541 Applied mathematics

0542 Applied statistics

0831 Aquaculture

0222 Archaeology

0731 Architectural urban design and planning

0731 Architecture

0322 Archival sciences

0031 Argumentation and presentation

1031 Army training

0917 Aromatherapy

0213 Art history

0213 Art studies

0213 Art theory

0841 Artificial insemination (of animals)

0912 Artificial insemination (of humans)

0619 Artificial intelligence

0031 Assertiveness training

0913 Assistant nursing

0533 Astronomy

0533 Astrophysics

0532 Atmospheric sciences

0416 Auctioneering

0912 Audiology/hearing sciences

0211 Audio-visual techniques and media production

0411 Auditing

0914 Auditory prosthetics

0714 Automation

0716 Automotive electrical systems

0716 Automotive engineering

1041 Aviation

0716 Avionics

0917 Ayurvedic medicine

B

0912 Bacteriology

0721 Baking

0215 Ballet

0412 Bank teller studies

0412 Banking and finance

1013 Bar service

1012 Barbering

1013 Bartender/mixologist

0913 Basic nursing

0011 Basic programmes and qualifications

0021 Basic remedial programmes for youth or adults

0811 Basic skills in agriculture

1012 Beauty therapy

0721 Beer brewing

0310 Behavioural sciences

0715 Bicycle production

0715 Bicycle repair

0211 Binding and finishing (printing)

0711 Biochemical technologies

0512 Biochemistry

0512 Biological chemistry

0511 Biology

0511 Biometrics

0533 Biophysics

0512 Biotechnology

0711 Biotechnology engineering

0722 Boat building (non-motor)

0715 Boilermaking and welding

0211 Bookbinding

0411 Bookkeeping

1014 Bookmaking (horses etc)

0511 Botany

0721 Brewing

0732 Bricklaying

0732 Brickwork and masonry

0732 Bridge construction

0011 Broad generic (non-specialised) programmes and qualifications

0321 Broadcast journalism

0714 Broadcasting electronics

0732 Building construction

0731 Building design

0732 Building engineering

0732 Building maintenance

0732 Building renovation

0732 Building technology

1041 Bus and coach driving

0413 Business administration

0415 Business correspondence

0412 Business finance

0721 Butchery

0416 Buying and selling

C

1041 Cabin crew training

0722 Cabinet making

0213 Calligraphy

0211 Camera operating

0722 Cane, willow and bamboo work

0912 Cardiology

0921 Care (non-medical) of the elderly

0921 Care (non-medical) of disabled adults

0922 Care (non-medical) of disabled children

0923 Career advising

1011 Caretaking, housekeeping, home service

0722 Carpentry (furniture)

0732 Carpentry and joinery (building)

0731 Cartography

1013 Catering

0511 Cell biology

0512 Cell technology

0732 Cement working

0214 Ceramics (craft)

0722 Ceramics (industrial)

0821 Charcoal burning

0721 Cheese production

0711 Chemical engineering

0533 Chemical physics

0711 Chemical process engineering

0531 Chemistry

0922 Child care (non-medical)

0922 Children recreation programmes

1011 Chimney sweeping

0915 Chiropractice

0215 Choreography

0211 Cinematography

0215 Circus

0731 City planning

0312 Civics

0732 Civil engineering

1032 Civil security

0113 Class teacher training

0231 Classical languages

1011 Cleaning

0415 Clerical programmes

0417 Clients' needs

0713 Climate engineering

0532 Climate research

0911 Clinical dentistry

0912 Clinical medicine

0723 Clothing industry

0723 Clothing trades

0723 Clothing, apparel and textile working

0031 Co-operation

0716 Coachwork

0724 Coal mining

0313 Cognitive sciences

0421 Commercial law

0321 Communication, mass- (wording and content)

1041 Communications (air, railway, road etc.)

0714 Communications equipment installation

0714 Communications equipment maintenance

0031 Communications skills

0714 Communications systems

0731 Community development

0913 Community nursing

0731 Community planning

0417 Company knowledge

0232 Comparative literature

0211 Compositing (printing)

0215 Composition (music)

0211 Composition equipment operating

0612 Computer administration and management

0714 Computer engineering

0211 Computer game production

0211 Computer graphics

0612 Computer media applications

0612 Computer network installation and maintenance

0613 Computer programming

0714 Computer repairing

0613 Computer science

0611 Computer software use

0612 Computer support

0613 Computer systems analysis

0613 Computer systems design

0211 Computer type-setting

0611 Computer use

0215 Conducting (music)

0721 Confectionery

0522 Conservation and land management

0214 Conservation of cultural material

0732 Construction equipment

0732 Construction plant operation

0732 Construction technology

0732 Constructional engineering

0732 Constructional metalwork (building)

0414 Consumer behaviour

1011 Consumer economics

0416 Consumer services

0313 Conversational therapy

0714 Control engineering

1011 Cooking (home)

1013 Cooking (restaurant and hotel-type)

0031 Co-operation skills

1012 Cosmetic services

1012 Cosmetology

0212 Costume design

0923 Counselling

0415 Court reporting

0214 Craft programmes

0214 Crafts, folk arts and artisan

0215 Creative and performance art

1041 Crane and truck driving

0232 Creative writing

0421 Criminal justice studies

0314 Criminology

0923 Crisis support

0811 Crop growing and husbandry

1013 Croupier training

1013 Culinary arts

0314 Cultural geography

0222 Cultural history

0314 Cultural studies

0322 Curatorial studies

0111 Curriculum development (theory)

0111 Curriculum studies

1011 Custodian/caretaker

0723 Custom tailoring

0417 Customer service training

1032 Customs programmes

0723 Cutting and tailoring

0912 Cytology

D

0721 Dairy foods (industrial)

0416 Dairy retailing

0721 Dairy science

0215 Dance

0541 Data analysis (mathematics)

0415 Data entry

0714 Data processing technology

0612 Database administrator studies

0922 Day care (children)

0921 Day care (adults)

0214 Decorative metal crafts

0831 Deep sea fishing

1031 Defence studies

0314 Demography/population studies

0732 Demolition

0416 Demonstration techniques

0911 Dental assisting

0911 Dental hygiene

0911 Dental laboratory technology

0911 Dental nursing

0911 Dental science

0911 Dental surgery

0911 Dental technology

0911 Dentistry

0912 Dermatology

0212 Design

0212 Design of industrial products (artistic)

0211 Desktop publishing

0313 Development and child psychology

0031 Development of behavioural skills

0031 Development of mental skills

0031 Development of personal organisational capacities

0111 Didactics

0915 Dietician programmes

0714 Digital technology

0215 Directing (theatre)

0211 Disc jockey training

0916 Dispensing pharmacy

0111 Distance education methodology

0721 Distilling

1032 Diving (professional)

1014 Diving (sport)

0732 Dock and harbour engineering

0322 Documentation

0811 Dog breeding

1011 Domestic science

0215 Drama

0213 Drawing (artistic)

0732 Drawing, technical

0723 Dressmaking

0724 Drilling (industrial)

0114 Driver and safety teacher education

0114 Driving instructor training

1041 Driving training

1011 Dry-cleaning

E

0112 Early childhood teaching (within formal school settings)

0532 Earth science

0712 Ecological technology

0521 Ecology

0311 Econometrics

0311 Economic history

0311 Economics

0311 Economics, business

0321 Editing (newspapers)

0110 Education (not further defined)

0111 Education science

0111 Education technology

0111 Educational assessment, testing and measurement

0111 Educational evaluation and research

0413 Educational management

0913 Elder care, health

0713 Electrical appliances repairing

0713 Electrical engineering

0713 Electrical fitting

0713 Electrical power generation

0713 Electrical trades

0714 Electronic data processing

0714 Electronic engineering

0714 Electronic equipment servicing

0113 Elementary teacher education

0215 Elocution

0214 Embroidery (craft)

0723 Embroidery and needlework (industrial)

0914 Emergency para-medical technologies

0413 Employment management

0712 Energy efficiency

0713 Energy studies

0031 Enhancing personal skills

0511 Entomology

0413 Entrepreneurship

0712 Environmental control

0712 Environmental engineering

0712 Environmental protection technology

0521 Environmental science

0912 Epidemiology

1022 Ergonomics (occupational health and safety)

0213 Etching (artistic)

0223 Ethics

0314 Ethnology

0732 Excavation engineering

0231 Exogenous languages

F

0923 Family and marriage counselling

0031 Family life development training

0811 Farm and ranch management

0811 Farm maintenance

0811 Farming

0212 Fashion design

0215 Fashion modelling

1013 Fast food preparation

0214 Fibre, textile and weaving arts

0211 Film and video production

0211 Film and TV editing

0412 Finance

0412 Financial management

0213 Fine art printmaking

0213 Fine arts

1032 Fire-protection (fire-fighting)

1032 Fire technology

0232 First language studies

0831 Fish breeding

0831 Fish farming

0831 Fish husbandry

0831 Fishery science and technology

1012 Fitness and weight control

1012 Fitness services

0114 Flight instructor training

0732 Floor and wall tiling

0732 Floor covering

0812 Floriculture

0214 Floristry (flower arranging)

1041 Flying and navigation

0222 Folklore studies

0721 Food and drink processing

1013 Food and hospitality services

0721 Food handling/hygiene

0721 Food preparation

0721 Food preservation

0721 Food processing industry

0721 Food science and technology

1013 Food serving

0721 Food techniques

1014 Football playing

0723 Footwear making

0231 Foreign languages (acquisition of)

0415 Foreign language secretary programmes

0912 Forensic medicine

0914 Forensic medicine technology

0912 Forensic pathology

0512 Forensic science

0821 Forest keeping

0821 Forest product techniques

0821 Forest ranging

0821 Forestry

1041 Fork-lift truck driving

0811 Fruit growing

0021 Functional literacy

1011 Funeral services and mortuary science

0723 Fur making

0722 Furniture crafts

0722 Furniture making

0723 Furrier

0314 Futurology

G

1021 Garbage disposal

0812 Gardening

0723 Garment production

0713 Gas distribution

0314 Gender studies

0912 General medicine

0913 General nursing

0011 General programmes and qualification with no specific subject emphasis

0511 Genetics

0512 Genetic code (DNA, RNA) studies

0512 Genetic engineering

0532 Geodesy

0532 Geographic information systems (GIS)

0532 Geography (nature)

0532 Geography (physical)

0314 Geography (social)

0532 Geoinformatics

0532 Geology

0532 Geomatics

0541 Geometry

0532 Geophysics

0532 Geoscience

0532 Geospatial technology

0913 Gerontological services

0912 Gerontology

0214 Glass arts and craft

0722 Glass production

0722 Glass working (industrial)

0732 Glazing

0214 Goldsmithing

0811 Goose keeping

0811 Grain growing

0211 Graphic design

0211 Graphic reproduction

0812 Greenhouse operations

0812 Green keeping

1015 Ground crew training (airport)

1015 Guiding, tour leading

0715 Gunsmithing

1014 Gymnastics

0912 Gynaecology

H

0912 Haematology

1012 Hairdressing

0214 Handicrafts

0413 Health administration

1022 Health and safety in the work place

0913 Health care of the elderly

0913 Health care of the disabled

0913 Health care programmes

0914 Hearing aid technology

0713 Heating trades

0917 Herbalism

0917 Herbology

0716 Helicopter construction

0912 Histology

0222 History

0222 History and philosophy of science and technology

0213 History of art

0215 History of film and theatre

0421 History of law

0222 History of literature

0222 History of medicine

0215 History of music

0222 History of science and ideas

0222 History of technology

0917 Holistic medicine

1011 Home economics

0114 Home language teacher training

0917 Homeopathic medicine

0811 Horse breeding

0811 Horse husbandry

0812 Horticultural techniques

0812 Horticulture

1013 Hospitality services

1013 Hotel and restaurant studies

1013 Hotel receptionist training

1013 Hotel services

0732 House building

0314 Human geography

0412 Human resources management

0312 Human rights

0821 Hunting and trapping

0715 Hydraulics

0532 Hydrogeology

0532 Hydrology

1021 Hygiene, community

0913 Hygiene, medical

1021 Hygienic standards

I

0211 Illustration

0912 Immunology

0113 Indigenous crafts

0232 Indigenous language studies

0421 Indigenous law

0113 Indigenous teacher training

0732 Industrial abseiling (commercial)

0721 Industrial bakery/flour production

0212 Industrial design (artistic)

0722 Industrial diamond production

0712 Industrial discharge control

0417 Industrial relations

1022 Industrial welfare

0913 Infant hygiene (nursing)

0613 Informatics (computer science)

0321 Information (wording and content)

0415 Information processing/data entry

0322 Information science

0322 Information searching

0612 Information technology administration

0612 Information technology security

0532 Inorganic chemistry

0732 Insulation

0412 Insurance

0211 Interactive media design

0212 Interior architecture

0212 Interior decorating

0212 Interior design

0912 Internal medicine

0311 International economics

0312 International relations

0611 Internet use programmes

0231 Interpretation programmes

0417 Introductory courses at work

0412 Investment analysis

0412 Investments and securities

0732 Irrigation and drainage (construction)

0811 Irrigation techniques

0421 Islamic sharia law

J

0214 Jewellery design

0214 Jewellery making (craft)

1022 Job safety

0031 Job-seeking programmes

1014 Jockeying

0732 Joinery and carpentry (building)

0321 Journalism

0421 Jurisprudence

K

0415 Keyboard skills

0723 Knitting (industrial)

L

0711 Laboratory assistant programmes

0711 Laboratory technician programmes

0711 Laboratory technology

0421 Labour law

1022 Labour protection

1022 Labour security

1022 Labour welfare (safety)

0731 Land surveying

0731 Landscape architecture

0812 Landscape gardening

0231 Language acquisition

0214 Lapidary and jewellery

1011 Laundry

0421 Law

1032 Law enforcement

0211 Lay-out

0723 Leather goods production

0723 Leather processing

0723 Leather trades

0421 Legal practice

0415 Legal secretary programmes

0421 Legal studies

1015 Leisure and tourism

0322 Librarianship training

0322 Library programmes

1032 Life guarding

0031 Life orientation programmes

0511 Life sciences

0511 Limnology

0232 Linguistics, general

0021 Literacy

0021 Literacy and numeracy

0232 Literature

0222 Literature history

0213 Lithography

0413 Local public administration

0715 Locksmithing and safe repairing

0223 Logic

0821 Logging

0413 Logistic management

0113 Lower secondary teacher training

M

0311 Macro economics

1041 Mail operations

0812 Maintaining sports turf

1012 Make-up

0923 Maltreatment (knowledge about)

0413 Management of education

0413 Management science

0413 Management skills

0415 Management support services

1012 Manicure

0831 Mariculture

0716 Marine construction

0716 Marine engineering

0532 Marine science

0716 Maritime engineering

0414 Market research

0414 Marketing

0732 Masonry and tile setting

0321 Mass communication (wording and content)

1012 Massage (beauty)

0915 Massage (medical)

0542 Mathematical (theoretical) statistics

0541 Mathematics

0721 Meat processing

0715 Mechanical engineering

0715 Mechanical trades

0211 Media techniques

0914 Medical laboratory technology

0533 Medical physics

0912 Medical science

0415 Medical secretary programmes

0914 Medical technology

0912 Medical training

0912 Medicine

0222 Medieval and renaissance studies

0915 Mental health services

0414 Merchandising

0715 Metal casting and patternmaking

0715 Metal fitting, turning and machining

0715 Metal trades

0715 Metallurgical engineering

0715 Metallurgical technology

0532 Meteorology

0511 Microbiology

0715 Micromechanics

0913 Midwifery

1031 Military science

0724 Mineral technology

0532 Mineralogy

0724 Mining engineering

0724 Mining of minerals

0724 Mining technology

0923 Mobbing (knowledge about)

0511 Molecular biology

0223 Morals

0913 Mother craft nursing

0716 Motorcycle engineering

0716 Motorcycle mechanics

0211 Multimedia production

0322 Museology

0322 Museum documentation

0322 Museum studies

0215 Music

0215 Music conducting

0214 Musical instruments (making, repairing and tuning)

0215 Musicology

0511 Mycology

N

0719 Nanotechnology

0311 National accounts

0522 National parks and wildlife management

1031 National security

0522 Nature conservation

0912 Naturopathic medicine

1041 Nautical science

0716 Naval engineering

1041 Navigation technologies

1031 Navy training

0214 Needle craft

1011 Needlework (home)

0612 Network administration

0612 Network design (computers)

0714 Network technology

0912 Neurology

0321 News reporting

0712 Noise pollution control

0421 Notary/Notary's practise

0914 Nuclear medicine technologies

0533 Nuclear physics

0713 Nuclear, hydraulic and thermal energy

0021 Numeracy

0541 Numerical analysis

0812 Nursery management (horticulture)

0913 Nursing

0913 Nursing aide/Orderly

0114 Nursing teacher training

0915 Nutrition and dietetics

0915 Nutrition science

O

0912 Obstetrics and gynaecology

1022 Occupational health and industrial hygiene

1022 Occupational health and safety

0915 Occupational therapy

0532 Ocean life sciences

0532 Oceanography

0911 Odontology

0415 Office automation

0413 Office management

0724 Oil and gas drilling

0724 Oil and gas extraction

0711 Oil refining

0711 Oil/gas/petrochemicals processing

0811 Olive growing

0912 Oncology

0613 Operating systems (IT)

0415 Operation of office machines

0541 Operational research

0912 Ophthalmology

0914 Optical lens making

0914 Optical prosthetics

0914 Optical technology

0533 Optics

0915 Optometry

0911 Oral surgery

0811 Orchards construction

0531 Organic chemistry

0417 Organisation at work

0413 Organisational theory and behaviour

0812 Ornamental plant production

0511 Ornithology

0911 Orthodontics

0914 Orthopaedic prosthetics

0915 Osteopathy

P

0912 Paediatrics

0111 Paedagogical sciences (education)

0213 Painting (art)

0732 Painting and wall covering

0532 Palaeontology

0716 Panel beating

0722 Paper manufacturing and processing

0421 Para-legal studies

0511 Parasitology

0031 Parenting courses

0923 Parole officer training

0721 Pastry cooking

0912 Pathology

0312 Peace and conflict studies

0831 Pearl cultivating

1012 Pedicure

0723 Pelt worker

0412 Pension insurance

0413 Performance appraisal

0215 Performing arts

0921 Personal care of adults

0031 Personal career planning

0031 Personal development

0031 Personal skills

0413 Personnel administration

0413 Personnel management

0531 Petrology

0512 Pharmacology

0916 Pharmacy

0232 Philology (first language)

0223 Philosophy

0213 Philosophy of art

0231 Phonetics

0211 Photo developing

0211 Photography

0114 Physical education teacher training

0531 Physical chemistry

1014 Physical training (sports)

0533 Physics

0912 Physiology

0915 Physiotherapy

0214 Picture framing

0811 Pig farming

0732 Pipe fitting

0533 Planetary sciences

0711 Plant and machine operation (processing)

0732 Plastering (building)

0722 Plastic manufacturing

0912 Plastic surgery

0732 Plumbing

1032 Police work

1032 Policing studies

0311 Political economics

0312 Political history

0312 Political science

0312 Politics

0531 Polymer chemistry

0031 Positive thinking

1041 Postal services

0811 Poultry husbandry

0713 Power production

0713 Power line installation and maintenance

0110 Practical paedagogical courses

0211 Pre-press operations

0112 Pre-primary teacher training

0715 Precision mechanics

0031 Presentation skills

0222 Preservation of artistic heritage

0912 Preventive and social medicine

0011 Primary level programmes and qualifications

0113 Primary teaching (without subject specialisation)

0211 Print finishing and binding

0211 Printing

0211 Printing machining

1032 Prison work

0542 Probability theory

0923 Probation officer training

0711 Process technology

0812 Production of ornamental plants

0613 Programming (computer)

0613 Programming languages (Visual Basic, C++ etc.)

0613 Programming languages development

0416 Property sales

0914 Prosthetic technology

0913 Psychiatric nursing

0912 Psychiatry

0313 Psychoanalysis

0313 Psychology

0313 Psychotherapy

0413 Public administration

0413 Public and institution management

0312 Public policy studies

0414 Public relations

1032 Public security

0031 Public speaking

0321 Publishing (dissemination of messages)

0211 Publishing design

0416 Purchasing

0416 Purchasing, procurement and contracts

0541 Pure mathematics

Q

0417 Quality assurance

0413 Quality management

0732 Quantity surveying

0724 Quarry supervision

R

0811 Race horse care

0211 Radio and TV production

0914 Radiography

0914 Radiology technology

0914 Radiotherapy

1041 Railway operations

0724 Raw material extraction

0416 Real-estate business

0415 Receptionist training

0211 Recorded music production

1015 Recreation and leisure

1015 Recreation management

0413 Recruitment

0712 Recycling

0915 Reflexology

0713 Refrigeration

1021 Refuse collection

1021 Refuse/sewage disposal

0314 Regional cultures

0915 Rehabilitation

0221 Religion

0221 Religious history

0221 Religious studies

0321 Reporting (news)

0416 Retailing

0732 Road building

1041 Road motor vehicle operations

0714 Robotics

0732 Roof fixing

0722 Rubber processing

0731 Rural development

0811 Rye and wheat growing

S

0221 Sacred books, study of

0723 Saddlery

0414 Sales and marketing

0416 Sales representatives

1012 Salon services (beauty therapy)

0732 Sanitation (building)

1021 Sanitation (community)

0732 Scaffolding work

0211 Screen printing

0213 Sculpture

0831 Sea food breeding

1041 Seamanship

1041 Seamen's programmes

0231 Second languages

0114 Secondary teaching

0415 Secretarial programmes

1032 Security and loss prevention services

1032 Security guarding

0532 Seismology

0031 Self-esteem skills

0031 Self-confidence

0231 Semantics, foreign languages

0232 Semantics, first language

1011 Sewing (home)

0723 Sewing (industrial)

0831 Shellfish breeding

0811 Sheep farming

0715 Sheet metal working

1041 Ship operation

0716 Shipbuilding

1041 Shipping

0723 Shoemaking and repairing

0415 Shorthand

0231 Sign language interpreting

0231 Sign languages

0214 Silversmithing

0031 Simple literacy

0213 Sketching (art)

0723 Skins and leather production

0314 Social anthropology

0923 Social care

0031 Social competence

0314 Social conflict theory

0314 Social geography

0412 Social insurance

0923 Social policy

0923 Social practice

0310 Social sciences

0923 Social theory (applied)

0923 Social work (welfare)

0314 Sociology

0723 Soft furnishings

0613 Software development

0611 Software for calculating (spreadsheets), use of

0611 Software for data processing, use of

0611 Software for desktop publishing, use of

0611 Software for word processing, use of

0613 Software localisation

0613 Software programming

0613 Software testing

0522 Soil and water conservation

0811 Soil and water technician programmes

0811 Soil fertility

0811 Soil science

0713 Solar energy

0713 Solar power

0211 Sound and vision

0211 Sound techniques

0533 Space science

0113 Special education teaching

0913 Specialised nursing

0114 Specialised subject teaching

0232 Speech and rhetorical studies (first language)

0915 Speech pathology and therapy

0723 Spinning (industrial)

1014 Sport leadership

1014 Sport trainer training

1014 Sports

1014 Sports coaching

1014 Sports instructor training

0812 Sports grounds maintenance

0212 Stage designing

0413 Start your own business-courses

0542 Statistics

0715 Steel production

0415 Stenography

1041 Stewardess/steward training (air)

0412 Stock-broking

0416 Stock-keeping

0912 Stomatology

0214 Stone carving (craft)

0722 Stone cutting, precious

0732 Stonemasonry

1021 Street cleaning

1022 Stress management

0731 Structural architecture

0732 Structural engineering

0811 Sugar cane growing

0413 Supply change management

0912 Surgery

0542 Survey design

0542 Survey sampling

0731 Surveying

0415 Switchboard operating

0722 Synthetic fibre manufacturing

T

0723 Tailoring

0411 Tax accounting

0411 Tax management

0110 Teacher training

0112 Teacher training, pre-school

0113 Teacher training, primary

0113 Teacher training, lower secondary (without subject specialisation)

0114 Teacher training courses for university teachers

0114 Teacher training in arts and crafts

0114 Teacher training in commercial subjects

0114 Teacher training in music

0114 Teacher training in nursing

0114 Teacher training in physical training

0114 Teacher training in second languages

0114 Teacher training in specific theoretical subjects (e.g. mathematics, history)

0114 Teacher training in technical subjects

0114 Teacher training in vocational subjects

0114 Teacher training with subject specialisation

0113 Teacher training without subject specialisation

0031 Teamwork

0732 Technical drawing

0114 Technical teaching

0710 Technology

0714 Telecommunication technology

0416 Telephone selling

0714 Television and radio repairing

0723 Textile techniques

0723 Textile trades

0723 Textiles, clothing and footwear

0215 Theatre

0221 Theology

0212 Three dimensional design

0722 Timber technology

0031 Time management

0512 Tissue culture technology

0721 Tobacco processing

0715 Tool and die making

0731 Topography

1015 Tourism

0731 Town and country planning

0512 Toxicology

0417 Trade union courses (general)

0917 Traditional medicine

0716 Train repair and maintenance

0413 Training management

0912 Training of doctors

0114 Training of driving instructors

0912 Training of physicians

0114 Training of trainers (with subject specialisation)

0113 Training of trainers (without subject specialisation)

0231 Translation programmes

1041 Transport studies

1015 Travel agency services

1015 Travel and tourism

1015 Travel services

0821 Tree felling

1041 Truck driving

0812 Turf cultivation

0812 Turf management

0211 Type-setting

0415 Typing

U

1014 Umpires and other sports officials

0723 Upholstery

0731 Urban planning

0731 Urban studies

V

0716 Varnishers/sprayers (vehicles)

0811 Vegetable plantation

0716 Vehicle and motor engineering

0716 Vehicle building

0716 Vehicle diagnostics

0716 Vehicle electrical systems

0716 Vehicle mechanics

0716 Vehicle painting

0716 Vehicle repairing

0716 Vehicle trimming

0716 Vehicle varnishers/sprayers

0732 Ventilation (building)

0841 Veterinary assisting

0841 Veterinary medicine

0841 Veterinary nursing

0841 Veterinary science

0811 Vineyard construction

0512 Virology

0811 Viticulture

0923 Vocational counselling

0923 Vocational guidance

0915 Vocational rehabilitation

0532 Vulcanology

W

1013 Waiting and bar service

1031 War theory

0416 Ware-housing

1021 Waste management

0715 Watchmaking

0712 Water pollution control

1021 Water supply (service)

0732 Water supply and sewerage engineering

0732 Water technology and engineering

0214 Weaving (craft)

0723 Weaving (industrial)

0612 Web design (Internet)

0715 Welding

0416 Wholesaling

1012 Wig making

0522 Wildlife management

0522 Wildlife ranger studies

1011 Window cleaning

0212 Window dressing

0713 Wind turbines

0811 Wine growing

0721 Wine production

0721 Wine science

0721 Wine storing/maturing

0314 Women's studies

0722 Wood machining and turning

0722 Wood technology

0214 Woodcarving

0722 Woodwork trades

0722 Woodworking and carpentry

0723 Wool science

0417 Work development

1022 Work environment

0417 Work place skills

0417 Working life

X

0914 X-ray technology (medical)

Y

0922 Youth recreation programmes

0922 Youth services

0922 Youth worker programmes

Z

0511 Zoology

Courses Numbering System in US

100—900 Level? BS or MS Class?

What is the concept behind Course Numbers in USA ?
In most of the US schools/ Colleges /Universities, every course number starts with a digit ranging from 1 to 9. The first number in the entire course number has significance and it tells the complexity or the level of the course. It can also tell that if it is an Undergrad level class or Graduate level class. As the numbers say, the lower the number the basic the course it is. For instance, if it like 102 Mathematics, then it will be very basic Math and does not require any complex skills. On the other hand, if it is like 302 Mathematics, then it is assumed that you have the expertise of 102 Mathematics and even may be 202 Mathematics or similar. They would mention in advanced there is no universal rule here that every schools/ Colleges /Universities should adopt this pattern, for most part most of the schools/ Colleges /Universities adopt this format (all the four US schools/ Colleges /Universities I studied had this pattern). They may have either three digits or four digit classification like 100 or 1000 depending on the schools/ Colleges /Universities.

- **100- 600 or 1000 -6000 level:** Typically, this slab of 100 to 600 corresponds to Undergrad level classes. Typically, all the courses that are on the 100 and 200 level are very basic, they are either freshman (first year) or sophomore (second year) level classes. Most of these classes are foundations for bachelors and everyone would have to take these. All the classes from 300 to 4000 are advanced level classes and are taken by juniors (3rd year) or seniors (fourth year) students. They are more focused. Some schools have more advanced classes that are around 500 and 600 level, they are also Undergrad level classes but more advanced.

- **700—900 or 7000—9000 level:** This classes with this numbering correspond to Graduate level classes for MS, MBA or PhD. Masters classes are ideally in the range of 700 to 800. 900 level classes correspond to PhD and Thesis or research level classes and much advanced.

  800 level course designation .These courses are offered at the doctoral level. Students must have been admitted into a doctoral program within the university. Assumptions: A doctoral program involves a serious commitment of time and energy.